

# VFM Examinations

## Software available for vfm examinations

Summer 1998

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### Introduction

In vfm examinations we rely on computer software to plan, conduct, and present our work. Whether report drafting, collecting information, analysing results, producing tables, or presenting findings, the computer plays a large role. The Microsoft Office suite is the main strategic software we use: its word processing, spreadsheet, graphics, diary, and database cope with many of our requirements. However there are times when additional software is needed or will handle a task more appropriately. These include a variety of tasks such as statistical analysis, flowcharts, presenting data, and conducting surveys. A small range of software has been brought in to assist in many of these areas and expand the software that is available for vfm work. All the software is in the latest Windows versions.

### Software

This leaflet provides summary information on the software that we currently hold together with key points on its value to vfm work. The software is divided into six main groups: Planning, Surveys, Data Analysis and Modelling, Text Analysis, Charting, and Presentation. If the software spans more than one group then it is listed against its main use.

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## Planning

### MS Project Manager

### Scheduling tasks

#### What it can do

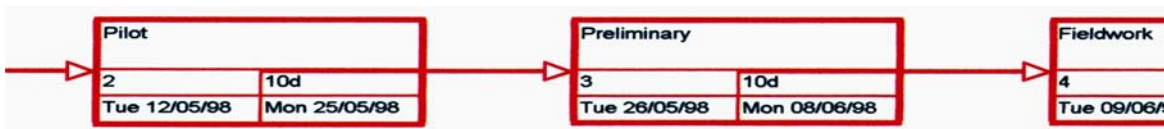
Microsoft Project Manager is a business project planning system aimed at planning, managing, and communicating projects. Its main features are project management, entering tasks, and scheduling tasks and resources.

#### How you can use it

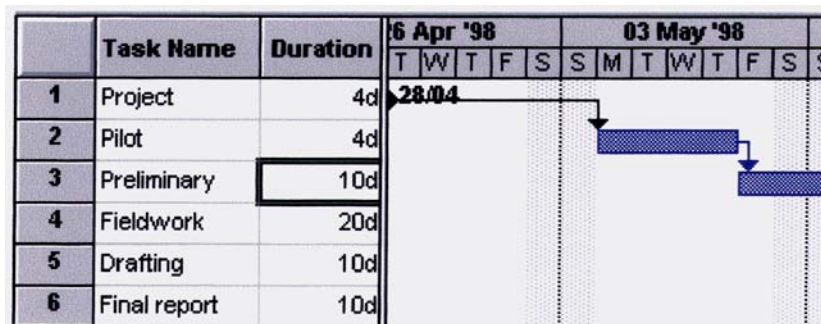
This is most appropriate for managers who wish to construct and maintain their own detailed work plan for their projects. However you will need several hours to learn to use this software. To help, it has an introductory tour and step-by-step instructions to creating your first project. There is on-line help and a user manual to assist you. The software is held on the Resource Centre PCs and will be available for managers who wish to use a project management package.

FEATURES	OTHER OPTIONS
Produce and monitor project plans and schedules. Gantt Chart – graph activities across timescale. PERT chart – network diagram of tasks. Calendar – enter recurring events. Visual Basic for Applications.	MS Excel MS Outlook RMS In most cases these options, already available, are sufficient.

*PERTchart*



*Gantt chart*



## Planning

### Inspiration

### Issue analysis

#### What it can do

The main value of this software is seen when using issue analysis, a hierarchical approach to structuring a report. Its main feature is the ability to display the issues in both flowchart and text outline view. Basically this is a flowchart package, so it is also useful for designing and presenting flowcharts and for mind-mapping diagrams.

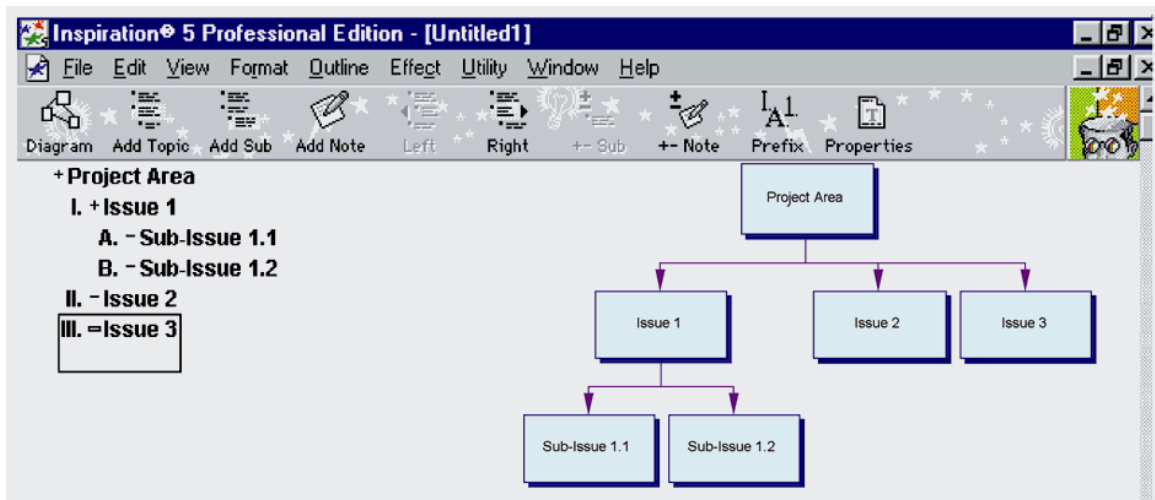
#### How you can use it

Currently Inspiration is used for issue analysis on a number of vfm studies. It is a fairly simple package to use, so no training is planned. If you have basic Windows

experience you can use this software. Each copy has a manual setting out all the features simply and fully. It will be fully supported and assistance will be given as requested. The copies available will cater to demand, and you can examine the software first and then request a copy.

FEATURES	OTHER OPTIONS
Flowchart and text outline views. You can choose from a range of hierarchical structures, connector lines, shapes, and symbols. Good drawing tools let you move and align shapes and create attractive charts.	PowerPoint Visio FlowCharter

### Outline Chart



## Surveys

### SNAP

### Quantitative surveys

#### What it can do

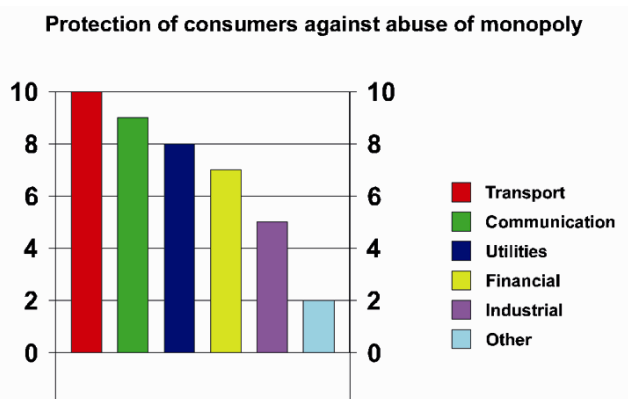
This software is designed for conducting quantitative surveys. It makes it fairly easy to design a questionnaire, enter survey data, analyse the survey, and produce survey results, tables, and charts.

