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# More For Less

## 10 Computer Buying Secrets That Will Save You Money

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- ◆ Learn how to choose the right PC for your needs at a price you can easily afford.
- ◆ Discover alternative buying sources that can save you money.
- ◆ Find out how to spot bargains when shopping for refurbished, used or leased IT equipment.
- ◆ Technical support contracts -vs- hardware support contracts. Discover which one is a waste of money.
- ◆ Find out why hiring only experienced consultants and expert technicians will actually save you money.

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## Intended Audience

This document was written to help both technical and nontechnical PC and network equipment buyers maximize their investment in their office's computer technology. Small, medium and large businesses can benefit from the materials in this document whether these tips are used to create or expand a computer network. New businesses, preparing to purchase PCs and other IT equipment, will have the greatest benefits if they follow this document's advice.

## IT Purchasing for Better or Worse

The problem facing most people responsible for purchasing office computer equipment is money or the lack of it. Let's face it. The IT department has always been a money pit, showing very little return on investment from a major part of the company's overall budget. What's worse, the equipment you buy and software you use are usually outdated after only three years. No wonder your company wants to decrease IT spending and use their money more efficiently. They don't understand why the IT department needs so much money, and they look to you for a solution. How can you cut IT costs without cutting IT services?

This document will show you how to make your IT budget go farther when it comes to purchasing PCs, networking equipment, technical services and maintenance contracts. This document will also show how to look for IT pricing deals and opportunities.

## Secret # 1 – Only Buy as Much Horsepower as Needed

Sure, it looks sexy, all that horsepower under the hood, and it's all yours. You get a smug feeling of superiority watching the office lights flicker as you hit your PCs power button and watch that monster come to life. Unfortunately, that PC costs a lot of money and you are only using a fraction of its abilities. This brings me to our first tip. Don't buy more PC than you need. Most functions can be done on even the slowest of the new PCs available on the market today. The only reason you would need a faster processor is if you worked in the following areas: graphic art design, computer-aided drafting (CAD), movie editing, desktop publishing, photo editing, and of course computer games, which isn't a good career move anyway so we'll just cross that one off the list. Most of your company's IT processing power is being used for Internet browsing, E-mail, word processing and spreadsheets, and probably in that order too. If this is the case, you can save a lot of money by avoiding "cutting edge" products. All new technology products are going to be overpriced for at least the first six months to a year after being launched into the market, while the manufacturer makes up for research and development costs. You'll find that last year's model or maybe a slower version of this year's model will serve your needs for less money.

If your PC users, or users for short, are only going to be doing MS Office, E-mail and Internet browsing, then get the slowest processor that the vendor sells in his stable of new products. I didn't say get the slowest thing he has. If he has a used 18 year old IBM XT 286 PC with a black and green monitor, just walk right by it. What I'm saying is that rather than buy a 2.6 gigabit Pentium 4, Try looking at either slower Pentium 4s or high-end Pentium 3s. The same goes for servers too. If a server is only going to be used by a small number of people, and it's only going to have a few functions on it, then the same processor purchasing rule applies.

One thing that you shouldn't skimp on with PCs is memory and video cards. RAM, or memory, up to 512mb is valuable and shouldn't be reduced below 256 mb for Windows NT, and greater operating systems.

Increasing memory, up to 512 mb, improves a system's performance no matter how fast the processor is. A good graphics accelerator (video card), with lots of memory, also speeds up a computer's performance. It improves performance by doing some of the system processor's work. The graphics accelerator off-loads [from the system processor] the graphic processing tasks and performs them on its board. These performance enhancers could add a couple of years of life to a slower PC.

### **Secret # 2 – National Name Brand PCs –vs– Clone PCs**

Which brand is better, a small computer shop that builds its own “clone” PCs or a large computer manufacturer like Dell, Gateway, HP/Compaq, IBM, Apple, etc.? Remember, the clone is only as good as its parts. Unless you are familiar with the names of manufactures that produce processors, motherboards, hard drives and other parts, you will not be able to properly evaluate a clone PC's quality based on its parts. If you didn't pay too much for a clone, either you got a good deal or you got a box of cheap parts that will probably break down in a year. With a large manufacturer like Dell, Gateway, etc. you are guaranteed a quality product, regardless of price. After all, these companies have a reputation and brand name identity to protect.

