

ICT Coursework-Spreadsheet

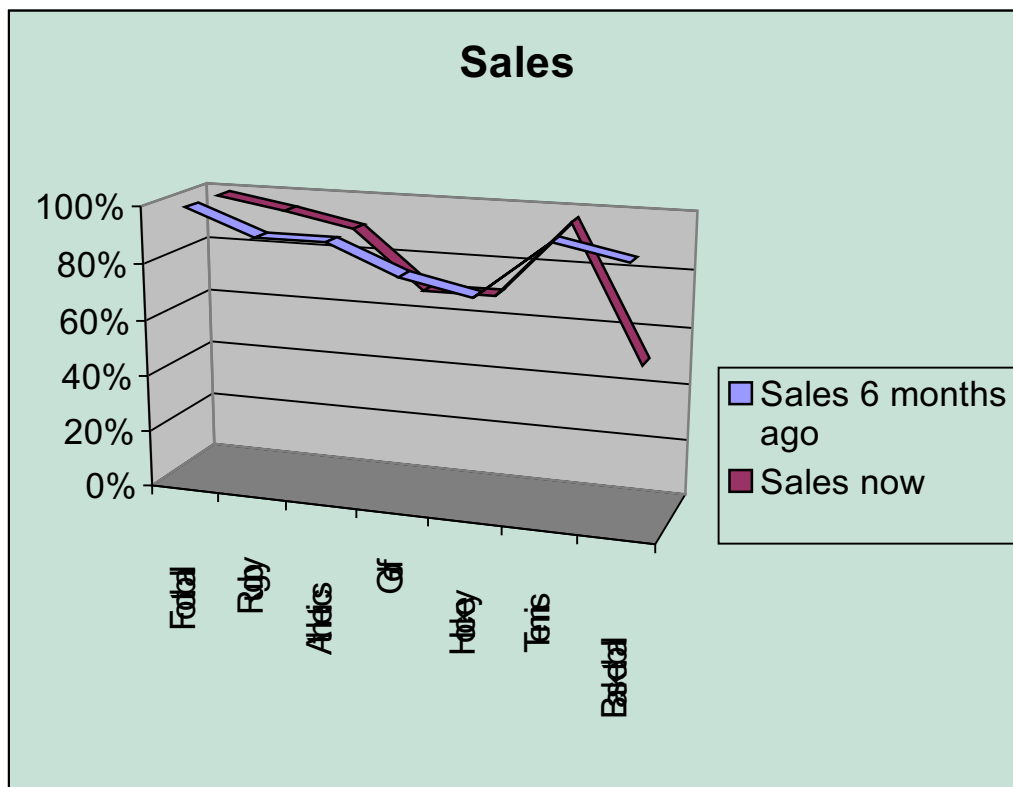
Identify:

Mr Smith, who is the owner of *JC SPORTS*, has discovered three main problems with his shop's basketball sales, these were due to...

1. The old-fashioned manual systems in his company.
(Manual system).
2. The lack of interest for the latest new products on the market. (Marketing system).
3. The lack of a new hardware & software systems.
(Computer system).

Surprisingly, because of poor product handling, out of all the sales in his sports and design shop, the amount of basketball sports goods sold dropped massively over the past six months as seen here...

[Hyperlink to Sales.xls](#)



This is their table...

JC Sports Sales in the last 6 months

Goods	Sales 6 months ago	Sales now	
Football		99%	99%
Rugby		90%	95%
Athletics		90%	90%
Golf		80%	70%
Hockey		75%	70%
Tennis		95%	97%
Basketball		90%	50%

[Hyperlink to Sales1.xls](#)

At the time, I happened to assist Mr Smith as he was recording down his sales. Mr Smith was not very clever when it came to using computers. He needed a quite a lot of helping out.

Due to the fact that I was one of his best customers, Mr Smith then showed me his most baffling results that he recently found out. The problem was that Mr Smith was pretty old fashioned and used the ancient, long gone manual technology like the typewriter to sort out his business instead of using the modern day computer software and technology such as the word processor and the spreadsheet.

