What Would Happen if the Internet Collapsed?

By: Jonathan Strickland Updated: Apr 1, 2021

The internet is robust. It's not dependent upon a single machine or cable. It's a network made up of other computer networks. It spans the globe. Connections cross over continents, under oceans and through space via satellites. And as the internet has grown, so has our dependence upon it.
Connections across the internet are flexible. When you use your computer to contact another machine on the internet, the data could cross one of millions of pathways. Whenever you download a file, the file comes to your machine in electronic data packets that travel across the internet. The packets don't all take the same path -- the traffic routes are dynamic. If a particular connection is damaged or unresponsive, the data can follow a different path to reach your machine.

This makes the internet a reliable communications resource. Even if an entire section of the internet were to go offline in the wake of a natural disaster or a nuclear attack, other sections could remain functional. While any data stored on machines that were hit by the disaster might be lost, the internet itself would remain.
It's almost impossible to imagine a set of circumstances that could cause the internet to collapse. It would require destruction on such a widespread scale that the loss of the internet would probably be the least of our worries. But what if the internet did collapse? How would that affect us? Would life change drastically or would we quickly adjust, relying on older means of communication?

Internet Collapse and Communication Errors

Imagine a world without the World Wide Web, Facebook, Twitter or even e-mail and you might start screaming too.
A world without the internet would probably seem very strange to us now. Depending upon the nature of the disaster and how you defined the internet, even basic services like text messaging or cell phone service could become unavailable. That's because the infrastructure for these services is also part of the internet infrastructure. If you take this thought experiment to an extreme case, even the phone lines might not work since they, too, form part of the internet's infrastructure.

Some cable and satellite services would be unavailable. You could still access television programming sent via broadcast towers if you had an antenna. But if the cable and satellite systems were part of the general collapse, you'd lose access to most channels.

You wouldn't be able to log on to social networking sites and services like Facebook or Twitter. You wouldn't be able to fire up an instant messaging service to check up on friends. Many of the tools we rely on to keep up with what our friends and family are doing would cease to exist. If the cell phone towers and telephone lines were also affected, we'd be reduced to writing letters and sending them through the post office.

Transferring files between computers would be difficult, too. You'd either need to store the files on some form of physical media like a compact disc or you'd need to connect the two computers with a physical cable. Projects that depend upon grid computing to make complex calculations wouldn't work either. Cloud computing services would also fail and the information you store on those services could become inaccessible.

The Economic Fallout of a Collapsed Internet

If the internet did collapse somehow, the economic impact would be disastrous. While the loss of services like electronic banking or PayPal would be annoying, the effects would extend much further.
Think of the businesses that depend upon the internet. Every Web site would be offline. Huge companies like Google or Amazon would become obsolete instantly. Other companies like Microsoft would see

enormous sections of their operations disappear. Even companies that only use the Web as a means of advertisement would be adversely affected.

Assuming the collapse was either of a permanent or extended nature, many companies would go out of business. Hundreds of thousands of people would be out of a job. Google employs nearly 20,000 people alone [source: Google]. With hundreds of companies folding or cutting back on staff, the market would be flooded with people in need of a job.

According to the U.S. Census Bureau, e-commerce accounted for 35 percent of all shipments from the manufacturing industry in 2007. That amounts to more than $1.8 trillion for that industry alone. When you extrapolate those numbers to all industries across the entire world, you'll see that commerce on the internet is big business. If the internet collapsed, multiple industries would experience an instant recession. There's no easy way to bounce back from a loss of trillions of dollars.

Some countries would feel the sting more than others. Developed countries would face severe economic crises as entire industry sectors either disappeared or struggled to survive in the wake of devastating losses. Other countries wouldn't suffer as many direct effects from the collapse because they don't have much of a presence on the internet. But these countries would also suffer as the trade and aid they depend upon from other connected countries decreases.

Very few types of businesses would remain unaffected by the collapse of the internet. The internet has become pervasive in business.

Political Crises After the Internet Collapse

The economic fallout would probably be the primary crisis governments would face around the world if the internet were to collapse. But that would just be one problem world leaders would face.

In the United States, there's a push to develop the power grids around the nation into a smart grid. Smart grids could theoretically respond to customer needs more efficiently, conserve power and communicate with one another over internet connections. In theory, this system could reduce power outages and other problems. But if the internet were to collapse, a smart grid would be crippled. Massive power outages could become a problem across any country using such a system.

As the internet has become more pervasive, countries have used it to gather intelligence and to spy on one another. The loss of the internet would be an enormous blow to intelligence agencies. Sharing information would become slow and difficult. Some governments might react to such a situation rashly. It's impossible to predict how each government would react; however, it's not hard to imagine a series of events that could escalate into a conflict.

Assuming world leaders could maintain order and resist the urge to blow each other up, other problems would surface. The internet has become an important part of many educational programs. The loss of the internet would leave a void that other resources would need to fill. Resources cost money -- something that would be in short supply as markets around the world try to recover from staggering losses.

In the United States, military organizations and some research institutions are part of networks that are similar to the internet but are technically not part of the internet itself. If these networks remained unaffected, at least some electronic communication and data transmission would be possible. But if our imaginary crisis extended all the way to these computer networks, the country would become vulnerable to all sorts of attacks.

Could the Internet collapse?

Here's the good news -- a total collapse of the internet would be almost impossible. The internet isn't a magic box with an on/off switch. It's not even a physical thing. It's a collection of physical things and it's constantly changing. The internet isn't the same entity from one moment to the next -- machines are always joining or leaving the internet.

It's possible for parts of the internet to go offline. In fact, this happens all the time. Whether it's a particular server that crashes and needs to be rebooted or replaced or a cable under the ocean gets snagged by an anchor, there are events that can disrupt internet service. But the effects tend to be isolated and temporary.

While there is such a thing as the **internet backbone** -- a collection of cables and servers that carry the bulk of data across various networks -- it's not centralized. There's no plug you could pull out from a socket or a cable you could cut that would cripple the internet. For the internet to experience a global collapse, either the protocols that allow machines to communicate would have to stop working for some reason or the infrastructure itself would have to suffer massive damage.

Since the protocols aren't likely to stop working spontaneously, we can rule out that eventuality. As for the massive damage scenario -- that could happen. An asteroid or comet could collide with the Earth with enough force to destroy a significant portion of the internet's infrastructure. Overwhelming gamma radiation or electromagnetic fluctuations coming from the sun might also do the trick. But in those scenarios, the Earth itself would become a lifeless hulk. At that stage it hardly matters whether or not you can log in to MySpace.

The positive way to look at this is to realize that the men and women who helped design the internet created an amazing tool that's remarkably stable. Even when sections of the internet have a technical hiccup, the rest carries on with business as usual. While the collapse of the internet would be a catastrophic event, it's not one you need to worry about.