Both types of PC manufactures have warranties. However, a warranty only lasts as long as the company stays in business. Small PC stores come and go each year. How can you know if your local PC store will stay in business. The truth is, you won't. Large PC manufactures will stay in business long enough to honor their warranty periods but mom and pop neighborhood PC companies usually don't. Even when large manufactures go under, they never just go away. Large computer manufacturers usually merge or get bought up by another company. When this happens, the old company's products are usually serviced by the new company's technical support department, and the new company also assumes responsibility for the warranty too. Take the HP's acquisition of Compaq as an example.

If you don't get excited when I say Sound Blaster, nVidia, GeForce, Asus, or Adaptec then maybe you need to stick to large PC manufacturer brands. If you know enough about the parts or components and have experience putting a PC together then you may want to look into clones, or just buy the parts and assemble it yourself. Deals can be found either way. However, if warranties are important then avoid clones. In most cases, I usually steer my customers towards large PC manufacturers. I've consistently had good luck with PCs from one of the large PC manufacturers that I've used for at least six years. E-mail me if you want to know who it is.

### **Secret # 3 – “Used” Doesn't Always Mean “Old” or “Worn Out”**

PCs, servers and networking equipment usually have a three-year life span. At that point, it's usually outdated, fully depreciated and ready to be replaced. Remember, just because something is outdated, doesn't mean that it is showing signs of age or ready to be retired. If a company likes to have the fastest products available, and lives life on the bleeding edge of technological innovation, some of their discards can be quite impressive. They may even be discarding last years best model.

Sometimes a company discards networking technology because it needs to upgrade to the next model higher, to handle increased networking traffic or to improve their existing network infrastructure. Your company's networking infrastructure may benefit from their discards.

If you are going to buy used equipment, I recommend that you know the company it came from, and the vendor selling it. Ask them how the equipment was used, how long it has been in service, and why it was retired. While you are looking for deals in this area remember that used equipment, in most cases, does not come with a warranty. Don't let the fact that it doesn't have a warranty scare you. On the positive side, most PCs are retired years before they start showing signs of wear. In most cases, those first signs of wear appear in disk drives, chassis and processor fans, and other constantly moving parts. Luckily all of these parts are cheap to replace. Most hardware problems occur while the product is either new, within the first 3 months of the product's life, or years beyond its usefulness.

Great deals can be found in used equipment, especially if the seller wants to get rid of it. Beware of scavenged PC equipment though. Most used PC stockpiles are raided for spare parts. So, before you buy a used PC, make sure it boots. Used equipment inventories are also a great source for networking equipment such as CSU/DSUs, routers, switches and hubs.

#### **Secret # 4 – Refurbished Goods are Sometimes Better Than New**

Rather than looking at used goods, how about looking for bargains and deals with refurbished goods. PC, server, and networking equipment manufacturers all have refurbished goods for sale. Some companies specialize in the buying and selling of refurbished goods inventories because they know that they are such a good deal. Some of the equipment even comes with a manufacturer's warranty. Several PC manufacturers even have a section of their web page devoted to selling refurbished PCs and servers. Some are great deals, some are not. Always know the value of what you are shopping for.

Refurbished goods are damaged products returned for repair; leased products returned after the lease period; new products returned by unsatisfied customers; or products used for demonstration purposes. These returned units are repaired, the cases are repainted, and then they are offered for sale on the refurbished markets with either a full or limited warranty. These units look as good as new and usually come with a full set of instructions, cables and accessories.

#### **Secret # 5 – eBay, the Bargain Hunter's Dream**

Yes, I said it, eBay. The same place where you can bid on Aunt Agatha's spoon collection also has great networking deals too, if you know what you are looking for. Over the years, I have bought several networking items on eBay. Some of these items were switches, routers and CSU/DSUs. I even bought software, complete with original client access licenses, over eBay. Sometimes the deals resemble a gold mine and sometimes the mine doesn't pan out. It all depends on the price of the product under bid. If you are going to use eBay as a source of computer procurement, I recommend that you follow these suggestions. First of all, be familiar with the equipment that you are shopping for, before you bid, and don't bid on anything without a picture. When you find the brand and model of the product listed in the bid, go to the product manufacturer's web site and research the product to make sure that you are getting all of the features and options. You don't want to pay a premium price for a scaled down product when you think you are getting a bargain buying the full-featured version. Also find out if the product is used or refurbished, and if comes with a warranty. The second tip I offer is to research the seller's customer satisfaction ratings. If a seller has several bids and most of the buyers speak highly of them, then it's a safe bet that you'll be safe buying from him/her. Some sellers offer a return policy if

you are not happy with their product. The most important piece of advice I can give you, and you must follow, is to know your maximum bid before you start bidding and stick to it no matter what. The bidding frenzy can be dangerous. If you get caught up in the bidding process, you may forget that you are there trying to save money and end up spending far more than the product is worth. Sometimes I like to avoid the bidding process by using eBay's "buy it now" feature. It may not provide the greatest savings but it does ensure that I walk away with the product, at a fixed bargain price, rather than someone else getting it, or me overbidding on it.

