Christmas <u>IS</u> Coming!

Don't hate me please. I know it's early and still 8 weeks away, but some of you are probably thinking about a new computer or tablet for the family or maybe for that special student.

If you are planning on a new computer, I'm hoping this blog will give you some ideas to make the best decision for your needs and not break the bank.

Computer Types and Models:

For most people there or only two major types to consider. Either a Windows based computer or an Apple computer. Both types have laptops, towers and All in Ones (AIOs). Windows based computers make up the largest segment of market and generally are much less expensive than Apple computers.

Years ago, people thought Apple computers were better for graphics and music composing and video editing, hence they got a real edge in the graphic arts industries. Today that is not so. Most Windows computers can do everything an Apple computer can do, and usually do it cheaper.

Personally, I recommend Windows based systems as they are generally cheaper to purchase, much easier to get support and service, and for most people will do everything you need to do.

Now as for models of computers, here a simple breakdown:

Desktop or Tower:

This configuration consists of a separate computer system (the tower), monitor and keyboard and mouse. It's the most conventional type of system we find in most offices, and generally the least costly to upgrade or repair, and to purchase.

If you're getting a desktop system, be sure to get a decent sized monitor, at least 22 inch, to avoid eyestrain. Today the video standard for most monitor and desktop systems is an HDMI connection, which gives you really sharp video, much like an HD TV screen.

Laptops:

You don't really use them in your lapt, so 'Portables' would probably be a better name. A portable computer has its screen, keyboard, drives and everything in a self-contained case, about the size of a briefcase. Hence the term portable.

If you need to carry your computer back and forth to work or to school, a laptop is probably the best choice. If it's for a student just make sure they're mature enough to take care of it and not drop it.

All in One (AIO):

An AIO is like a portable in so much as it's got the monitor, harddrive, all but the keyboard and mouse contained in one unit. They range in size from 19 inch screens to 24 or 25 inch screens. They really aren't 'portable' because they're kinda large and weigh a lot more than a portable.

They can be quite good if you've got limited space in your work area and don't want cords running all over. The main disadvantage to AIOs is they are more difficult to work on than a tower system and generally a bit costlier to repair or upgrade and slightly costlier than a tower system.

A Little Acronymphomania

Once you decide what type or model computer you want now you need to decide how fast, how powerful and how big a system you want. It's kind like buying a car. Bigger engine, cloth or leather seats, two door or four door etc. etc.

The computer industry LOVES their acronyms, and really they are just to make us geeks look smart. But .. you should be aware of some common, important terms:

CPU	Central Processing Unit, the computer brain or main engine	RAM	Ranom Access Memory, the computer's brain cells or cylinders
HDD	Hard Disk Drive. Where the computer stores your files and data	SSD	Solid State Drive. An all electronic HDD. Sometimes called a flash drive
VGA	An older video standard, but still found in some systems today	HDMI	High Definition Multimedia Interface. Most current video and sound interface for computers
GB	Gigabyte. A LOT of bytes.	Peripheral	Things connected to your computer

Now that you speak Acronymphonese, your ready to start shopping.

Price considerations

Like a car, the bigger the engine, the faster the car, and the more it costs. Similarly, the more cylinders, the more powerful and faster, but again more costly.

Both Windows based systems and Apple systems use mostly Intel CPUs. For standard computers, the main marketed CPUs are Intel i3, i5 or i7 CPUs. As you might guess, the bigger the number, the faster and more powerful the CPU.

For most home users and small business users, an i5 CPU should be more than sufficient.

Now we've selected a good brain, how smart do we need our computer to be. The more brain cells your computer has the faster it can do calculations, communicate with peripheral devices like printers, and write data to the HDD. Most general home and small business sytems come with minimum 4 Gigabytes (GB) of RAM, but I recommend upgrading to 8 GB RAM to ensure you have lots of power for future new versions of software.

Ok so now we've got a good engine, our i5 CPU, lots of brain cells, 8 GB RAM, now we need to be able to see what we're doing and store our masterpieces and pictures.

Monitor Selection:

Like with TVs the bigger the screen the higher the cost. For most users, a 22 to 23 inch monitor should be fine. A good 22 inch HDMI monitor will run between \$125.00 and \$160.00. Brandwise I prefer Samsung or LG based on past experience. Benq and Viewsonic are also good brands.

HDD or SSD?

For home use and most small businesses, you really don't need more than a 500 GB hard drive or storage. SSD drives are about 10 times faster than conventional disk drives or HDDs, but cost about twice as much.

If you can afford the additional 75.00 to 100.00 for an SSD drive then get it. You'll be REAL please with the performance increase.

Other Peripherals and Considerations:

A printer is probably the first peripheral you will consider. Inkjet printers generally cost less initially to purchase, but the consumable ink cartridges are quite expensive. Most people do NOT need a colour printer, so if you're going to get a black & white printer consider a small laser printer.

The cost per page to print on a monochrome (B&W) printer is about 1/5 the cost of printing on an inkjet printer.

One VERY important peripheral should be an external USB hard drive to be used for backing up your data. Those important pictures, documents, budget files and everything you saved on the hard disk because you wanted to save it.

For most people a 1 Terrabyte (TB) external drive should be more than adequate for a backup drive. These will cost you less than \$100.00, and using Windows built in backup software or free backup software will save an extra copy of your valuable data 'just in case' something happens to your computer.

Summary:

All in One Cost:	a 22 inch, i5 CPU, with 4 GB RAM will cost around \$1250.00
Tower Cost:	an i5 CPU, with 8 GB RAM, 500 GB HDD drive, 22 inch monitor will cost around \$875.00 (Dell.ca pricing)
Portable/Laptop	a 15 inch, 8 GB RAM, 256 GB SSD, will cost around \$925.00. If you plan to use this for a lot of WEB browsing or working on documents and files at home, you should consider getting a larger monitor to avoid eyestrain.