

Implementation

I am going to show the evidence behind the solution I have made. I am going to show how I am going to achieve what I said in specification. I am going to give 2 options, and will show the pros and cons of each. One might be better than the other. I am going to show six different sections for each part of the implementation.

Hardware

First of all, my client will need a computer. There are many options within this. There are six options: -

- Monitors,
- Processors,
- Printers,
- RAM (Memory),
- Hard Drive.

Monitor

A monitor is the screen. This is the visual part of a computer. A monitor is a component with a screen that is used for viewing data at a computer terminal (video display terminal or VDT). Therefore, a monitor is needed to see the visual effects of what you are doing. The video output of the computer generates the image. No computer is complete without it. I am going to show the advantages and disadvantages of using TFT and then I will do the same with CRT. At the end I will conclude which will be the best option for my client, Bob.

1. He can choose a TFT. This is a flat screen monitor. It is the newer version of the two. The pros of choosing TFT are:
 - It uses less space,
 - They are modern, and therefore look more professional,
 - They may also have better resolution,
 - Faster FPS (i.e. frames per second),
 - Don't give off a glare,
 - Give off less heat,
 - Very compact and tight,
 - Uses less power,
 - No geometric distortion,
 - Rugged,
 - Very little or no flickering, depending on backlight,
 - Larger in screen size.

The cons of choosing TFT are:

- They are more expensive,
- Contrast ratio is low,

- Lots of colour, saturation, contrast and brightness varies if viewed from an angle, sometimes even when viewing it from the intended posture,
 - Brightness distortion if the backlight is uneven,
 - Slow response times, causing smearing and ghost artefacts,
 - Input lag,
 - Hard to see the screen if the sun is shining on it and from an angle it is hard to view.
2. On the other hand, my client could choose CRT. This is a curved screen monitor. It is the older version of the two. The pros of choosing CRT are:
- It is relatively cheap,
 - High contrast ratio,
 - Additive colour is excellent,
 - Hardly no contrast, colour, brightness and saturation distortion,
 - No input lag,
 - Reliable, proven display technology,
 - The view does not change whatever angle you look at it from.

Nonetheless, there are also many cons for CRT. These are:

- It has a glare when you look at it,
- Less reliable,
- Geometric distortion,
- Prone to burn-in,
- Takes up more space,
- Bigger and bulkier,
- Tends to flicker more often,
- Picture is blemished by soft edges,
- Has a flawed focus,
- Gives off lots of heat.

I would advice Bob to choose TFT, as although it is more expensive, it makes up for it through reliability and it is also more modern.

Processor

A processor is a personal computer known as a central processing unit (or CPU). A processor is a program that translates a different program into a form that is accepted by the computer being used. Without it nothing will be able to run. I am going to compare and choose one of either AMD or Intel.

1. Bob can choose Advanced Micro Devices (AMD). The pros of choosing AMD are:
 - It is cheaper than its alternative.

The cons of choosing AMD are:

- Bad performance.
 - Unreliable.
2. On the other hand Bob could choose an Intel processor. The pros of choosing an Intel processor are:
- Good performance, it is fast.
 - Lasts for longer and is more reliable.

The cons of choosing Intel are:

- It is more expensive.

Intel is more expensive, but I would Bob to choose this as it is better overall, and worth the long term investment.

Printers

There are two main types of printers that Bob can choose from. They are inkjet and laser.

1. Bob could choose inkjet. The pros of choosing inkjet would be:
- Cheap.
 - Fast when printing small amounts.
 - Allows various paper types.

The cons of choosing Inkjet are:

- Expensive to run.
 - Slow when printing many documents.
 - Unreliable.
 - The quality and durability depends on ink type, ink quality and paper type.
2. On the other hand Bob could choose a laser printer. The pros of choosing a laser printer are:
- Generally has a faster printing rate.
 - Has very good printing quality.
 - Produce very little sound.
 - Have good features, like self-printing which means the user does not have to supervise the printing.