### **Secret # 6 – Profiting off the Misery of Others**

There's a reason vultures circle a wounded animal. They know the animal is near death and they know supertime is near. You also need to be on the lookout for wounded animals. More specifically, you need to start looking for overstocks, clearance sells and going out of business sales. Overstocks and clearance sells are common for large stores such as Best Buy, CompUSA, Circuit City, etc. Overstocks occur when they have too much of a slow moving item. Most companies will reduce prices on items that have been on the shelves too long, just to keep inventory moving. Clearance sales usually occur to get rid of a product that is about to become obsolete or replaced by a newer model. These are the best deals and most frequent opportunities for buying bargain priced PCs. Going out of business sales or auctions are also a great way to buy a new PC.

### **Secret # 7 – Where leased PCs go to die**

From a financial position, I don't recommend leasing your equipment. It's just not good financial since to make payments over a three-year period and have nothing to show for it. You can't even depreciate it for tax savings. I'm consistent in this argument because I don't like car leases either. Yes, I'm a Dave Ramsey Show listener. Even though I don't recommend leasing PCs, I do recommend buying PCs, servers and other equipment that others have leased and returned after their lease period expired. All leased equipment has to go somewhere after the lease expires. Ask the leasing company how they dispose of their leased equipment. They either sell it themselves or can direct you to someone that does. Either way, get on their mailing list.

### **Secret # 8 – The Value of Experienced Labor**

Robert Kiyosaki, best selling author of the "Rich Dad, Poor Dad" series of business books recommends always using the best lawyers and accountants that you can afford when you are conducting business deals. The advice and work that these people do, provide you with greater sources of information, advantages and opportunities. He believes that one can profit from such expert information. IT consulting and maintenance services can be profitable too. We reduce downtime and reduce expenses by providing expert services. These services can be as valuable as your lawyer or accountant.

Why should you hire only experienced technicians? I can think of several reasons. They do the job right the first time so your users suffer fewer mishaps, due to poorly trained technicians erasing data, misconfiguring equipment, or just being a nuisance to your workers. Experienced technicians know the value of caring for your users' needs, protecting their data and doing the job right the first

time. You may have to pay more per visit for the experienced technician, but you will have fewer hassles, fewer user complaints and best of all, fewer visits. In the end, you will save money using the experienced technician, and have a better running network too. Another advantage of hiring only experienced technicians is that you can use their expertise to solve other problems. Experience technicians can also detect and correct security vulnerabilities that most inexperienced techs leave behind. It is also important that you seek professional advice when expanding your network or planning its future. An experienced technician also knows the value of proper documentation and keeping change management records current.

### **Secret # 9 – Which Service Contracts to Avoid**

Another way to save money is to avoid costly reactive labor contracts. Most reactive labor or support contracts work by paying a monthly fee for a set number of hours of service to be used each month, whether you use the service or not. These hours are used for repairs only, requested by your company. If you don't request service, you still pay for it. Why pay for unused privileges? If you didn't have a contract but called the company for support anyway, wouldn't they still come? I think they'd show up at your door ready to repair your equipment and financially profit from the experience. All you are really paying for is advanced ranking in the morning dispatch schedule, assuming that they were fully booked for the day, which is rarely the case. The truth is that if a company claims to be service-oriented, it will find a way to accommodate your needs, especially if you have a good relationship with that company. CertiTech Solutions does not believe in reactive labor service contracts, nor do we sell them or endorse them. If you need our help to get you out of trouble, call us. We'll find a way to schedule you in. Save you money for more useful things. Don't waste it on labor contracts.

We do recommend and sell proactive support contracts. These contracts provide monitoring services and a monthly maintenance program to maintain and update your systems and to prevent problems from occurring in the first case. In these contracts, you not only get 24/7 monitoring and a monthly service at a fixed fee, but you also get reduced labor rates too. These types of contracts have value, by reducing downtime and user problems, but reactive labor only contracts do not.