#### How you can use it

You can use SNAP if you want to conduct your own survey. This software has been selected as part of the vfm software kit. A one-day vfm course gives basic training. Copies and manuals are provided for survey work on request. The software is fully supported and assistance is given as requested.

FEATURES	OTHER OPTIONS
<p>Create a questionnaire.                      Easy data entry.                      Produce results in frequency tables, crosstabs, statistics and a variety of bar, line, and pie charts.                      Tailor the tables and copy them into Excel for further work or take the charts as pictures into a Word document.                      An additional Internet module allows us to interview through email, internet, and intranet.</p>	<p>Access                      Excel                      SPSS</p>

*Charts*



*Tables*

Absolute Analysis % Respondents	
<b>Base</b>	<b>11</b> <b>100%</b>
Protection of consumers against abuse of monopoly	
<b>Transport</b>	10 91%
<b>Communication</b>	9 82%
<b>Utilities</b>	8 73%
<b>Financial</b>	7 64%
<b>Industrial</b>	5 45%
<b>Other</b>	2 18%

## Data Analysis and modelling

### IDEA

### Data interrogation

#### What it can do

Used routinely in financial audit, IDEA has some application in vfm work. It is most useful for transferring large data files, for interrogating large data sets, and for selecting samples from the data.

#### How you can use it

You can use IDEA to examine large data files and select samples. IDEA is available throughout the Office on a site licence. A vfm course gives basic training. The software is fully supported by the CAATS team and assistance is given as requested.

FEATURES	OTHER OPTIONS
Sample selection. Transfer large data files. Interrogate data.	SPSS MS Access SAS

*Data view*

	ESTDAT	TOTPREF	NETPREF	FIRDAT	FIRAMT	RECOVERY
1	1968/01/01	882.53	284.70	1997/01/17	597.83	597
2	1994/09/16	9,596.00	8,593.78	1996/12/21	1,002.22	1,002
3	1968/01/01	696.79	0.00	1996/12/14	696.79	696

*Dialog box – draw random sample*

**Random Record Sampling**

Records to select:  
 Starting record #: 1  
 Ending record #: 12701

Number of records to select: 50  
 Random number seed: 8001  
 Allow duplicate records

File name: SAM00001  
 File description: Random sample from REC

Buttons: OK, Fields, Cancel, Help

*Statistics*

Field Statistics			
Field name:	Description:		
Field name:	AAMT		
Net value:	25,796,678.87	Number of records:	12,701
Absolute value:	25,796,678.87	Number of zero items:	4,939
DR value (+):	25,796,678.87	Number of DR records:	7,762
CR value (-):	0.00	Number of CR records:	0
Average value:	2,031.07	Number of data errors:	0
Minimum value:	0.00	Record number of min:	1
Maximum value:	99,462.67	Record Number of max:	644

Fields list: AAMT, BAMT, CAMT, DAMT, FILTER\_

## Data Analysis and modelling

### SPSS

### Data analysis

#### What it can do

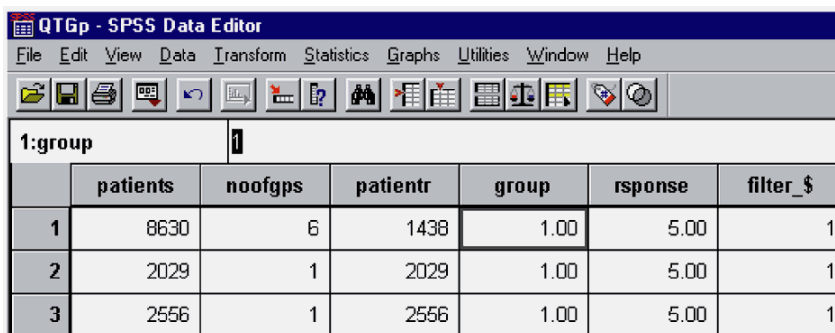
SPSS lets you analyse your data through easy interactive menus. You can summarise data in tables and charts, look at the distribution of data, compare groups of data, and look for association between variables.

#### How you can use it

You can use SPSS when you want to explore, summarise, test, or model a set of data. Vfm courses give basic training. On-line tutorial help and a statistics 'coach' provide assistance when using SPSS. This software has been selected as part of the vfm software kit and is available on request, provided you have had experience or training in SPSS. The software is fully supported and assistance is given as requested.

FEATURES	OTHER OPTIONS
Main features are data management and analysis, statistical tests, frequency tables, cross-tabulation, descriptive statistics, correlation and regression, ANOVA, cluster and factor analysis, and statistical graphs such as box-plots and histograms.	Excel IDEA SAS

#### Data



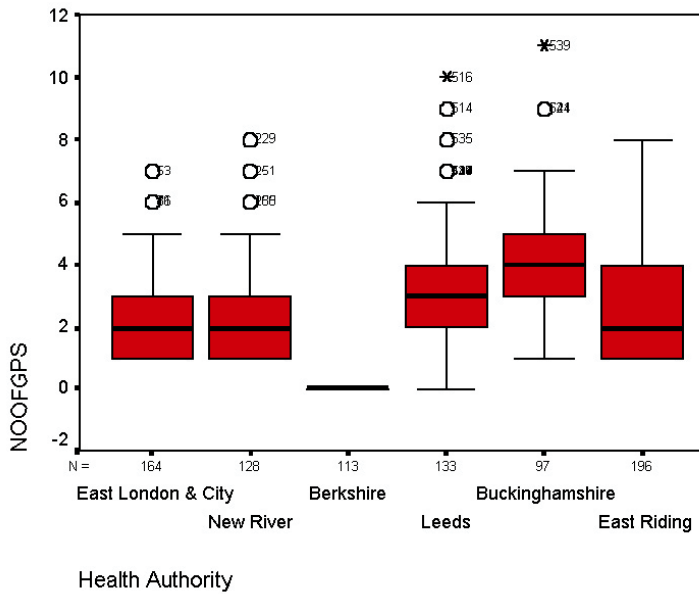
1:group						
	patients	noofgps	patientr	group	rresponse	filter_ \$
1	8630	6	1438	1.00	5.00	1
2	2029	1	2029	1.00	5.00	1
3	2556	1	2556	1.00	5.00	1

#### Frequency table

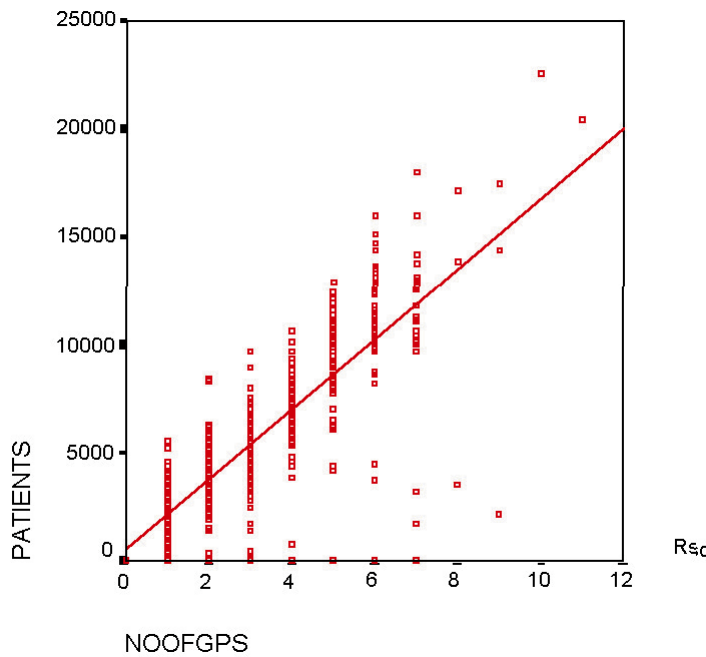
Health Authority

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	East London & City	164	19.7	19.7	19.7
	New River	128	15.4	15.4	35.1
	Berkshire	113	13.6	13.6	48.7
	Leeds	133	16.0	16.0	64.7
	Buckinghamshire	97	11.7	11.7	76.4
	East Riding	196	23.6	23.6	100.0
	Total	831	100.0	100.0	

Box plot



Scatter plot



## Data Analysis and modelling

### SPSS Modules

### Further analysis

#### What it can do

In addition to the basic SPSS software there are a number of optional modules that provide further analytical tools. These range from producing tables to advanced statistical analysis and analysing text.