The cons of choosing a laser printer are:

- Expensive.

- Take up lots of space.
- Only one printer can be printed at a time.
- Reliable but costly to repair.

I would advise Bob to choose Laser printer as overall it is better. Even though it is more expensive now, it would be cheaper in the long term.

RAM

Random Access Memory (RAM) is a form of computer storage. All data is stored here.

1. Bob could choose 512 MB. The pros of choosing it are:

- It would be cheap.

The cons of choosing it are:

- It has a small memory.

2. Bob could also choose 1GB. The pros of choosing it are:

- It has a large memory.

The cons of choosing it are:

- It is expensive.

I would tell Bob to get 1GB as he needs it. It may cost more but it is necessary.

Hard Disk Drive

A hard disk drive is a non-volatile storage device.

1. Bob could choose a SATA Hard Disk Drive, the pros of which would be:

- They have a fast running speed (of about 3 GB/s).
- It also has Native Command Queuing which makes it more efficient.
- They also have Port Multipliers.
- Asynchronous Notification, which speeds up performance and increases the battery life of a CD-Rom.
- It has Click Connect, which ensures that it does not come loose from the motherboard.
- Hot Plug, allowing the user to add and remove SATA drives on-the-fly without taking the system down.
- Link Power Management, which helps to conserve power.
- Cheaper.

However, the cons of choosing it are:

- Aren't capable of working for long hours.
- Not very reliable.

2. On the other hand, Bob could choose a SAS Hard Disk Drive. The pros of choosing it are:

- Has high speed data transfer.
- Cost effective.
- Reliable.
- Fast Running Speed.
- SAS has tagged command queuing.
- SAS has higher signalling voltages.

The cons of it though are:

- Noise levels can rise.
- Small memory.
- Expensive.

I would advise Bob to choose SAS as his business is only small, but he does need to have a fast computer, to be able to keep the customers happy.

Software

Software that is required

As for what system Bob is going to use, I am going to advise him to use Windows Vista. It is far better than Windows XP SP3. It is much better performance wise, has a highly praised security system and has better enhancements to the user interface. In Vista, the search is much improved and better. Also, the 3D graphics are great and is much faster starting up and shutting down. Therefore, I would advise Bob to choose Windows Vista, as it is better in quality.

As for what programme Bob is going to use there are two options; he can either use Excel or QuattroPro. For very simple reasons I think he should have decided to use Excel. This is because I actually don't have access to QuattroPro. In addition to this, Excel is compatible with the operating system, as both are made by Microsoft. But, the problem with QuattroPro is that this software is not widely used. In addition to this, I am not experienced with QuattroPro. So, if I would have to use QuattroPro I would need to get training. This can be very time consuming and costly. SO, in conclusion, I am going to use Windows Excel, as I find it to be easier to use as I have past experience with it. Moreover, Windows Excel has many features that will be beneficial to the business.

One feature is the use of formulas. The use of formulas within Excel is very essential. It allows calculations to be done with apparent ease. In addition to this, the formulas

in Excel automatically update results if the values are changed. This will highly reduce the chances of mistakes and will make the system more reliable. Windows Excel also has the 'Mail Merge' feature. This feature is useful as it allows the user to create reports and hand outs for the company. Also, this feature is quite important as it allows the user to create receipts and invoices from a word template. Conditional formatting is also a very useful feature in Excel. You could programme the system to alert you when certain conditions have been met. An example of where this is very useful is when you can set it to alert the user when the budget has been used up or has been exceeded. Another feature that is highly incorporated into Excel is the use of Graphs. They give a visual representation of data. This will make it easier to see how the business is performing, which areas need improving, help forecast profits and whether or not the business is financially viable. Another feature that will help the business is Macros. The use of macros will help the user to perform commands very easily and there is no need to input commands manually.

Therefore, I am going to advise Bob to choose Windows Excel as not only am I more experienced with it I also find it to be highly useful.