# Glossary

# Activity

A task or job that requires time and resources

# ADSL

Asymmetric Digital Subscriber Line is a high speed digital protocol which allows very fast connection over standard telecommunication copper wire (512 kbps), at present modems have a maximum speed of 56 kbps. (Also see kbps). Commonly known as broadband.

# Additive model (Ch.9, p.195)

A model that explains differences by adding component parts (A = T + S + R)

# AGP

Accelerated Graphics Port. This is the graphics card interface that allows very fast 3D Graphics.

# Algebra (Ch.2, p.8)

Uses letters to represent amounts or quantities which could be money, weight, people or whatever. Algebra allows us to develop formulae, or general statements about relationships between things

# **Alternative hypothesis**

A second hypothesis summaring what will be the case if the null hypothesis is not true. (see null hypothesis)

# Application

Programs such as Word or Excel are known as applications

# Archie

A system of search and locating publicly available files on the Internet by filename and then using FTP to transfer the file. (Also see FTP).

# ASCII

American Standard Codes for Information Interchange is a standard way of exporting and importing files between different software packages

# Bandwidth

The capacity to carry data on the Internet.

**Bar chart** (Ch.4, p.70) Chart where bars are equal width and length represents frequency

#### **Base year** (Ch.7, p.132)

Starting point for an index number, given the value of 100

# **Base-weighted** (Ch.7, p.138) Refers to index series, Laspeyres, where base year weights are used throughout the calculations

# BASIC

Stands for Beginner's All-purpose Symbolic Instruction Code. This programming language was developed by J.G. Kemeny in the 1960's at Dartmouth College, USA. It was originally designed to enable students to learn about elementary programming and be able to solve simple problems. Modern versions of Basic like Microsoft Visual Basic are very powerful and have little in common with the original version.

# BEDMAS (Ch.2, p.8)

A mnemonic to help you remember the order of doing things – Brackets, Exponentiation, Division, Multiplication, Addition, Subtraction

**Bias** (Ch.12, p.266) A systematic source of error

**Binomial model** (Ch.11, p.245) A discrete probability model where there are 2 outcomes and each trial is independent

# BIOS

The BIOS controls the basic operating of the PC and tells the operating system key information such as the time

# Bitmap

A graphic image which is made up of rows and columns of dots this is translated into pixels on a screen and ink dots when printed. (Also see pixels)

# Bookmark

This is a way of storing a URL or web address so it can easily be used later. (Also see URL)

# Bit

The smallest measure of computer memory a bit is like an on off switch.

**Brainstorming** (Ch.13, p.288) Describes a type of technique where judgement is deferred and a range of ideas generated

# Break-even (Ch.3, p.45)

Making zero profit, where total revenue just equals total cost

# Browser

A piece of software used to surf the net. The most popular browsers are Internet Explorer and Netscape.

# Byte

Each byte has 8 bits (Also see bits).

# C

A highly portable cross platform programming language, developed by Dennis Ritchie in the early 1970's at Bell Labs. C was a development of the programming language B and BCPL that originated from Cambridge University in England. The latest versions of C are called C++. C is a third generation language.

# CAD

Computer Aided Design. Programmes that are used for designing buildings and a variety of other things from cars to washing machines.

# Categorical data (Ch.4, p.71)

Data which can only be classified or put into groups, for example, eye colour or gender

# CCD

Stands for charge coupled device and is a light sensitive chip in a digital camera, which is used to capture the picture.

## CD-R

CD-Rs are special CD-ROMs which can be written to only once. (Also see CD-ROM)

# **CD-ROM**

CD-ROMs are similar to normal music Compact Discs but CR-ROMS are used to stores computer files. They can hold up to 650Mb on a single disc. Computer software is commonly supplied on CD-ROMs. CDs have an expected life of about 20 years before they start to deteriorate. (Also see Mb)

#### **CD-RW**

CD-ROMS which can be written to numerous times. (Also see CD-ROM)

# **CD-Writer**

A piece of hardware that can also write or create CD-ROMs. A CD-Writer uses either CD-RW or CD-R discs. (Also see CD-ROM, CD-RW and CD-R).