Since I was compiling this project, I offered to help him solve this very problem by myself doing a series of analysis on the sales, marketing and systems later on in that very same week. It was a challenge. Mr Smith was very much obliged and gave me his sales report immediately. I also advised him to shape up and use the latest up-to-date, business & industrial technology around him and not use his very old, former technology.

Later on at home, as I assessed the report, I took into consideration any possible alternative solutions and objectives of the following concerning a sales analysis, marketing analysis and a system analysis.

These were to...

1. Write a questionnaire: Write questionnaire in Microsoft Word. (For the customers- Customers will fill it in)
2. Do a survey: Plot survey results in Microsoft PowerPoint. (For the customers- Questionnaires will be sent out to customers as part of survey)

3. Enter all information and data into both Microsoft Word and Microsoft Excel.
4. Cut down prices: this will help by attracting customers who would like to buy the product at an affordable price.
5. Include deals: this is making special offers to customers that they will find hard to resist.
6. Advertise: this will help more and more people, customers and business associates know more about the product.
7. Introduce new appropriate hardware and software.

Analyse:

Continuing assessing my project, I conducted a feasibility study on the Mr Smith's problem and soon composed a long systems analysis to tackle this hard problem.

The hardware and software that was introduced was used to enhance the accuracy of the business of Mr Smith.

My three main goals were to...

1. **Eliminate** the old manual system.
2. **Boost** the marketing system.
3. **Introduce** the new computer system.

Objectives for No.1 were to...

1. Use manual system methods only when necessary and when there is something wrong with the computer. (E.g. Printing of reports for sales, having documents if encase they are needed, having extra copies etc.)
2. Try to eradicate human error and computer error.
3. Try to understand information in the data; this is because the computer does not understand the data that is in it.

Objectives for No.2 were to...

1. Write a questionnaire: Write questionnaire in Microsoft Word.
2. Do a survey: Plot survey results in Microsoft PowerPoint.

3. Enter all information and data into both Microsoft Word and Microsoft Excel.
4. Try and understand the entire number of information withdrawn.
5. Cut down prices: this will help by attracting customers who would like to buy the product at an affordable price.
6. Include deals: this is making special offers to customers that they will find hard to resist.
7. Advertise: this will help more and more people, customers and business associates know more about the product.

Objectives for No.3 were to...

1. Introduce a computer system to help give accurate product handling.
2. State and identify the new appropriate hardware and software.
3. State what new appropriate hardware and software will be used for.
4. State where new appropriate hardware and software will be used.
5. State how new appropriate hardware and software will be used.
6. State why new appropriate hardware and software will be used.
7. State when new appropriate hardware and software will be used.
8. State who the new appropriate hardware and software will be used for.
9. State data inputs.
- 10.State data outputs.
- 11.State the data and spreadsheet manipulation.
- 12.State the ways in which how problems will be solved.
- 13.State and identify appropriate backup and security strategies.

Goals number 1 and 2 had clearly already been accomplished in time that same week by other means necessary. Focusing my attention on goal number 3, I afterwards devised the following analysis corresponding to goal number 3:
Input- I will require a keyboard for typing in data.
Output- I will also require a printer available considering that my document may be reacquired efficiently refraining from having to worry whether the computer is switched on or off.

Input and Output Devices

Keyboard

The keys on a keyboard let you enter information and instructions into a computer. The Macintosh keyboard has a **Command**, or **Apple**, a key that you can use to quickly perform specific tasks. For example, in a word processing document.



Mouse

A mouse is a handling-pointing device that lets you select and move items on your screen. Unlike a PC mouse, which has two buttons, a Macintosh mouse has only one button.



Monitor

A Monitor display text and images generated by a computer. Some monitors are designed to work only with Macintosh computers. For more flexibility, you can buy a monitor that will work with the both Macs and PCs.



Video Capabilities

All Macintosh computers come with built-in video capabilities that translate instructions from the computer into a form the monitor can understand.

