

Building vs. Buying a Personal Computer

The Advantages And Disadvantages Of Building A Custom PC

By [Mark Kyrnin](#), About.com Guide

Introduction

Since the earliest IBM PC computers, consumers have had the option of putting together their own computer system from compatible components. In the earliest days, this offered a significant savings for consumers who were willing to buy third party parts from smaller manufacturers. Things have changed a lot since then, but there are still significant advantages to building a machine from parts rather than buying a pre-built system.

To us the advantages of getting the exact computer that I want over what a company feels I might want outweigh the disadvantages of building one.

A System Is A Sum Of Its Parts

All computer systems sold on the market are a collection of components that provide a functional computing system. Processors, memory and drives are just some of the components that make up a system and allow us to differentiate one system from another. As such, the performance and quality of a system is determined by the parts used in its construction.

So what is the difference between a store bought system and a custom built machine from parts? There could be almost no difference to a very significant difference based on the parts selected for the machine. With this in mind, let's examine some of the advantages and disadvantages of building a computer from parts rather than buying a system.

Advantages of Building

The most distinguishing advantage to building a computer from scratch is the selection of parts. Most computer systems come pre-built with the specifications and components already selected for you. This often can lead the user to have to sacrifice certain features that they may not want to give up. By building a computer from components, the user is able to choose the parts that best match the computer system they desire. Some vendors do allow you to customize a computer system, but you are still limited to their selection of parts.

Another thing that users may not be aware of with pre-built systems is that two of the exact same model computer can actually have very different parts. The reason for this has to do with suppliers, parts available at the time the system was built and just pure luck. For example, Dell might switch between multiple suppliers of memory because one is less expensive than the other. Buying all the parts on your own guarantees what parts you will get in your PC.

One of the less tangible advantages to building a computer from scratch is knowledge. By building a computer from scratch, a user is able to learn and understand how the parts work together. This information becomes immensely valuable when troubleshooting computer problems. The knowledge of what components control the different sub-systems of a computer means it can be easily repaired without having to deal with support groups or expensive repair labor bills.

Disadvantages of Building

The biggest disadvantage with building a computer system is cost. In most cases, the cost of building a computer will be slightly more expensive than purchasing a pre-built computer. This is due to the fact that the manufacturers can buy in bulk for steep discounts that translate into savings on the computer system.

The cost disadvantage does not always hold true though. As the more money one is willing to spend on a computer system, the more likely you will be able to save money by building the PC yourself. This has to do with the top of the line specialized systems are often marked up for extra profits per unit by the manufacturers. So, if you are looking to spend big, investigate building it yourself first.