#### Census (Ch.12, p.264)

The inclusion of all those people or items of interest to us

# CGI

Common Gateway Interface a standard way for Web servers to pass control to an application program and then receive data back.

## Chance (Ch.11, p.235)

A measurable probability that something happens

## COBOL

Common Business Oriented Language was first released in 1960, and has been widely adopted for business and financial systems, mainly on large computers.

**Coefficient of determination** (Ch.8, p.166) Is the squared value of correlation (r 2 )and is a measure of the amount of variation in the data that we can explain

## **Combinations** (Ch.11, p.247)

In probability, the number of ways of selecting r from n

# **Component bar chart** (Ch.4, p.73)

Bar chart where each bar represents two or more sub-divisions of the data

#### Compound interest (Ch.10, p.220)

Money invested gains interest but that interest also gains interest in subsequent years

#### Constant (Ch.2, p.11)

Something which does not change, a horizontal line on a graph

# Continuous data (Ch.4, p.79, Ch.5, p.99)

Data which can take any value, including fractional values, for example, time taken to do something

# **Contribution** (Ch.3, p.46)

The difference between selling price and variable cost of one item – used in determining the breakeven level of production

#### Cookie

Many web sites place a small file on your harddisc called a cookie when you visit them. If you return to the same web site at a later date the web site will be able to read this file to see what you did last time.

# **Coordinates** (Ch.2, p.10)

Reference points on a graph, giving the x and y values of a point

# **Correlation** (Ch.8, p.159)

A measure of the relationship between two variables and lies in the range -1 to +1

# CPU

Central Processing Unit is the main processor inside a computer

#### **Critical path**

Defined by those activities that must be completed on time for the project to be completed on time.

# **Critical value**

The critical value or values define the point at which the chance of the null hypothesis being true is at a small, predetermined level, usually 5% or 1% (called the significance level)

**Cumulative frequency** (Ch.5, p.99) The number of items with a given value or less

## Cyberspace

A word suggested by the author William Gibson to describe the world 'inside' a computer

**Data** (Ch.12, p.263, Ch.13, p.285) All the facts and figures we have collected

#### Database

A way of storing large amounts of data in a way that can easily be searched or sorted

# Decryption

Decoding encrypted data back to its original form

**Dependent** (Ch.11, p.240) In probability, where the outcome of one event affects the outcome of another

#### **Dependent variable** (Ch.8, p.161)

The variable we are trying to explain. We are looking to relate the values of the dependent variable to the values of other variables

# Desktop

This is the starting point for Windows and displays all the applications and programs as icons

#### **Digital Camera**

A camera that takes pictures digitally and stores them in its own memory. This is unlike normal cameras, which used light sensitivity film to hold the image. (also see CCD, Resolution, megapixel, optical & digital zoom and memory cards)

# **Digital Certificate**

This is the common security standard for on-line transactions called secure electronic transaction (SET). A digital certificate would be issued by a credit card company to each customer and each company to identify them as valid transactors.

## Discount factor (Ch.10, p.221)

Used in investment appraisal to find current time value of money

#### Discrete data (Ch.4, p.79)

Data which can only take whole number (integer) values, for example, number of children in a family

#### **Domain name**

Is the precise location of an organisation or company on the internet (i.e. http://www.agfa.com). Also see http

#### DOS

Disk Operating System

# DPI

Dots per Inch, this is the measure of resolution used in both scanning and printing. The higher the number of dots per inch the better the image. The human eye can easily register up to 500 dpi

# DRAM

Dynamic Random Access Memory

## Dreamweaver

Software used for creating HTML files for the world wide web (Also see HTML)

#### Driver

Software that interfaces between the computer and a peripheral

## DTP

Desk Top Publishing

## DVD

Digital Versatile Disc is a form optical disk technology, similar to a CD-ROM that can hold a minimum of 4.7Gb, enough for a full-length movie. Commonly used for movies and other multimedia presentations that use sound and graphics. Many DVD players are compatible with CD-ROMS.