#### How you can use it

SPSS modules are for specialist users. The modules we currently hold and their main uses are listed under Features.

FEATURES	OTHER OPTIONS
<p><b>Professional Statistics</b> – advanced regression including logistic regression and non-linear regression. (Logistic regression regresses a yes/no variable on a set of independent variables.)</p> <p><b>Advanced Statistics</b> – General linear modelling (GLM); MANOVA; hiloglinear (for modelling multi-dimensional contingency tables).</p> <p><b>Trends</b> – time series analysis; curve fitting; smoothing; ARIMA modelling.</p> <p><b>Tables</b> – presentation nested tables; multiple response data analysis.</p> <p><b>Categories</b> – analyse categorical data; measure preferences; correspondence analysis.</p> <p><b>AnswerTree (CHAID)</b> – data mining tool to find groups in the data; segment population into like sub-groups; present tree diagrams; develop models.</p> <p><b>Exact Tests</b> – exact tests for small samples and subsets of data with uneven distributions; Monte Carlo estimates.</p> <p><b>SamplePower</b> – help determine sample size requirements.</p> <p><b>AllClear</b> – for flowcharting .</p> <p><b>TextSmart</b> – text analysis tool to analyse open-ended survey responses.</p>	<p>SAS SPlus</p>

*Example of SamplePower*

	Proportion Positive	N of Cases	Standard Error	95% Lower	95% Upper
<b>Population</b>	0.50	400	0.03	0.45	0.55
<b>Test against the constant</b>	0.50				

**Alpha= 0.05, Tails= 2, Power = 0.05**

Power computation: Normal approximation (Arcsin transformation)  
Precision computation: Normal approximation

*Example from Tables*

Count	Health Authority							
	East London & City		New River		Berkshire		Leeds	
	IN		IN		IN		IN	
	0	1	0	1	0	1	0	1
	NOFGPS	NOFGPS	NOFGPS	NOFGPS	NOFGPS	NOFGPS	NOFGPS	NOFGPS
0					53	60		1
1	54	13	51	11				23
2	29	17	13	15				19
3	10	11	5	14				12
4	6	10		6				9
5	3	7		8				4
6	1	2		3				1
7		1		1				5
8				1				
9								
10								
11								
Total	103	61	69	59	53	60		74

## Data Analysis and modelling

### SAS

### Data management

#### What it can do

SAS is a large data management system – it is among the major statistical software systems available. It can handle large data sets, and is used for file transfers, data management, and analysis.

#### How you can use it

SAS is a specialist system and is generally only available for experienced SAS users. It is difficult to learn to use – a week of training is needed to learn the basics. There are enhancements such as the Assist module which make SAS more accessible to more casual users through interactive menus and prompts. Systems can also be developed for specific tasks, such as sample evaluation, which users can run without SAS experience. The software is held on the Resource Centre PCs.

<b>FEATURES</b>	<b>OTHER OPTIONS</b>
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The SAS system is a collection of procedures and a programming language. The base system is supplemented by many optional modules. The modules we currently hold include:

**Assist** – Simple menu driven interface provides easy way into many features in SAS including summary statistics; regression; tests.

**Stat** – Multivariate analysis; non-parametric analysis.

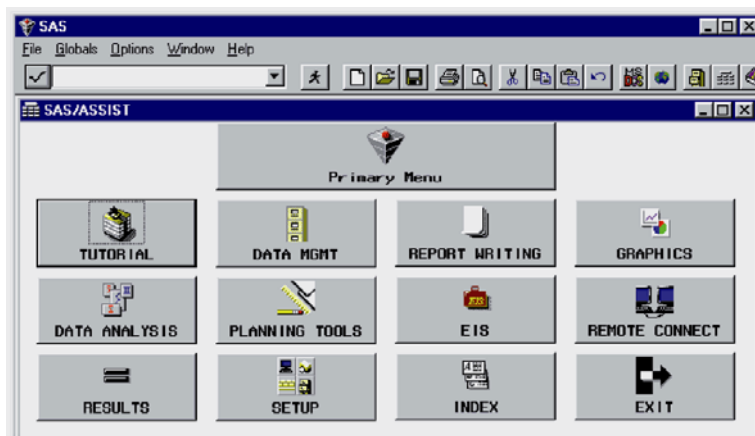
**Insight** – Statistical graphics; distribution fit.

**Lab** – For interactive analysis; initial data analysis, regression with full interpretation of results and assumptions, ANOVA.

**Eis** – a menu-driven system for developing, running, and maintaining executive information systems.

SPSS  
SPlus

### *Assist interactive screen menu*



## Data Analysis and modelling

### SPlus

### Advanced statistics

#### What it can do

SPlus is another major statistical package. It provides users with access to advanced statistical methods and graphics.

#### How you can use it

This is for specialist statistics use. It is currently used for developmental work in financial audit. Recent developments make the package easier to use. On-line manuals and demo help with using this statistical package.

FEATURES	OTHER OPTIONS
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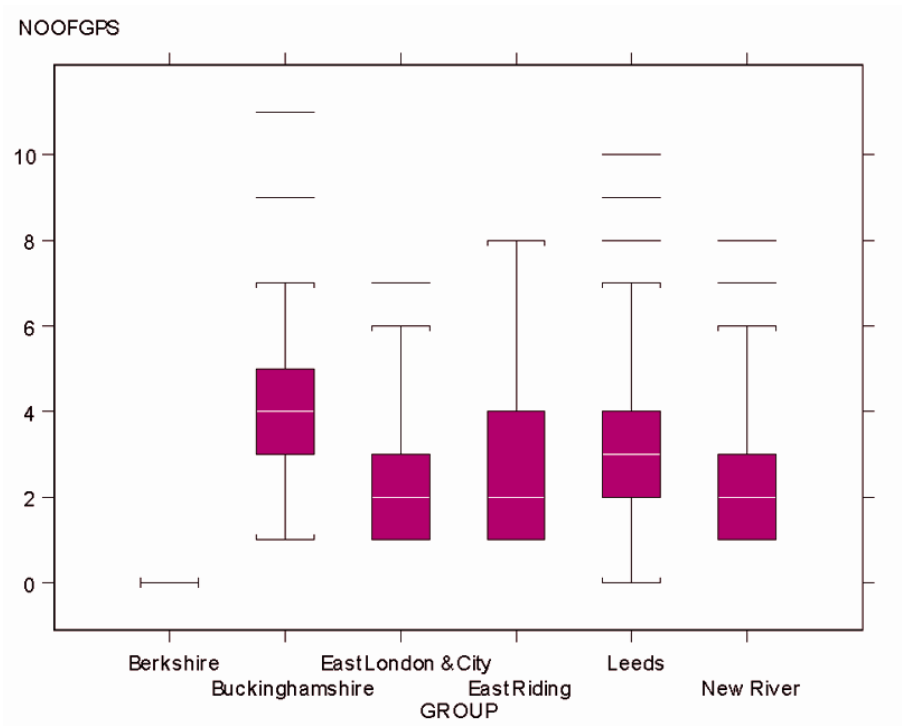
Advanced statistics include regression, multivariate analysis, time series.  
 Wide range of graphics.  
 Import from many file formats including SPSS.

