If there is a single point of advice I can offer novice computer users, it is stop using modern computers.

If you look at "technology YouTube," by which I mean the massive multi-million subscriber channels, nearly all of it is devoted to constantly reviewing and comparing every new computer, processor, graphics card and product. There's big money in it because obviously all of these companies put money in it, but also if you're a normal person, you automatically assume you need the "best" technology.

Do you need a modern computer?

Absolutely not. More than 95% of people could be using a computer from 2008 or before without any problems. Needing a recent machine is limited to people who:

- 1. Do extreme, professional, processor-intensive video-rendering.
- 2. Compile massive programs and operating systems with severe time constraints.
- 3. Play recent triple AAA video-games on high settings.
- 4. Use many massive Electron apps and other inexcusably bad software written by soydevs and other people who shouldn't be writing software.

The last two reasons aren't really real reasons at all because they are totally unnecessary and avoidable things.

But to the point, watching YouTube videos and using a word processor does not require last month's new release.

Every video I upload, I transcode for settings optimal for YouTube, meaning I render each video I record. On my computer from a decade ago, that still takes only a couple minutes. A fancy \$5000 computer might be able to do it in less than one, but it is honestly not worth the pain associated with modern computers.

How much should a computer cost a normal person?

Either nothing or below \$200, I say. I use a ThinkPad X220 I got for \$90 on eBay. Before that, I used another ThinkPad X220 I also got for \$90. Like anything else, if you are buying things on Amazon, you're doing it wrong.

The Pain of Modern Computers

Modern computers are more breakable

As computing has become more and more popular, companies have started to realize that a consumer's first reaction on having their \$5 wifi card die is immediately buy a whole new computer. This means two things: (1) they don't bother to make computers easy to repair, in fact, they make it more difficult and (2) there is absolutely no need to make computers durable at all. In fact, it's probably better to let computers break so you'll get yet another sale.

Apple is by far the most anti-social computing company because of this. I'll let the larger tech channels show you the specifics, but every Apple product is brilliantly designed to make it difficult to fix very basic and otherwise fixable problems. They have quite a racket licensing out the ability and tools to companies that want to fix their terrible hardware. Apple even used pentalobe screws just so normal people couldn't open their computers up with a typical screwdriver. Of course nowadays every other computer manufacturer imitates the Apple style where apparent "sleekness" is supposed to be a signal of high quality.

Modern computers are increasingly monitoring devices and come with proprietary junk.

The Management Engine

You might've heard that all Intel i3/i5/i7 processors (that is, after the Intel Core 2 Duo) have an onboard alternate processor that is meant to function as spyware. This is called the Intel Management Engine. It can view your memory and connect to the internet: basically all modern computers have this permanent back door. In older computers, say the ThinkPad X200, you can, with a little hardware action, remove the other processor and replace the proprietary BIOS with <u>Libreboot</u> or <u>Coreboot</u>, but that is *not possible* on more modern computers (you can install Coreboot on a more modern machine, but not all of the components of the Management Engine are removed).

More recent computers, however are non-removable spyware by design and, yes, the NSA can monitor any machine with a Management Engine. There are actually even rumors that one of the taps that the FBI under the Obama administration put on Trump during his campaign was a Management Engine bug.

Note that AMD (Ryzen) processors have what they call a "Platform Security Processor" that is equivalent to the Intel Management Engine, so you're not escaping the issue by using one of them.

NVIDIA

Again, unless you play modern videos alone all day, you literally have no reason to have a modern computer, especially one with an expensive graphics card. NVIDIA is a great example because they make graphics cards and develop proprietary drivers for them to make it harder and harder to use them on machines that aren't running whatever the most recent spyware variant of Windows 10 is. Linux works perfectly on all computers ancient and modern, but if you plug some NVIDIA thing up to it, you might lose your screen or not be able to boot. A lot of gaymers whine about their NVIDIA products "not working" on Linux without realizing that is by design. NVIDIA and other companies and all CPU designers go out of their way to keep their source code and standards private which makes their products tangibly worse because it is harder for other parties to write drivers for them. Why? Because most of them have partnerships with Microsoft.

The Problem of Windows

How many times have you heard a normie explain to you that their computer is slow because it's "really old" and they bought it "way back in 2015?" It's an absurd statement of course. Computers don't just get magically slow... ...unless they've been running Windows.

In the future, once even Microsoft has switched over to a purely Unix-based backend for their operating system, we're all going to have a good laugh about how Microsoft Windows, *literally the worst and least functioning operating system ever devised*, was the largest consumer market share for decades.

I might go into how Windows is poorly designed in another page or video, but I want to be clear that there is no such loss of speed on any Linux distribution, which is what you should be using. I am one of the first to complain about the feature bloat of the Linux kernel and Linux software, but compared to Windows, it's no contest: Linux runs fast on old hardware. You'll know from some of my videos, however, that I'm not *big* into "Linux Evangelism," mostly because it's sort of strident and doesn't really work with a high success rate. Using Linux is just something that normies have been immunized against (mostly because "It's what smart people do"), but I always find myself in a position where someone's Window installation has permanently crashed and they're at the awkward decision of having to *buy a license* to reinstall the dysfunctional and slow operating system they've grown to hate.

There is quite literally no problem that normal people have with computers that is not immediately alleviated by installing Linux.

Why do people use ThinkPads?

As I said above, I use a X220 ThinkPad. Older ThinkPads are fairly popular among people who think and care about doing things effectively and economically on a computer. Why is this?

ThinkPads were always designed for enterprise environments, meaning the financial incentives for the manufacturer are not always planned obsolesce, but a long-standing reputation among large companies of having durable, fixable and expandable machines.

To replace a hard drive on the X200 requires unscrewing just a single screw. Same to replace the memory. To replace a spoiled keyboard is no more than three screws. Modern laptops, including the degraded modern ThinkPad have abandoned this simplicity and opt for the Apple-Mac/cell phone design technique of making batteries, memory and the rest functionally soldered and irremovable.

How far can \$500 go?

Over the years, I've had many things break on my laptops, but since I've been using ThinkPads, it is incredibly easy to keep a working computer even after rough use. I estimate that I have never spent more than a combined total of \$500 on computers, which is usually a bare minimum for what someone can buy a "modern" laptop for nowadays.

When the keyboard on my ThinkPad breaks, I can just buy a replacement keyboard for \$30 or \$40 and replace the old one much easier than any other model. That's the modularity of these computers.

Even in the worst case scenario when something on the motherboard makes the computer unbootable, I still get to keep my "broken" ThinkPad and repurpose the memory, wifi card, keyboard and everything else. I still have some parts of every laptop I've had just because they do come in a lot of use. The other month, a friend's wifi on his desktop went out and I could replace it with one of my old ThinkPad modules.

This is the kind of thing you lose with modern computers. This is purposeful on the part of manufacturers, and it's important not to pay them huge amounts of money to incentivize this behavior. It's very easy to live off of 10 year old computers nowadays. The eBay-and-etc resale market is massive even thought many of us have gotten wise to the value of these old computers.