#### **Dummy activity**

Used to maintain the logic of the network and does not require time or resources

#### **Dynamic HTML**

Web content that changes every time it is viewed, see also HTML.

#### **Earliest start time (EST)**

The earliest time that an activity could begin assuming all the preceding activities are completed as soon as possible

#### **E-business**

A term first used by IBM to describe e-commerce as a term to encompass the process of buying and selling goods and services over the Internet. (Also see E-Commerce)

#### **E-Commerce**

The way in which goods and services are traded over the Internet, normally using a credit card to pay

## EIDE

Enhanced **IDE**. This is an advanced way of sending and receiving information from the hard disc. In many areas EIDE has replaced SCSI

#### E-Mail

Electronic Mail. This is a way of sending and receiving notes, memos and letters between computers

#### **E-tailing**

The selling and retailing of goods and services over the world wide web

# Encryption

A way of coding data to prevent unauthorised people from gaining access to it. It is frequently used to protect e-mail. (Also see ROT-13)

**Equally likely** (Ch.11, p.236) Things with equal probabilities

## Ethernet

A method of connecting computers together using cable, a special Ethernet card is also required.

# Expected value (Ch.10, p.226, Ch.11, p.241)

An amount multiplied by its probability, a bit like an average or what might happen over a long period of time

Explorer Microsoft's Internet web browser

#### **Exponentiation** (Ch.2, p.9)

Raising a number, or a letter to a power, which could be a whole number or a fraction or a negative number

#### Extranet

A companies own internet system with varying levels of access to outside users needing Username & Password – often used for partner companies

#### **Extrapolation** (Ch.8, p.169)

Making forecasts outside the range of the current data

#### FAQ

Frequency Asked Questions, files containing these are dotted all over the Internet

# Feasible area (Ch.3, p.53)

Area on a graph which meets criterion – often in relation to an inequality

# **File extensions**

There are numerous file extensions which are added to the end of a file name when it is saved to indicate what type of file it is. Common file extensions including .XLS (Excel), .CDR (Coreldraw), .DOC (Word processor), .PPT (Powerpoint), .PDF (Acrobat) and .SAV (SPSS).

## Firewall

This is a special security device used to protect a network from hackers. It is normally a machine with two network interfaces, designed to restrict the protocols that can be used. It is also used to decide which internal IP addresses can be and cannot be externally viewed

# Fixed cost (Ch.3, p.46)

A cost incurred whether or not any production takes place, for example, the rent on buildings

# **Flatbed Scanner**

This is a scanner where images are placed flat on the glass sheet and a special scanner head reads and digitises the information into a picture

#### **Floppy Disc**

Invented by the Sony Corp, floppy disks are used to store computer files up to a capacity of 1.44Mb. They have a life of up to 15 years before the earths magnetic field will start to corrupt them. (Also see LS-120 and Mb)

## Font

A set of characters used on screen or printed, including letters, numbers and other typographic symbols of the same style and design.

## FORTRAN

**FOR**mula **TRAN**slation is a third generation language designed for scientific algorithms, it has been replaced by C. Fortran is a third generation language.

#### Free float

The time that an activity could be delayed without affecting any of the activities that follow

**Frequency** (Ch.2, p.26, Ch.5, p.98) The number of times a value occurs, brought together into a frequency table

**Frequency definition** (Ch.11, p.236) In probability, conducting an experiment to determine a probability

#### **Front Page**

Microsoft's web page designer software

# FTP

File Transfer Protocol allows you to download files from a host computer

#### Gb

A Gigabyte is a thousand megabytes. The capacity of hard discs are measured in Gbs

#### Generation

Computers have been through four generations so far. The initial work was started by Charles Babbage's Analytical Engine, which relied on mechanical parts. The first generation of computers started in World War II with the use of vacuum tubes, one of the most famous of these computers was called the ENIAC (Electronic Numerical Integrator and Computer). ENIAC used 18,000 vacuum tubes and weight over 30 tonnes. In 1947 the transistor was invented and heralded the second generation of computers. In 1958, Jack St Claire Kilby produced the first micro-chip which lead to the third generation of computers. The last generation happen in 1971 when Intel produced the first microprocessor and RAM was invented.