We also recommend hardware contracts for PCs and servers. These service contracts cover you in case of a hardware failure. A hardware service contract ensures that you get replacement parts that day or the next day. This is worth paying for and it saves you money by freeing you from maintaining a spare parts inventory. When you buy it as a warranty option with your hardware, it isn't that expensive and can be included in a payment plan. I wouldn't recommend buying any service contract that covers more than three years. You'll probably be upgrading that equipment by the third year anyway. If you plan on holding on to the equipment longer, then get a longer hardware service contract.

### **Secret # 10 – Disposing of the Cadaver**

Every company I have worked for has had a room where old PCs go to die. Make sure your company doesn't have one of these rooms. Inventories tie up money and waste space. Rather than stockpile, get rid of all but five PCs. Save the five PCs for spare parts. Sell, auction or donate the rest of them. There are companies out there that buy up used PC inventories.

But wait! There are bargains to be found here. Look for companies that have these PC inventories and look for bargains. Also look for companies that buy up inventories. There are bargains to be found in these markets, but beware of the overpriced antique. Do your research and proceed with caution. Also, make sure it boots up before you buy it.

### **Secret # 11 – Hackers, Viruses and Other Little Nasties**

Okay, this may not save money, but it will certainly save you embarrassment and it will save your data. I have to mention computer security. CertiTech Solutions specializes in computer security so I like to work the topic of security in as many places as possible. It goes over great at dinner parties. First of all, regarding security, don't be smug. You are vulnerable! We are all vulnerable! Anyone who thinks they are safe from viruses and hackers is naive. As long as there are users, your system is vulnerable to attack. Remember, most attacks happen from within or from past employees. If your network has an Internet connection, then the rest of the world has an opportunity to attack your network too.

To be safe and minimize the odds of being attacked, a few steps can be taken to protect your system. First, I suggest that you lock up your networking equipment. All of your servers, routers, hubs, etc. need to be locked up to prevent someone from stealing them or tapping into them. Maintain passwords that are hard to crack, and change them every 30 to 90 days. Load virus software and spyware software and update them when new virus signature files are released. We recommend personal firewalls on each PC too. Make sure you involve your users in the process of security. Teach them to know what information should and should not be given out. CertiTech Solutions has a program designed to teach your users how to combat social engineering so your users will not [unintentionally] give away secrets that can help a hacker gain access to your network. We can also audit your network, provide specific suggestions for securing your network, and then fix your security vulnerabilities.

You need to be aware of the unusual and train your users to do the same thing. In this case, paranoia is prevention. These tips are only the beginning steps to minimize your odds of becoming a target.

### **Why Am I Sharing These Secrets With You?**

Bet you are wondering why an IT solutions provider is giving you tips on how to buy PC, server hardware, and networking hardware for less. Why do we do this? We want to show you that you can get the network you need with the budget you have. These secrets will help you maximize your PC investment. Remember, faster and newer equipment doesn't buy happiness, however, better technicians and consultants do.

I hope you enjoyed reading this paper and find it useful as you plan or expand your network. And remember, we're here to help.

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# Bibliography

Beech, Hannah. "Features: Getting More For Less Bargaining for big-ticket items like PCs and airfares can be a breeze – if you know a few tricks of the trade." **Time International**, April 1, 1999, pp 16+.

"eBay Service: Overview." **eBay - The World's Online Marketplace**. <http://pages.ebay.com/services/index.html>.

Husted, Bill, Staff. "High-tech cheap for a dauntless few, it's a challenge to find the best price." **The Atlanta Journal and Constitution**, July 28, 2003, pp Q1.

Husted, Bill, Staff. "Personal Tech: Brand-name computers make it tough to go wrong." **The Atlanta Journal and Constitution**, November 17, 2002, pp G9.

Kiyosaki, Robert T. and Sharon L. Lechter (contributor). "Rich Dad, Poor Dad: What the Rich Teach Their Kids About Money that the Poor and Middle Class Do Not." **Warner Books**, April 1, 2000.

McEvoy, Aoife, Scott Spanbauer. "Features: Bargain Hunter's Guide to Buying PCs." **PC World Monthly**, August 1, 1996.

Muhmud, Vishnu K. "Old hardware: Is it a great bargain or a minefield?" Jakarta Post, **The Jakarta Post**, October 28, 2002.

Ramsey, Dave. "The Dave Ramsey Show." Nationally Syndicated Talk Radio Show. [www.daveramsey.com](http://www.daveramsey.com).

Sheets, David. "Computer Shows Offer Opportunity – For Bargains or Mistakes." **St. Louis Post-Dispatch**, September 16, 2002, pp E1.

Sheets, David. "Here are some basic tips on buying a computer." **St. Louis Post-Dispatch**, October, 16, 2002, pp E3.