SPSS  
 SAS

**Data**

	24	25	26	27	28	29	30
	PATIENTS	NOOFGPS	GROUP	REFERENC	CHECK	RSPONSE	F
155	1312.00	1.00	East London	0.00	0.00	5.00	Se
156	5148.00	2.00	East London	0.00	0.00	5.00	Se
157	3643.00	2.00	East London	0.00	0.00	5.00	Se
158	2010.00	1.00	East London	0.00	0.00	1.00	Se
159	10875.00	5.00	East London	0.00	0.00	5.00	Se
160	1438.00	1.00	East London	0.00	0.00	5.00	Se
161	1570.00	1.00	East London	0.00	0.00	5.00	Se
162	6470.00	4.00	East London	0.00	0.00	5.00	Se

**Box plot**



**Data Analysis and modelling**

**@Risk**

**Financial modelling**

**What it can do**

This package provides advanced risk analysis for spreadsheets. It uses Monte Carlo simulations to estimate probability distributions, in order to examine the impacts of risks on any spreadsheet model. It can be used to examine physical

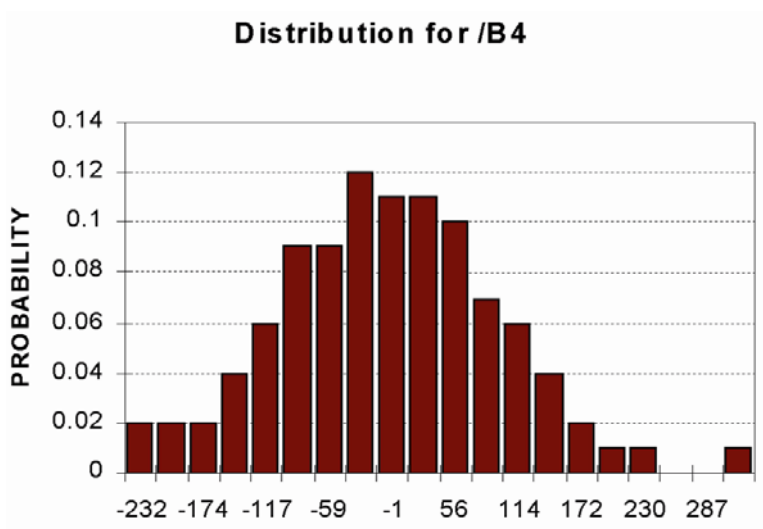
risks in projects and/or financial models. The package provides statistical and sensitivity analyses of probability distributions and produces graphical outputs of presentation quality. It lets you construct a model and analyse this using simulation. That is, the computer generates a distribution of all possible outcomes of the model. It does not provide exact answers and must always be used with judgement, but adds robustness to decisions concerning risk analysis.

### How you can use it

@RISK is an Excel spreadsheet add-in. It uses Excel functions in addition to its own specialised functions and is accessed via Excel. The user specifies the variables to be analysed, and appropriate distributions, and the package performs a specified number of iterations to determine the probability estimates. These can then be used to enhance the analysis of situations where uncertainty exists.

FEATURES	OTHER OPTIONS
Financial modelling. Risk analysis. Simulation modelling of probability distributions. Graphical output. Results importable to Excel spreadsheets.	Crystal Ball SPlus

*Graph of probability distribution*



## Data Analysis and modelling

### Crystal Ball

### Risk analysis

#### What it can do

Crystal Ball (produced by Decisioneering) is another forecasting and risk analysis

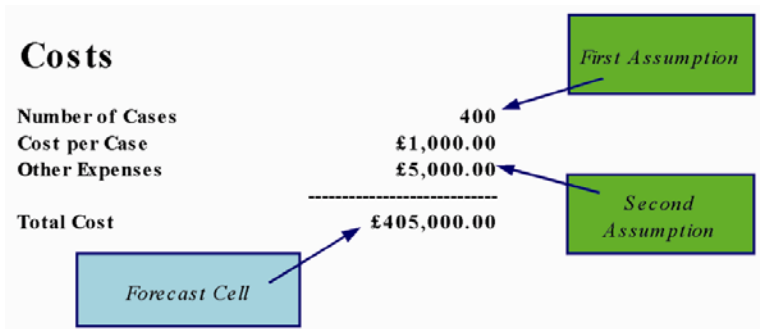
package. Through simulation it forecasts the range of results possible from the model and assumptions given and the probability of those outcomes.

**How you can use it**

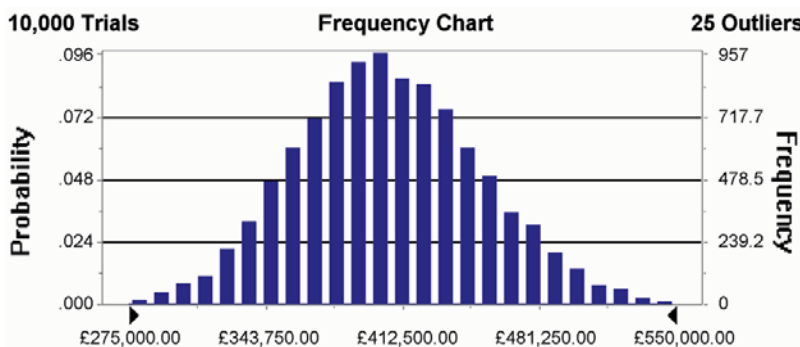
A similar product to @Risk, Crystal Ball also provides a spreadsheet add-in to examine models by performing simulations. The user enters the model (expected outcomes together with assumptions on variation) on the spreadsheet. Crystal Ball then runs a simulation. It is a fairly easy package to use.