Input

Last modified: Wednesday, February 19, 2003

(n) Whatever goes into the computer. Input can take a variety of forms, from commands you enter from the keyboard to data from another computer or device. A device that feeds data into a computer, such as a keyboard or mouse, is called an input device.

(v) The act of entering data into a computer.

Input device

Last modified: Thursday, August 30, 2001

Any machine that feeds [data](#) into a [computer](#). For example, a [keyboard](#) is an input device, whereas a [display monitor](#) is an [output device](#). Input [devices](#) other than the keyboard are sometimes called *alternate input devices*. [Mice](#), [trackballs](#), and [light pens](#) are all alternate input devices.

Output

Last modified: Wednesday, February 19, 2003

(n) Anything that comes out of a [computer](#). Output can be meaningful information or gibberish, and it can appear in a variety of forms -- as [binary](#) numbers, as [characters](#), as pictures, and as printed pages. [Output devices](#) include [display screens](#), loudspeakers, and [printers](#).

(v) To give out. For example, display screens output images, printers output print, and loudspeakers output sounds.

Output device

Last modified: Thursday, August 30, 2001

Any machine capable of representing information from a [computer](#). This includes [display screens](#), [printers](#), plotters, and synthesizers.

1. The new computer system introduced was a spreadsheets programme.
2. The new appropriate hardware and software that I identified were of course some computers (the hardware) and Microsoft Excel (the software). These both supported the spreadsheets programme.

Hardware=*Computer Science*. A computer and the associated physical equipment directly involved in the performance of data processing or communications functions.

Software= Machines and other physical equipment directly

involved in performing an industrial, technological, or military function.

3. The new appropriate hardware and software will be used for the marketing system of *JC SPORTS*. It will be used to boost the ability of good, explicit and precise product handling.
4. The new appropriate hardware and software will be used at *JC SPORTS*.
5. The new appropriate hardware and software will be used by... (Shown in these step-by-step explanations below: **How to use Spreadsheet**) we use a Spreadsheet document to organize text and numbers into rows and columns. Spreadsheets are particularly useful for entering numbers that you want to organize and analyse information. When you work with a spreadsheet document, you see the spreadsheet menus. The spreadsheet itself is a grid of rows (going across) and columns (going down). Key concepts: Each column is labelled with a letter at the top. Each row is labelled with a number at the left. The intersection of a row and column is called a cell. Each cell has a unique address, which consists of the column letter and row number (for example, D3). You enter a cell's contents using the entry bar at the top of the spreadsheet. You can enter text, numbers, or formulas into cells. Formulas are not actual values like text or numbers. Instead, formulas are a set of instructions that produces good a value for a cell. You see a cell's formula in the entry bar. The formula's result appears as the actual value in the spreadsheet cell. The spreadsheet always has one current (active) cell, and that cell has a heavy border. The contents of current cell, if any, appear in the entry bar. A block of adjacent cells is called a cell range. You identify a cell range by the addresses of the upper-left and lower-right cells in the block. In this spreadsheet... The upper-left cell is B2 and the lower-right cell addresses separated by two periods (for example, B2.C3). Formulas: Sum formula: Example: =sum (D4.G4) or =D4+E4, Average formula:

Example: =average (D4.D12), multiply formula: Example: =D4* 4.