Computer programming languages have been thought five generations so far. The only first generation language was machine code, written purely in binary code and very difficult to use. The only second generation language, was assembler which used names instead of numbers as machine code had and could be read, making it much easier to use than machine code. Third generation languages are much high level in there use of English making them much more readable. Furthermore third generation languages are more concise then earlier languages and can be ported to other systems (examples of third generation languages are COBOL and Fortran). Fourth generation languages allowed user to access databases. Finally fifth generation languages used graphical development environments to create programmes.

## GIF

Graphics Interchange Format originally designed by Compuserve, a low-resolution (72dpi) format for graphics files to be used on the web.

#### Gradient (Ch.8, p.167)

The increase in they value resulting from a unit increase in the x value (slope of the line)

## **Graphics Card**

A graphics card designed to hand the graphical images used to display information on the computer screen

#### Hacker

A person who attempts to break into a restrictive area of a network or computer, considerable damage can be done by hackers. Firewalls are often used to protect computers and networks from hackers

## **Hard Disc**

This is a high capacity storage media that computers used to hold programs and files. The information stored on the hard disc will remain even if the computer is switched off

**Histogram** (Ch.4., p.78) Chart where bars may be of varying widths and their areas represent the frequencies

## Hot Metal

Software that can edit HTML files for the world wide web (Also see HTML)

#### HTML

HyperText Mark-up Language use to create world wide web pages

#### HTTP

Hyper Text Transfer Protocol, this is a WWW protocol used to transfer HTML files. (Also see WWW and HTML)

## Hyperlink

Links which are used to connect to other web sites, normally shown in blue

#### **Hypothesis testing**

An alternative name for significance testing, the two being used interchangeably (see significance testing)

#### Icon

This is small picture displayed on the computer screen to identify a command, program or file

## IDE

Intelligent Drive Electronics or Integrated Drive Electronics. An interface for mass storage devices

#### IIS

Internet Information Server

## IMAP

Internet Message Access Protocol. An email message protocol

#### Independent events (Ch.11, p.238)

In probability, where the outcome of one event does not affect the outcome of another

# **Independent float**

The time that an activity could be delayed if all the previous activities are completed as late as possible and all the following activities are to start as early as possible.

**Independent variable** (Ch.8, p.161) The variable being used for explanatory purposes

# **Index number** (Ch.7, p.131)

Used to make comparisons back to a base year, can be used to amalgamate many items into one index, most famous is Retail Prices Index

## **Inequality** (Ch.3, p.52)

Things that are not equal; often used in linear programming

**Information** (Ch.12, p.264) Data organised in such a way that it informs the user

#### **Inkjet Printer**

This is a printer which squirts very small drops of electrically charged ink on to the surface of paper

**Intercept** (Ch.2, p.13, Ch.8, p.167) The point where a line cuts they-axis, in a linear function, the value of 'a' also used in regression

## Interlaced

The way pictures are build up on a computer screen, an interlaced screen draws every other line before going back to fill in the other lines. Interlaced monitors may flicker. Non-interlaced monitors paint each line in turn

#### Internet

A worldwide network connecting millions of computers

#### **Interpolation** (Ch.8, p.169)

Making forecasts within the range of the current data

#### Intranet

A private network that is use used as an internal company wide Internet

# IP

All computers permanently connected to the net have an IP (Internet Protocol Address) this is a unique 32 bit number

## IRQ

The settings which determine the memory addresses used for PC peripherals such as modem etc

# ISDN

Integrated Services Digital Network is a very fast digital telephone line, which has been widely adopted in Europe but not North America