FEATURES	OTHER OPTIONS
<p>Monte Carlo simulation. Distribution fitting. Forecast chart.</p> <p><i>Note: Simulations generate distributions of possible outcomes by recalculating the spreadsheet many times using different randomly selected values for the specified probability distributions.</i></p>	<p>@Risk SPlus</p>

*Basic model*



*Forecast chart (after simulation)*



**Data Analysis and modelling**

## Visual Basic

## Build applications

### What it can do

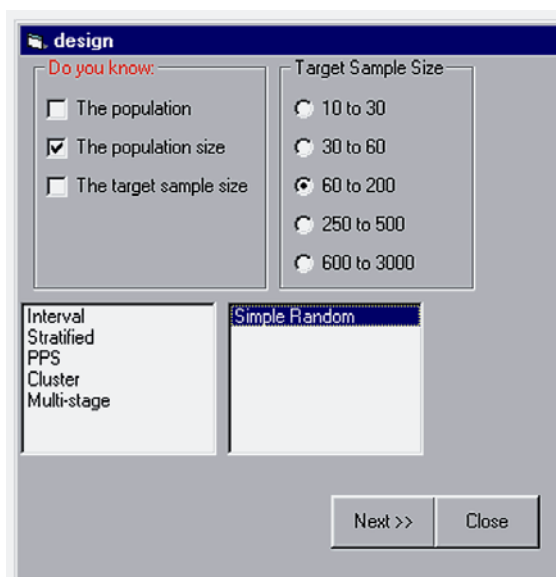
If computer tasks are to be undertaken routinely or require standard procedures, it may be appropriate to develop a Visual Basic application to carry them out. Visual Basic applications range from the simple (eg a simple dialog box to view files) to the complex (eg developing an accounting system).

### How you can use it

This is a programming language that lets you develop your own applications. The Visual Basic (VB) language is quite powerful and can be used to accomplish most programming tasks. The developer can build simple menus (user front ends) to your simple or complex procedures. Developing applications using VB is for specialists: a week is needed for introductory training. If you want to develop an application you will normally use an IT specialist with VB skills. Once developed, the application can be freely distributed to Windows users. The software is held on the Resource Centre PCs.

FEATURES	OTHER OPTIONS
Easy and flexible way to design forms for user interface. Object oriented. Work with other applications' objects.	Other applications with VBA (Visual Basic for Applications) or similar tools for programming and designing forms – such as: Access Excel IDEA SPSS SAS

### Example of screen developed in Visual Basic



## Text Analysis

### QSR NUD.IST

### Text analysis

#### What it can do

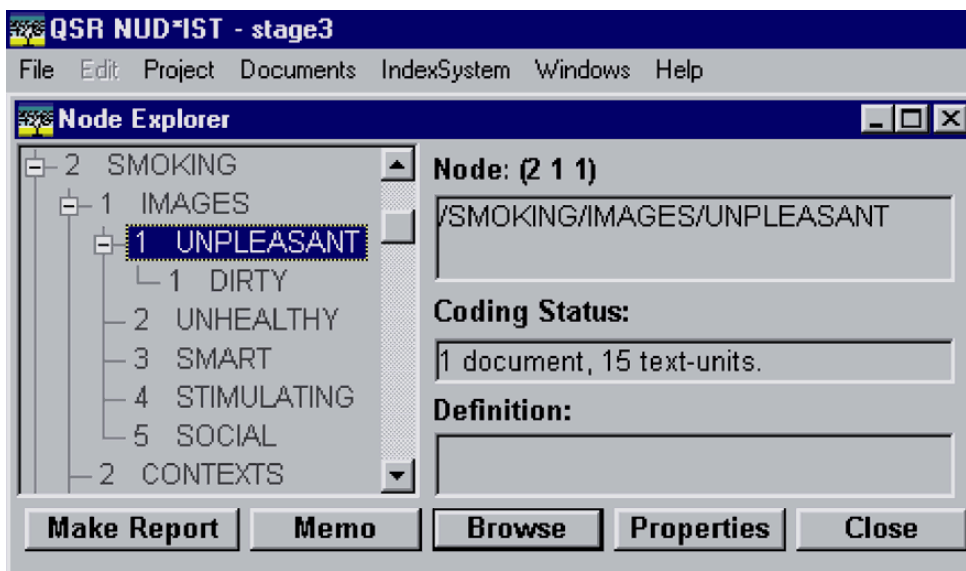
This is called 'software for qualitative data analysis'. QSR (Qualitative Solutions and Research) NUD.IST (Non-numerical Unstructured Data Indexing Searching and Theorising) has been included in the vfm software as an aid to qualitative analysis. It provides a research tool for analysing textual information, whether structured interviews, survey responses, or documents. It provides search tools to search for text and phrases. And it helps you structure your findings.

#### How you can use it

This software is available for use but does require considerable effort to learn and use. It has a tutorial and a user manual to assist you, or there are training courses. It is most appropriate for specialist work, for a researcher or analyst conducting a full examination of text, whether recorded interviews or documents. The software is held on the Resource Centre PCs and is also available for special projects.

FEATURES	OTHER OPTIONS
Explore documents. Create categories. Code text. Develop index. Search procedures.	TextSmart in SPSS Word

#### Example of Explorer and Browse



```

Node Browser: [2 | 1]
JULIE'S NOTES APPENDED
* "Jane", "Sue", "Peter", "David", "Vincent"
+++++
[GROUP1 : 13 - 13 ]
Great. For sure. Because non-smokers shouldn't be subjected to smoke in
enclosed areas, especially when it's their job. Plus even if I am a
smoker I find it unpleasant for there to be smoke in the workplace,
because it's stuffy, hard to breathe, smells stale, unpleasant.
    
```

## Charting

### Visio

### Business diagrams

#### What it can do

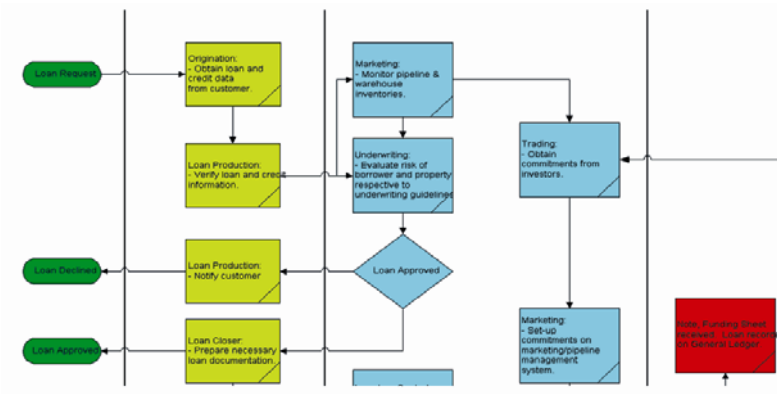
Visio is useful for building business diagrams. It can be used to illustrate organisation charts, networks, and processes. You can create Visio charts to show structures, projects, systems, business plans, and business processes.