6. The new appropriate hardware and software will be used because Mr Smith had been using very old technology compared to what we use today. Also because it will definitely help & save Mr Smith's business.
7. The new appropriate hardware and software will be used gradually and when it is necessary in *JC SPORTS*.
8. The new appropriate hardware and software will be used personally and financially for the *JC SPORTS* business and its customers.
9. The input devices for the business of *JC SPORTS* will include Keyboards, mouse(s), Digital cameras, Armatures, Assist-like Technologies for Special Needs, Bar Code Readers, Boards, Desks, Pads and Pens, Character Recognition, Chord Keyboards, Digitising Tablets, Video digitisers, Microphones, Sensors, Touch-tone telephones, Eye and Head, Movement Trackers, Foot Controllers, Force & Tactile Feedback ("Haptic") Devices, Game Controllers, Gloves, Joysticks, Keyboards and Keypads, Light pens, MIDI Controllers and Accessories, Miscellaneous & High DOF Devices, Motion Capture and Speech Recognition. Stylus devices: Digitising Tablets , Light pens, Boards, Desks and Pads, Touch Screens, Miscellaneous and Force Feedback ("Haptic") Devices, Touch Screens, Touch Tablets and Trackballs.
10. The output devices for the business of *JC SPORTS* will include monitors, plotters, printers, speakers, projectors, Actuators, Alarms, Microfilms, Films, VDUs, Ink Jet printers, Laser printers and Dot matrix printers.
11. Data and spreadsheet manipulation- as I plotted all my data information using a few Microsoft programmes, these were the spreadsheet how-to steps that shows how I did in using these programmes. This is my progress on three points of Goal 2:

1. MS Word>[Hyperlink](#)

- I entered into MS Word (you click it)
- I typed the questionnaire in 'Times New Roman' font
- I enlarged the font size to '36' to capture the whole page
- The language was of course 'English (UK)'

[Hyperlink](#)

1. What types of Sports goods do you like?
2. What types of Designer goods do you like?
3. What types of Sports goods do you hate?
4. What types of Designer goods do you hate?
5. What product should we enhance?

2. MS PowerPoint > [Hyperlink to MS PowerPoint1.ppt](#)

MS PowerPoint

- I entered into Microsoft PowerPoint
- I highlighted the table and graph from questionnaire.xls
- I copied both of them one at a time
- Then pasted them the same way into some of my Microsoft programmes

Example

Quarter	East	West	North
1st Q tr	20	30	45
2nd Q tr	28	35	48
3rd Q tr	90	35	45
4th Q tr	20	30	45

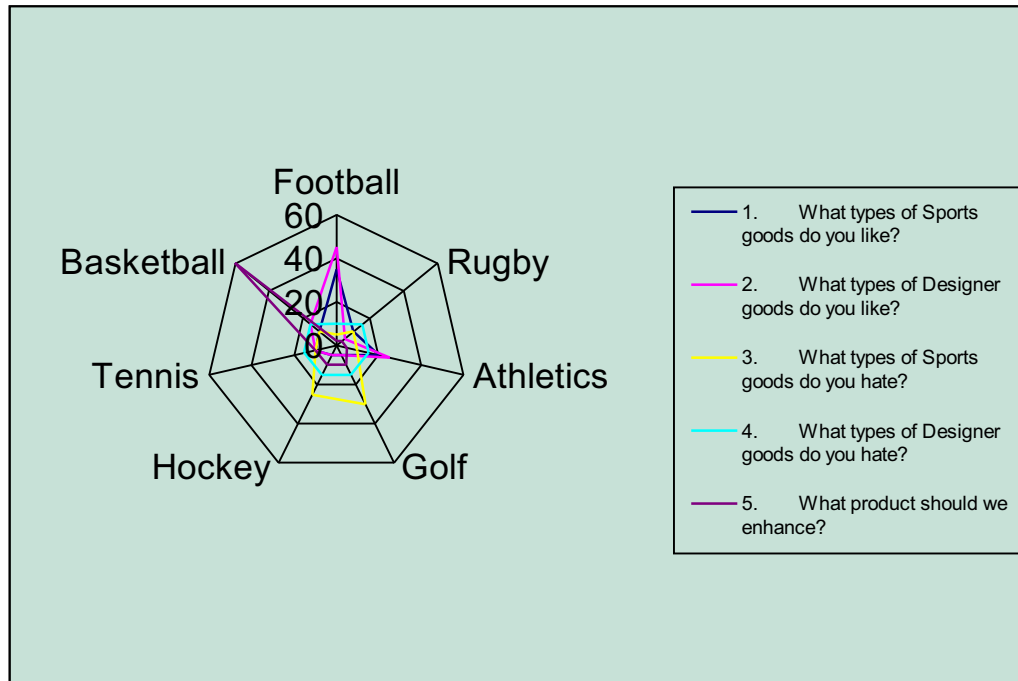
Legend:

- East
- West
- North

3. MS Excel > [Hyperlink to Questionnaire.xls](#) & [Firstly.doc](#)
 - I entered into Microsoft Excel
 - Then highlighted the questions from [Firstly.doc](#) & [Questionnaire.xls](#)
 - And pasted them into [Questionnaire.xls](#)
 - Made a table
 - Then made a chart

Survey Results for Questionnaire

Questions (out of 100 people)	Football	Rugby	Athletics	Golf	Hockey	Tennis	Basketball
1. What types of Sports goods do you like?	35	10	20	5	5	10	10
2. What types of Designer goods do you like?	45	5	25	5	5	10	15
3. What types of Sports goods do you hate?	5	10	10	30	25	10	10
4. What types of Designer goods do you hate?	10	15	15	15	15	15	15
5. What product should we enhance?	2	3	5	10	10	10	60



12. Ways in which problems will be solved-

- Diminish Human and computer (PC) error.
- Save time and money.
- Save space.
- Boost the marketing.
- Helps business tactics
- Boost status
- Saves valuable energy

13. Back up and security strategies-

- **Backup/Strategies:**
- Hard Disks are the main Internal Backing Store
- Hard disks are usually found inside computers. They're rigid circular plates that have been magnetised, and each hard drive usually contains several disks stacked on top of each other.

- Each disk contains lots of concentric tracks, and these tracks are divided into sectors. The data is stored in the sectors. Most disks can store data on both sides.
- The disk rotates at between 5400 and 7200 revolutions per minute (rpm), and read/write heads (one on either side) float just above the surface of the disk. They're so close that a speck of dust would ruin the hard drive – so the disk drive is kept in a sealed unit.
- It is possible to connect an external hard drive if additional storage is needed.
- The main benefit of hard drive is that the hard drive is that they have a pretty large capacity – 20 gigabytes or more (1 gigabyte = 1024 megabytes) is now common in a desktop, and 8 gigabytes in a laptop.
- One potential problem is that the hard drive is usually housed inside the computer, so it's not easy to use it on a different machine (though you can buy removable hard drives). Also, if there's a problem with the hard drive, all of the data stored on it may be lost.
- Hard disks
- Compact Disks (CD)
- Floppy Disks
- CPU (Computer Processing Unit)
- Films
- Videos
- Files
- Cabinets
- Storage Units
- Documents
- Back up disks
- Folders
- Chips
- Backup Software
- Backup Hardware
- Backup Storage

- Backup Items

Floppy Disks are a Common External Backing Store

- The most common external backing store is a 3.5-inch floppy disk.
- A floppy disk is a circular piece of magnetised plastic, but being floppy it is easily damaged – this is why they have a protective hard plastic sleeve.
- They work in a pretty similar way to hard disks. The main difference is that the read/write heads access the disk through holes in the protective sleeve.
- They have a small tab, which can be slid down to make the disk read-only. This helps to reduce the chances of data being accidentally overwritten and lost.
- Since floppy disks are small and portable
- CD ROMs
- RAMs
- RAMs- Hold temporary memory
- ROMs
- ROMs- Hold permanent memory
- Magnetic tape
- Optical Disks
- ZIP Disks
- ZIP Files
- Almost any hardware available could be good for backup
- **Security/Security Strategies**
- **Physical Security**
- **Access Security**
- **Data Security**
- **Reasonable Security**
- **Network Security**