## ISP

Internet Service Provider

# Java

A cross platform programming language used extensively on the Internet, due to the fact that it works on many difference types of computers. Java is related to C++. (Also see C)

## **JPEG**

Joint Photographic Experts Group is a standard format for saving images as a compressed file

## Kb

One Kilobyte consists of 1024 bytes or 8,192 bits

### Kbps

Kilobits per second. A measure used for the speed of a modem. One Kilobits is 1,000 bits. (Also see Modem and bits)

#### LAN

Local Area Network

#### Language

There are many computer languages some of the more famous include Fortran, Cobol, Basic, Pascal, C++, Visual Basic, Java

## Laptop

Portable computer

#### Laser Printer

A printer uses a complex set of lenses and mirrors to direct a laser beam. This laser beam paints a negative image of the page to be printed on to a drum. The electrically charge drum is then used to pick up toner, this is rolled on to a piece of paper and heated to fix it. Laser printers work in the same way to photocopiers

Laspeyres index (Ch.7, p.139) A base weighted index series

#### Latest start time (LST)

The latest time an activity can begin without causing a delay in the overall duration of the project

# LCD

Liquid Crystal Display. This type of screen technology is normally used in laptops

Linear (Ch.3, p.47) Straight line

**Linear function** (Ch.2, p.11) A straight line, as in y = a + bx

# Linear programming (Ch.3, p.50)

A technique to find the optimum allocation of scarce resources between competing uses

# Linux

An operating system in competition with Microsoft's Windows, it is very powerful and robust. Linux is a freely distributed version of Unix that runs on numerous hardware platforms

# Lower quartile (Ch.6, p.114)

Gives the value one-quarter of the way through an ordered set of data

# LS-120

A high-density disk which is capable of storing up to 120Mb of data. LS-120 drives can also read the standard floppy discs. (Also see Mb)

# Mb

Megabyte. This is a measure of storage capacity, and one Mb contains 1,024 kilobytes. The capacity of computer memory is also measured in Mb

# Mean (Ch.5, p.96)

The mean is calculated by adding the given values together and dividing by the number of values

Median (Ch.5, p.96) The middle value of an ordered list

# Megapixel

A megapixel is a million pixels, the latest models of digital cameras have a maximum resolution of six or more megapixels

# Memory

This is where a computer stores information it is presently processing and is normally measured in Mb

# **Memory card**

These are used in digital cameras to store pictures. At present there are three basic formats (i.e. SmartMedia, CompactFlash and Sony's memory stick) which are not compatible

# MHz

Megahertz. This is the measure of the computers speed, which is measured in millions of cycles per second

**Mid-point** (Ch.5, p.100) The half-way point of a given range

**Modal group** (Ch.5, p.103) The range of values containing the mode

Mode (Ch.5, p.97) The most frequent value

# Modem

**MO**dulator **DEM**odulator. This is a device which allows one computer to talk to another by converting electronic signals into sound sending them down a telephone wire or over a satellite link a and then converting them back to an electronic signal

# Monitor

The screen that the computer uses to display information

# Motherboard

This is the main part of the computer and holds the CPU

# Moving average (Ch.9, p.191)

An average calculated for a specified number of data points that moves forward as new data becomes available

# MP3

Motion Picture group 1 layer 3 is a way of digitally compression audio files to about one tenth of their original size. Internet web sites like http://www.mp3.com and

http://www.peoplessound.com provide access to MP3 files. You will need a MP3 Player to play these files

# MPEG

Stands for Moving Pictures Encoding Group and is the standard way to digitally compress both audio and video computer files

# MPEG-2

A method of compressing and storing video data.