#### How you can use it

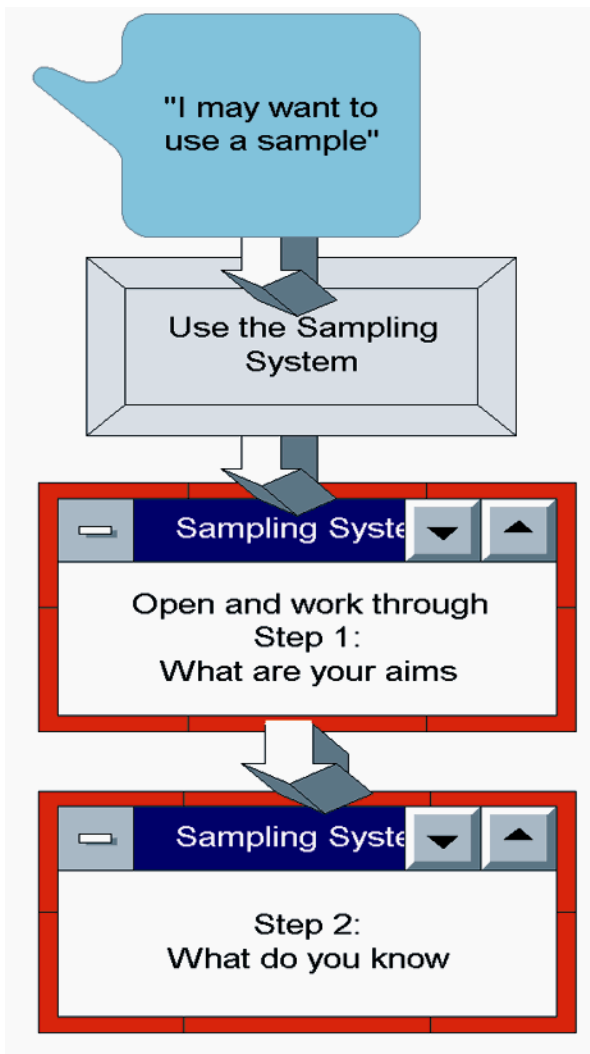
Available for use, but it may take a few hours of experimenting and learning before you start to benefit from using the software. The software is held on the Resource Centre PCs.

FEATURES	OTHER OPTIONS
Visio Standard provides templates and stencils to create flowcharts, network diagrams, relationship diagrams, office layouts, mind maps, project timelines, Total Quality Management (TQM) diagrams. Visio can be linked directly to Excel spreadsheets.	Inspiration FlowCharter MS PowerPoint

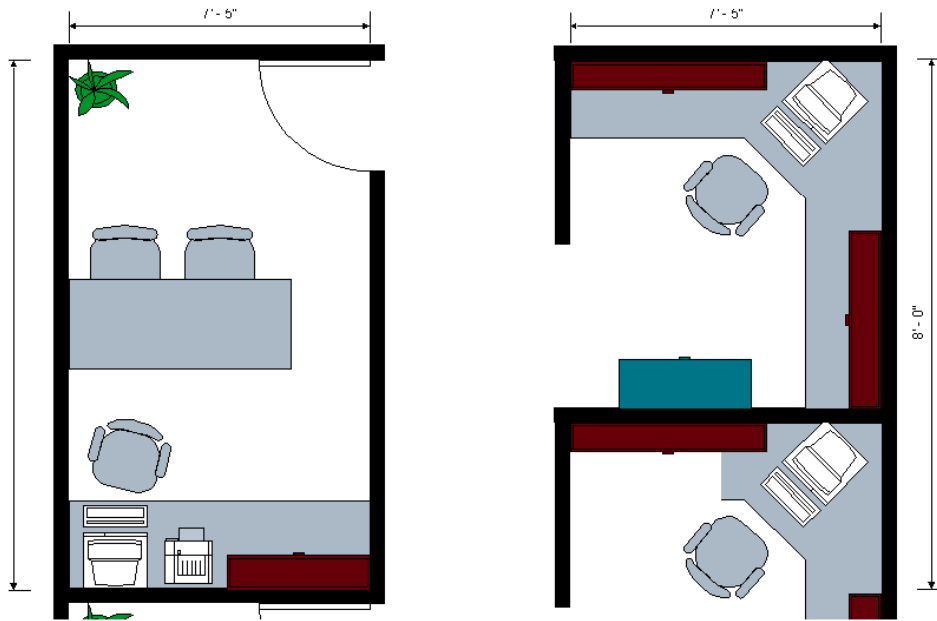
#### *Flowchart*



Block diagram



Office layout



## Charting

### FlowCharter

### Flowcharts

#### What it can do

Micrografx FlowCharter can be used to construct many types of business charts and diagrams. It lets you analyse process flows and helps construct flowcharts, network charts, pyramid charts, organisation and hierarchy charts, checklists, and project timelines.

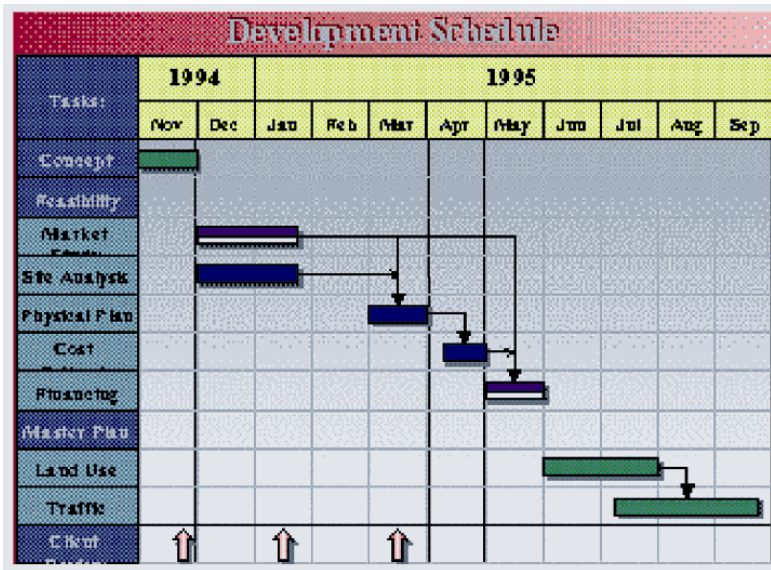
#### How you can use it

FlowCharter has a wide range of tools and aids to help you produce attractive and professional charts. It provides wizards, templates, on-line help, and a viewer with examples to assist you. Also there is a user manual. Fairly intuitive and flexible to use, but it takes a few hours learning and experimenting before benefiting from its use. The software is held on the Resource Centre PCs.

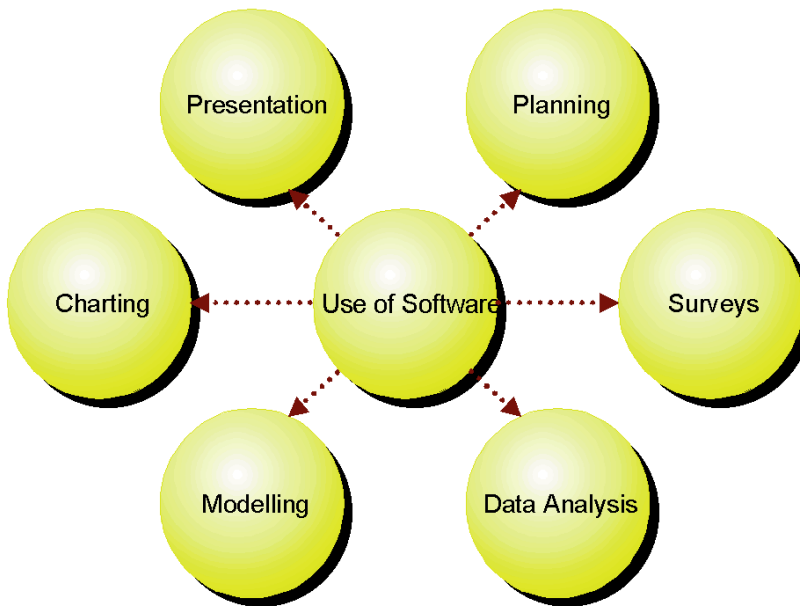
FEATURES	OTHER OPTIONS
FlowCharter holds many palettes of shapes and pictures to help you create a chart. There is a wide range of shapes, lines, text, and pictures to work with. It provides basic style templates and palettes for diagrams, including flowcharts, block diagrams, checklists, pyramid charts, circle-spoke, and project timelines. Also basic statistical	Visio Inspiration MS PowerPoint

process control (SPC) charts used in quality control, including Pareto and control charts.