- Serial Numbers- Keep record of all serial numbers, and mark the organisation's name and postcode on all equipment – this help police to identify stolen property.
- Alarms- Computer rooms should be protected by burglar alarms.
- Doors should be locked when rooms are not in use.
- Fire protection- Use fireproof doors and smoke alarms. Also, automatic gas-flooding systems could be used to put out any fire to prevent water damaging the equipment.
- Lock windows to prevent access.
- Avoid putting computers on the ground floor buildings, where they can easily be seen from outside.
- Blinds or curtains should be closed at night, and monitors should be switched off, so the computers are less visible.
- All authorised users should be given usernames and given or create their own passwords. This will limit unauthorised access to the network.
- Users should change their password frequently.
- Individual users should be assigned access rights – for example network managers can be given access to the software that controls how the network is run. Other users can be limited to certain types of applications software such as word processors.
- Some software can be password-protected so that a password is needed to view and amend data.
- Files can be made read-only, so that they cannot be altered or deleted. Other files may be hidden so that they are not visible to the user.
- Regular backups should be made of the data on the system using suitable backup storage. The main method used to back-up network data is the ancestral method.
- Back-up files should be kept secure – ideally in locked fireproof rooms in a different location to the network.
- Archiving means copying or moving a file somewhere for long-term storage.

Design:

This spreadsheet will contain the following five questions which all have been converted into Microsoft Excel. This was my progress...

1st- (FROM QUESTIONNAIRE SHEET) [hyperlink](#) *Firstly, Mr Smith and I sent out the following questionnaire to the JC SPORTS customers.*

1. *What types of Sports goods do you like?*
2. *What types of Designer goods do you like?*
3. *What types of Sports goods do you hate?*
4. *What types of Designer goods do you hate?*
5. *What product should we enhance?*

- I entered into Microsoft Word
- I typed the questionnaire in 'Times New Roman' font
- I enlarged the font size to '36' to capture the whole page
- The language was of course 'English (UK)'

2nd- (FROM POWERPOINT PRESENTATION) [Hyperlink to Questionnaire.xls](#), [Firstly.doc](#) & [Hyperlink to MS PowerPoint1.ppt](#)

MS PowerPoint

- I entered into Microsoft PowerPoint
- I highlighted the table and graph from questionnaire.xls
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Example

Quarter	East	West	North
1st Qtr	20	30	45
2nd Qtr	25	40	48
3rd Qtr	90	45	45
4th Qtr	20	30	45

Qeios (10/0/0/0/0)

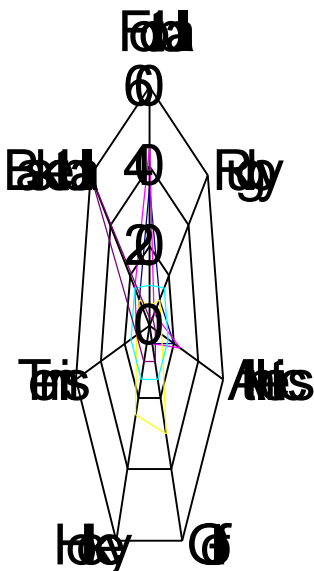
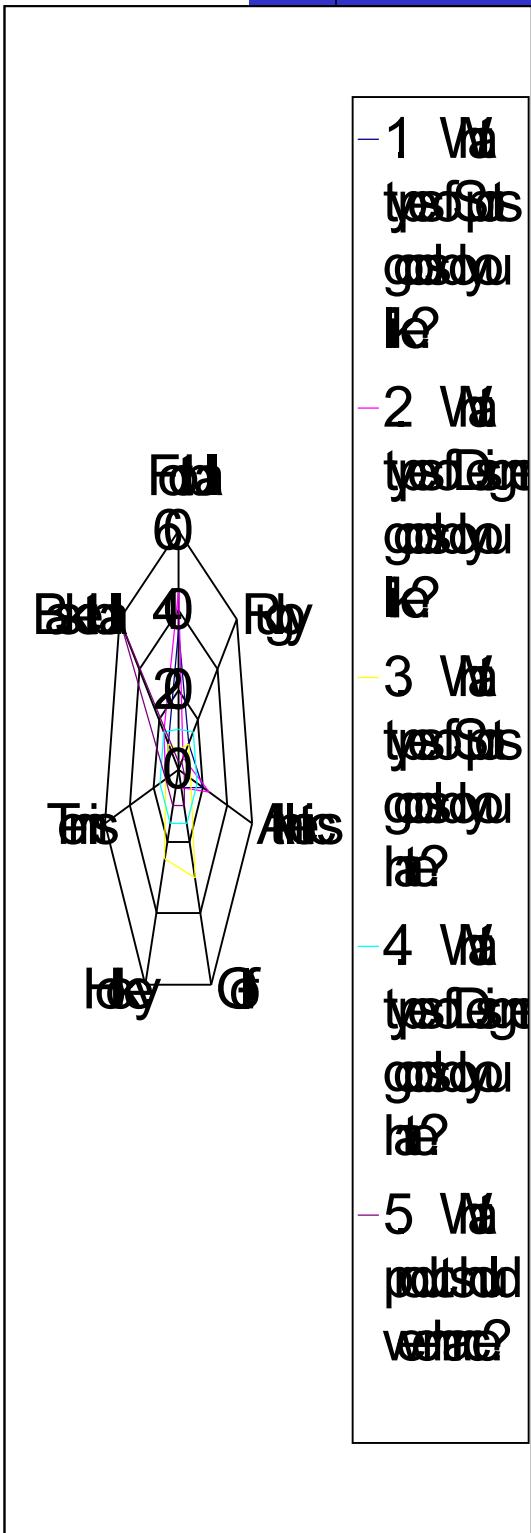
Total Qty: 62, Total Hits: 62, Total Views: 62