**Multiple regression** (Ch.8, p.171) When two or more x variables are being used to predict the y values

# Multiplicative model (Ch.9, p.195)

A model that explains differences by multiplying component elements  $(A = T \cdot S \cdot R)$ 

**Mutually exclusive events** (Ch.11, p.237) Things that cannot happen at the same time, used in probability

Net present value (NPV) (Ch.10, p.222)

Method of finding current value of a projected series of future cash flows to evaluate a project and hence choose between competing projects

Netscape Internet web browser

# Network<sup>1</sup>

Any large project will involve the completion of a number of smaller jobs or tasks. A network is a way of illustrating the various tasks and showing the relationship between them

#### Network<sup>2</sup>

The way a number of computers are linked together so information and peripherals can be shared.

#### Node

A point in time when an activity starts or finishes

**Non-sampling error** (Ch.12, p.276) Those differences that cannot be explained by the sampling process

## Null hypothesis

It implies that there has been no change in the value of the parameter that is being tested from that which previously existed

## OCR

Optical Character Reading. This is where a scanner reads a page of text and converts it into a page of electronic text which can be edited in the normal way

**Ogive** (Ch.5, p.101) A graph of cumulative frequency

#### **Origin** (Ch.2, p.10)

Represents the point where both X and Y are zero on a graph and is where the two (or more) axes cross

# OS

Operating System - i.e. Windows XP, 2000 etc

## **Paasche index** (Ch.7, p.142) A current weighted index series

A current weighted index serie

# **Parallel Port**

A connection on the back of the computer which allows the PC to use a printer, data is sent using eight parallel wires. The parallel port is normally referred to as LPT1 or LPT2

# Parity

Is the first method of checking that data transmitted to another computer has been transmitted correctly

## PASCAL

A computer programming language developed by Nicholas Wirth in Zurich, Switzerland, in the late 1960's. The roots of this language lie in early programming languages like FORTRAN, COBOL and BASIC. It was named after the famous French mathematician Blaise Pascal who died in 1662. (Also see BASIC)

## **Payback** (Ch.3, p.56, Ch.10, p.218) Amount of time it takes to recoup the initial

investment

# PC

Personal Computer

# PCI

An expansion slot on the motherboard which permits peripherals to be connected and allows for a fast rate of data exchange

#### PDA

Personal Digital Assistant – hand held device that combines computing, telephone/fax, Internet and networking features. Also known as Palmtops, hand-held computers and pocket computers

## PDF

Portable Document Format as created by Adobe Acrobat. (Also see Acrobat)

## Pentium 4

The standard processor used in most PC's worldwide

# Percentage change (Ch.2, p.27)

Looking at the increase from some starting point; they are the basis for index numbers, but are also used in comparing sets of data, especially if the units of measurement in the two sets are different.

#### Percentiles (Ch.6, p.116)

Gives the value at a specified percentage through an ordered set of data

#### Pictogram (Ch.4, p.78)

Diagram where a relevant picture or cartoon is used to represent the size of the data

## **Pie chart** (Ch.4, p.74) A circle divided in proportion to amounts of data

#### Pixel

The resolution of the screen is measured in pixels, a standard display would have 1024 by 768 pixels

#### **Plug-ins**

Special pieces of software used to view certain types of web files (e.g. Shockwave from Macromedia)

#### Point or pt

The basic unit of type measurement used on screen or printed material. 72 pts equals one inch (henceno coincidence we have screen resolutions of 72dpi)

## POP3

**P**ost **O**ffice **P**rotocol (version 3) is an email protocol generally used by Windows and Macintosh users

**Population** (Ch.12, p.264) All the people or items of interest to us

## Postscript

Page Description Language used for sending high quality print jobs to outside printing companies from a standard PC. Some laser printers can print in postscript format

# **PowerPoint**

Microsoft's flexible and very powerful presentation package, PowerPoint is part of the Microsoft office suite

#### Powers (Ch.2, p.9)

How many times the number is multiplied together, also known as exponentiation

# Pre-coded answers (Ch.4, p.71)

On a questionnaire where the acceptable answers are specified with the question and the respondent chooses one of these

**Primary data** (Ch.12, p.264) Facts and figures we collect for our purposes

#### Processor

This is the centre of the computer and is normally located on the motherboard, it is also know as the CPU (Central Processing Unit)