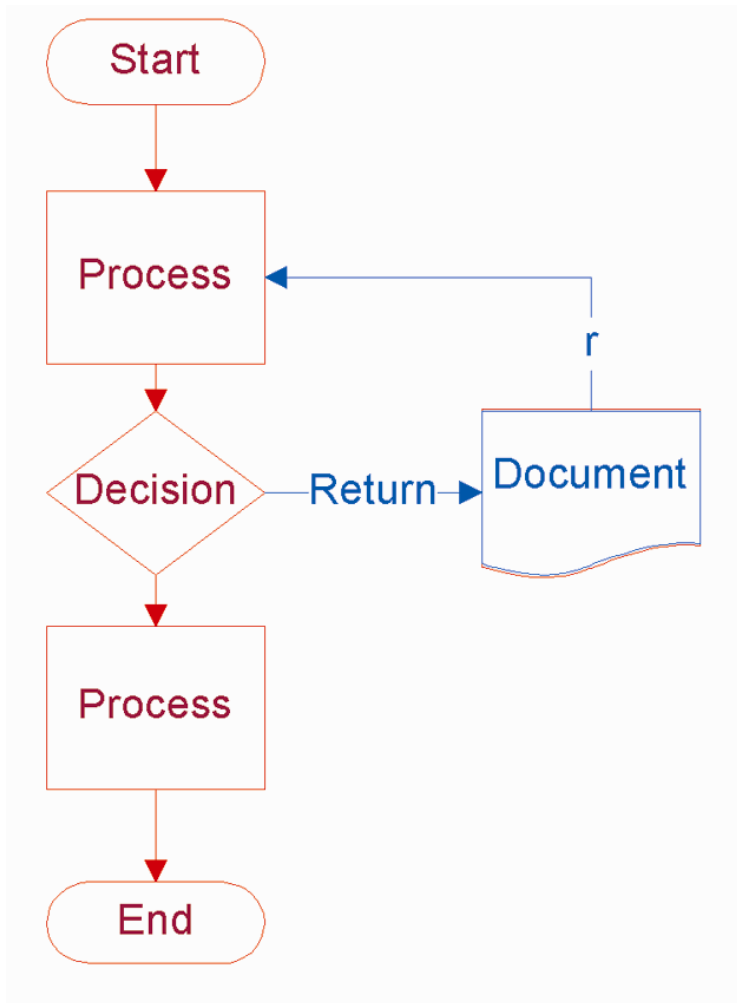
*Project timelines*



*Circle-spoke*



*Basic flowchart*



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## Presentation

### MapInfo

### Data maps

#### What it can do

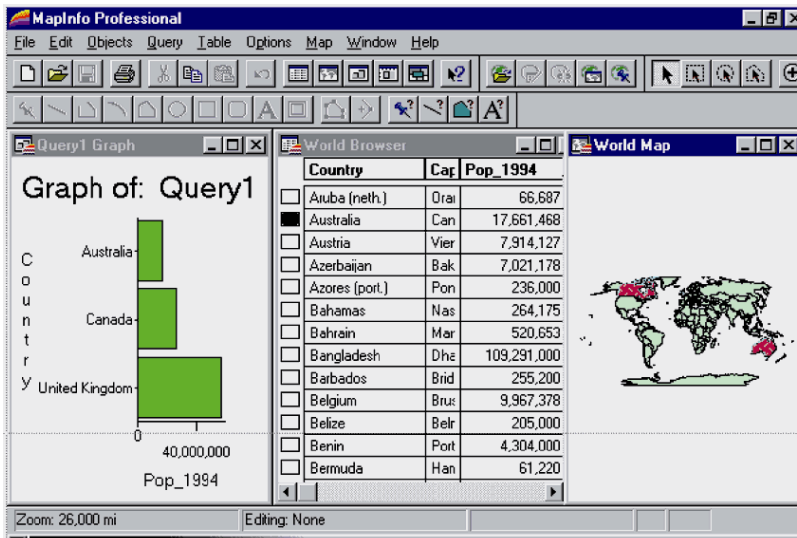
This software is used for desktop mapping. This lets you produce thematic maps (data maps) by plotting data held in geographical regions – for example population by region – on maps. The data can be displayed using dot density, ranges shading, graduated dots, pie, or bar charts. This can provide an excellent visual display of the information held.

#### How you can use it

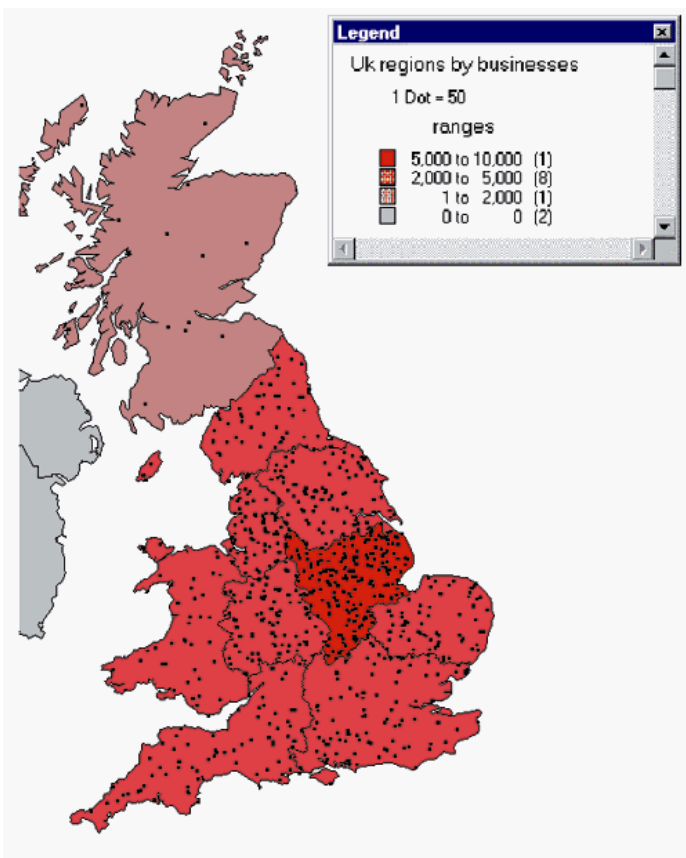
You can display information geographically to help show regional positions and variations. There is a user manual, on-line help, and on-line interactive tutorial to help you, but it will take several hours to run through the tutorials and guidance before you can start to use the software. For the interested user there are external training courses. The software is held on the Resource Centre PCs.