Created on 2/4/2004 10:25 AM

Category	Total	Qty	Hits	Views	Percentage
1. What types of Sports goods do you like?	5	0	2	5	0.1
2. What types of Designer goods do you like?	5	5	5	5	0.1
3. What types of Sports goods do you hate?	5	0	0	3	0.1
4. What types of Designer goods do you hate?	0	5	5	5	0.1
5. What product should we enhance?	60	2	3	5	0.1

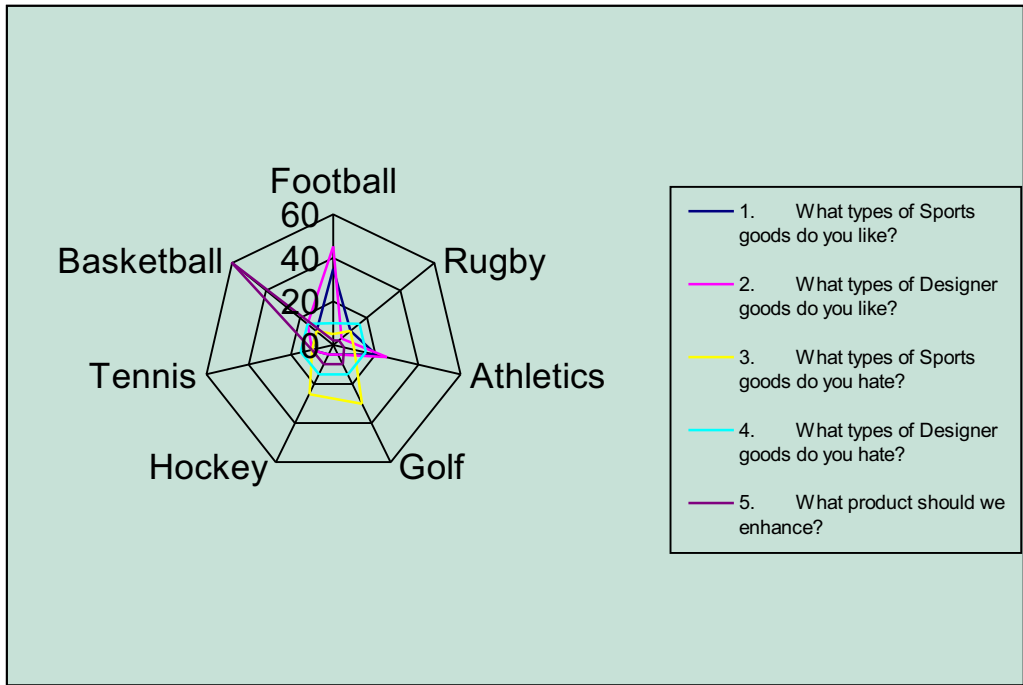
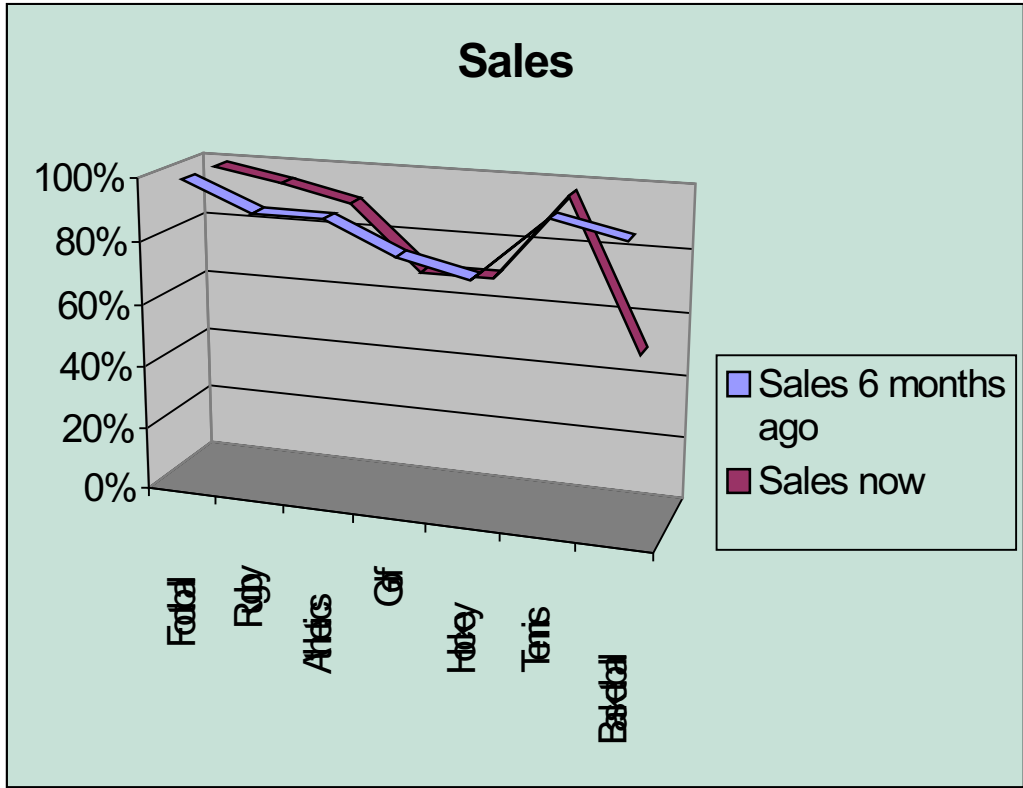
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The Graph



- 1. What types of Sports goods do you like?
- 2. What types of Designer goods do you like?
- 3. What types of Sports goods do you hate?
- 4. What types of Designer goods do you hate?
- 5. What product should we enhance?

Other Examples...



Implement:

At last, finally it was a good job well done at the end of my project. Mr Smith was had all his products and goods analysed precisely.

1. We collected all information from the questionnaire
2. Results were computerised
3. All systems were updated
4. All human & computer error were diminished
5. All Customers sales were restored
6. The new system was supported by all customers

Evaluate:

In the end, all the objectives for my coursework and project were met and accomplished completely.

Here is the evidence:

1. Mr Smith and his employees cooperated very well with the new system of work.
2. The sales questionnaire was fully word-processed.
3. All information was then sent to Microsoft Excel.
4. Customer sales boomed in the business for the first time in a long time.
5. Everyone became computer and PC literate.