# Protocol

Is a set of rules controlling the way communications are carried out

**Quadratic function** (Ch.2, p.15, Ch.2, p.47) A function where the power of x is 2 giving a graph with a single bend or turning point

# **Quark Xpress**

Industry standard desktop publishing package

**Quota sampling** (Ch.12, p.269) Selection based on achieving certain numbers with defined characteristics

#### RAM

Random Access Memory, normally measured in Mb

**Range** (Ch.6, p.112) The difference between the largest and smallest values

**Rank correlation** (Ch.8, p.173) Provides a measure of how columns of ranked data relate

# Rebasing (Ch.7, p.135)

Moving the base year of an index series, often to time align two or more series for comparative purposes.

**Regression** (Ch.8, p.167) The fitting of a line to a scatter of points

## Resolution

The quality of printed or scanned images; it is normally measured in dpi. The human eye can normally register up to 500 dpi. In digital photography an image of 1024 x 768 pixels is fairly standard(Also see dpi)

# ROM

Read Only Memory

#### **ROT-13**

A simple encryption method which involves rotating the alphabet forward or backwards by 13 places.

**Root** (Ch.2, p.19, Ch.3, p.49) The values of x where a function crosses the x-axis – a quadratic has 2 roots, a cubic 3 roots, and so on

#### Sage

Software supplier of what is considered the Industry standard accounting and payroll packages

Sample (Ch.12, p.264) A selection from all those people or items of interest to us

**Sample space** (Ch.11, p.237) A diagram showing all of the outcomes in a probability problem

Sample statistic The evidence from the sampling process

**Sampling error** (Ch.12, p.276) The variation from sample to sample (part of the sampling process)

**Sampling frame** (Ch.12, p.266) A listing of all those people or items of interest to us

**Sampling unit** (Ch.12, p.264) The item, object or person being selected

**Sampling with replacement** (Ch.11, p.240) Where each one selected for the sample from the population is put back before the next sample member is selected.

## Scanner

An input device used to read graphical images or text into an electronic form

# SCSI

Small Computer System Interface is a high-speed standard interface to connect peripherals to a computer

#### **SDRAM**

Synchronous **DRAM** is a very fast type of computer memory. (Also see DRAM)

## Search engine

Is a special piece of software designed to search the world wide web for interesting files. You state what to search for and the search engine will look possible matches in numerous databases. Logic can also be used in the search string (e.g. and, or, not). Popular search engines are http://www.yahoo.co.uk and http://www.google.com

Seasonal effects (Ch.3, p.44, Ch.9, p.195)

Variations in a time series associated with a particular period of time, say a quarter, or a month, or the differences in the data that can be explained by the season of the year

## Secondary data (Ch.12, p.264)

Data collected by others that might or might not be of use to us

## **Serial Port**

A connection on the back of the computer that allows the PC that is used to get data in and out of the computer. A modem uses a serial port. The serial port is normally referred to as COM1 or COM2

#### Server

A dedicated computer that allows other computers to access it over the Internet or via a network

#### Significance testing

Testing whether a set of sample results support, or are consistent with, some fact or supposition about the population.

#### **SIMM slot**

Single Inline Memory Module slot. SIMM slots allow the computers memory to be expanded by adding SIMM cards to add to the RAM. (Also see RAM)

**Simple random sampling** (Ch.12, p.266) Selection when all people or items are given an equal chance of inclusion

#### **Simultaneous equations** (Ch.2, p.22)

Two or more equations which are true at the same time, and usually you need to find the values of x and y where this happens, often needed in solving linear programming problems

#### **Slope** (Ch.2, p.13)

The value of b in a linear function, also used in regression

## Soundcard

The soundcard which converts sound data from digital to analogue which can then be played on normal speakers

## Spam

Junk e-mail

# Speech Recognition

A special computer program which allows the computer to be controlled by the human voice

### Spreadsheet

Software using cells to store and manipulate data, the first spreadsheet was called Super-Calc, however now Microsoft Excel is the industry standard

#### SPSS

Statistical Package for Social Scientists, a very powerful statistical package, excellent for undertaking and cross-sectional analysis. It can also be used for time series analysis.