FEATURES	OTHER OPTIONS
<p>There are maps of the UK, Europe and the world, with the UK at region and county level. Data are stored in tables and are placed on the basic map in layers, like a series of transparencies. You can add labels and text and draw on the map.</p>	<p>Excel maps Map outlines in clipart</p>

*Chart Browser table Map*



*Thematic ranges*



## Presentation

### Corel Draw

### Artwork

#### What it can do

Corel Draw is a drawing package to assist in producing artwork. It can be used to create high quality illustrations. There is also a large selection of clipart and photo images.

#### How you can use it

For those who want to work on their graphics, this package holds a range of drawing tools beyond those available in PowerPoint. It is also the main graphics package used by our DTP staff. There is a reference manual with thumbnail images of all its clipart and photos. CorelTutor provides on-line tutorial, but Corel is not an easy graphics package to use on a casual basis. It will take several hours before you start to benefit from using the software. It is available for those able to use the software, but no training or assistance is given. The software is held on the Resource Centre PCs.

FEATURES	OTHER OPTIONS
40,000 clipart and 1000 photo images. Templates, shapes and lines, shading and colour palettes. Tools for precise changes to drawings. Photo-paint for editing photos.	MS PowerPoint – easier and more appropriate for most vfm charts and diagrams and available on all PCs. MasterClips and Corel Gallery – for range of clipart and photographs.

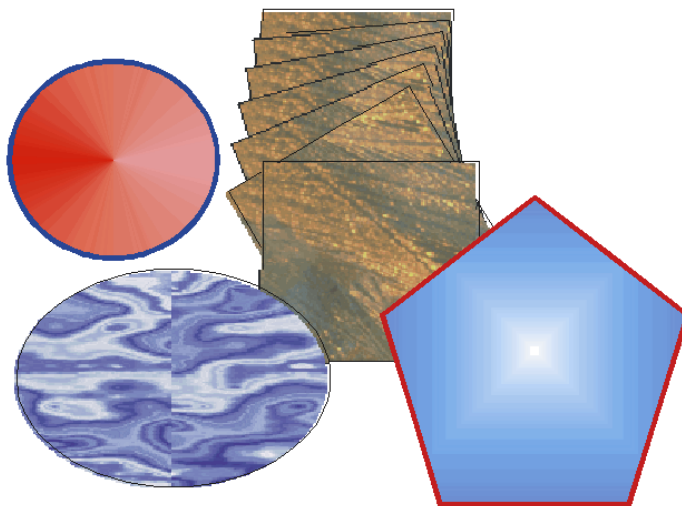
#### *Range of photographs*



#### *Select and edit clipart*



*Various drawing shapes and fills*



## Presentation

### Clipart and pictures

### Pictures

#### What it can do

MasterClips and Corel Gallery are two collections of clipart and photographs that each provide thousands of images from which to choose for presentations and reports. A wide range of areas is covered including communication, travel, food, military and business.

#### How you can use it

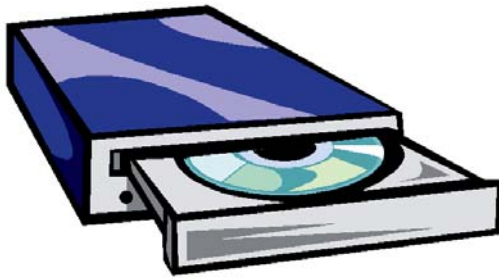
Copies are available for office-wide access on the Resource Centre PCs. The clipart and photos are stored on a number of CDs and found and viewed through index systems and searches. Manuals and guides are available. These are fairly simple to use and support is provided.

FEATURES	OTHER OPTIONS
Photographs. Clipart. Searches by key word(s).	MS PowerPoint Corel Draw

*MasterClip holds a range of pictures, maps, and photographs*



Corel Gallery holds clipart and photographic images



## Checklist: software available by main uses

	Availability	Project Manager	Inspiration	SNAP	IDEA	SPSS	SPSS Modules	SAS	Splus
PLANNING	Issue analysis	**	***	***	****	***	*	*	*
	Time management		oo						
	Information system								
SURVEYS	Questionnaire			oo					
	Data entry			oo		o			
	Survey results			oo		oo			
DATA ANALYSIS AND MODELLING	Sample selection				oo	o	o		
	Data interrogation				oo				
	Data analysis					oo	oo		oo
	Statistical analysis					oo	oo	oo	oo
	Regression					oo	oo	oo	oo
	Financial modelling								o
	Simulation methods						o		oo
QUALITATIVE ANALYSIS	Text analysis						oo		
CHARTS AND PROCESSES	Flowcharts		oo				o		
	Processes								
PRESENTATION	Tables			o		o	o		
	Diagrams								
	Slideshow								
	Maps								
	Graphs and charts					o			o
	Clipart and photos								

		@Risk	Crystal Ball	Visual Basic	QSR NUD.IST	Visio	Flow Charter	MapInfo
	<b>Availability</b>	*	*	*	**	**	**	**
PLANNING	Issue analysis							
	Time management							
	Information system			oo				
SURVEYS	Questionnaire							
	Data entry							
	Survey results							
DATA ANALYSIS AND MODELLING	Sample selection							
	Data interrogation							
	Data analysis							
	Statistical analysis							
	Regression							
	Financial modelling	oo	oo					
	Simulation methods	oo	oo					
QUALITATIVE ANALYSIS	Text analysis				oo			
CHARTS AND PROCESSES	Flowcharts					oo	oo	
	Processes					oo	oo	
PRESENTATION	Tables							
	Diagrams					oo		
	Slideshow							
	Maps							oo
	Graphs and charts							
	Clipart and photos							

		Corel Draw	Clipart & pictures - various	Excel	Powerpoint	Word	Access	Outlook
	<b>Availability</b>	**	**	****	****	****	****	****
PLANNING	Issue analysis					o	o	
	Time management			o				o
	Information system			o			oo	
SURVEYS	Questionnaire					o		
	Data entry			O			o	
	Survey results			o			o	
DATA ANALYSIS AND MODELLING	Sample selection			o			o	
	Data interrogation			o			o	
	Data analysis			o			o	
	Statistical analysis			o				
	Regression			o				
	Financial modelling			o				

	Simulation methods		o		
QUALITATIVE ANALYSIS	Text analysis			o	o
CHARTS AND PROCESSES	Flowcharts	o		o	
	Processes				
PRESENTATION	Tables		oo		o
	Diagrams	oo		oo	
	Slideshow			oo	
	Maps		o		
	Graphs and charts	o	oo	oo	
	Clipart and photos	oo	oo		o

- Availability:**
- \*\*\*\* Site: available for all Windows PCs.
  - \*\*\* Limited: available on a restricted number of licences. The software is installed on request for vfm work provided the user has completed training or sufficient experience to use it.
  - \*\* Restricted: a few licences are held. This software is available on the Resource Centre PCs and often held by a few individuals for their area of work.
  - \* Specialist: a few licences are held. All require experience and training in the software and techniques to use. All are available on the Resource Centre PCs. Often held by a few individuals for their specialist area of work.
- Suitability**
- o Suitable
  - oo Most suitable
- Integrated suites:** Sets of the office suites Lotus SmartSuite and Corel Office are also held. These cater for work requiring the word processing, spreadsheet, or graphics applications in these suites: for example, the use of Lotus 123 spreadsheet, Lotus Freelance Graphics, or WordPerfect.