#### SSL

Secure Sockets Layer, a software system which encrypts important information like credit card details. E-tailers using this system are identified by a closed padlock or unbroken key at the bottom of the screen. (Also see Digital Certificate and Etailing)

#### **Standard deviation** (Ch.6, p.112)

Provides a measure of the average difference from the mean

**Standard normal distribution** (Ch.11, p.249) A normal distribution where the mean is zero and the standard deviation is one. Forms the basis for all normal distribution tables of areas.

**Statistic** (Ch.5, p.96) A descriptive number

#### Stratified sampling (Ch.12, p.267)

Selection using information about the parts/structure of the population

# Subjective probability (Ch.11, p.237)

A probability found by questioning people, rather than by calculation

#### Swap file

A reserved area of the hard disc used as virtual memory

# Systematic sampling (Ch.12, p.268)

Selection using a calculated interval through the sampling list

# Taskbar

The bar at the bottom of the screen in Windows, which lists all the programs or windows which are currently in use

# Tasks

Elements that make up the project

# ТСР

Transmission Control Protocol used to transfer information from one computer to another over the Internet

# Test statistic

The difference between the sample evidence (sample statistic) with the null hypothesis (what is assumed to be true).

# TIF

Tagged Image File, a format for storing graphical images to be used in print.

**Time series** (Ch.3, p.44, Ch.9, p.185) Data which is measured over time, usually at specific intervals, often represented by a graph, or data specifically collected over time

# Total cost (Ch.3, p.46)

All costs incurred by the firm, usually seen as fixed cost plus variable cost

# **Total float**

The difference between the maximum time available for an activity and the duration of an activity

# Total revenue (Ch.3, p.46)

All of the income to a company, in a simple case, just price times the number of items sold

# Touchpad

A small touch sensitive pad on a laptop, usually a couple of inches square which is used instead of a mouse

**Trend** (Ch.9, p.185) General movement in the data over time

# TWAIN

A standard for the way scanners to communicate with computers

# UNIX

A very powerful multi-user, multitasking operating system developed in the 1970's. Commonly used by universities and Internet service providers, it's less popular in the PC market. (Also see Linux)

# Upper quartile (Ch.6, p.114)

Gives the value three-quarters of the way through an ordered set of data

# URL

Universal Resource Locater, which normally starts http://www

# USB

Universal Serial Bus is used to connect peripherals such as printers and scanners to a computer quickly and easily and can expand a system considerably.

# Variable cost (Ch.3, p.46)

Costs which are incurred as a result of production and which change with the level of production, for example, the cost of raw materials

# Variance (Ch.6, p.113)

Provides a measure of the average squared difference from the mean

# Virtual Memory

A special part of the hard disc used as a swapfile to storage temporary files, it can be configured to act like RAM

# Virus

A program designed to harm a PC, famous virus include the 'I Love you Bug' and 'Stoned'. You should always have an anti-virus program running on your PC to stop virus. Viruses can replicate themselves on a PC as well as over the Internet very very quickly

# W3C

World Wide Web Consortium is the governing and standard authority of the internet

# WAN

Wide Area Network

# Word

Microsoft industrial standard word processor, it is very powerful and can undertake simple desktop publishing. It is part of the Microsoft office suite of programmes

# Word processor

Software used to write and edit documents, advanced word processors can import graphics and provide simple desktop publishing

# WWW

World Wide Web or World Wide Wait

# XML

Extensible Markup Language, designed especially for web documents. Structures data so it can be easily transferred over a network.

# **ZIP Drive**

This is a high capacity disk storage device designed by Iomega. It can store either 100Mb or 250Mb on one special disc. Zip drives are excellent for backing up systems or for moving very large files between different computers. (Also see Mb)