

*SPECIAL REPORT*

# The New Economy: 5 Stocks That Will Soar in the “Post-COVID” World

By Jeff Brown

## The New Economy: 5 Stocks That Will Soar in the “Post-COVID” World

By Jeff Brown, Editor, *The Near Future Report*

The world changed in 2020... literally in the span of just a few weeks.

The COVID-19 pandemic upset the plans of most people in the United States and around the world. Quarantines and lockdowns led to virtual, postponed, or canceled meetings and conferences. Most sports events and festivals were put on hold.

Many of us worked from home for some portion of last year. Some people will continue to work from home for the foreseeable future. (Certain companies, like Twitter and Square, have even given employees the option to work from home permanently.) For some of us, that’s a welcome change, and for others, it has made work more difficult.

Our daily movements have shifted, and many of us are staying much closer to home. Few in-person gatherings are taking place even now, replaced by videoconference or phone communication. We are shopping more online than we ever have before. And we aren’t going out for entertainment. We’re staying in.

And there are certainly negative economic impacts as a result of these changes. Many sectors and companies are suffering through this difficult period. But that doesn’t mean that

all businesses will be negatively impacted by the COVID-19 crisis.

Quite the opposite.

Many companies are thriving due to the changes. The pandemic has caused a shift to take place, and certain technologies are now soaring as mass adoption happens. And those changes won’t “go back to normal” after the pandemic ends.

The technology industry has been waiting for a catalyst like this. The pandemic has “forced” entire societies to adopt and rely on technologies to continue day-to-day operations.

As I’ll show, the companies powering these trends are hitting their stride and providing investors with some of the best opportunities of their lifetimes.

I’ve outlined five stocks that are actually thriving amid the chaos of COVID-19. They have proven to be “virus-resistant.” They all benefit from the new trends that I mentioned above. Due to the increase in online shopping, changes to our communication infrastructure, the remote work environment, and our need to entertain ourselves at home, these companies are benefiting from this “new normal.”

Ultimately, the stocks in this report will come out

even stronger once the pandemic passes.

Let's turn to the first...

## Recommendation No. 1: The King of Enterprise Software

In recent years, the technology industry has seen a rapid shift to “the cloud.” The cloud simply means that software services are run in a remote data center, not locally on our computers.

When we log in to an enterprise software platform, we do so via our web browser. There is no software running on our laptop. This is a cloud-based application. Nearly every company in the world now uses cloud-based services.

Consider this: The average enterprise is running 464 software applications important to its business. Performance is critical. Even small companies with fewer than 1,000 employees run an average of 22 software applications. And 77% of enterprises have at least a portion of their business running in the cloud.

Most consumers use cloud-based services and don't even realize it. The popular Google Docs application is one of the most popular cloud-based applications for consumers. Facebook, Instagram, Twitter, iCloud, and even Google itself are all cloud-based.

And here's the important detail...

Cloud-based businesses and companies that provide products enabling these businesses won't slow down during a pandemic. In fact, the exact opposite will happen. The need for their products and services is dramatically increasing.

And the convenience of these services is one reason why they'll continue to use them even after the chaos caused by the virus has passed.

That's why our first recommendation of this report is in such a key position.

**Salesforce (CRM)** is a cloud-based software company. Originally, it was software meant to handle customer relationship management (CRM) tasks. But it has since grown into a wide platform of enterprise software applications.

However, Salesforce is not like Microsoft, which depends on PCs that are manufactured and shipped with its software preinstalled. Salesforce is an entirely cloud-based business. Its software runs in data centers around the world. It is accessible through any internet browser.

Salesforce is a software-as-a-service (SaaS) company. SaaS companies license their software to users on a monthly, quarterly, or annual basis. It's a subscription business model.

My longtime readers know that we love subscription business models. They tend to be high gross margin businesses that grow very quickly if the product is great. And Wall Street likes to see the consistent, reoccurring revenue that comes from subscriptions... The consistency of revenue streams makes for less “lumpy” sales cycles and simplifies the forecasting. The result is that high-quality SaaS companies receive higher valuation multiples.

Companies that use these cloud-based subscription services aren't going to cancel their subscriptions because of a virus – especially not something as important as Salesforce's CRM software. And I can say that from personal experience.

The marketing team at our parent publishing company said our business would come to a standstill if we were unable to use Salesforce. Many companies feel the same way.

That's why Salesforce predicts its revenue will grow 19.4% a year for the next four years.

And it's able to grow its free cash flow by 23.9% a year, even more quickly than its revenues, which means that its gross margins are increasing.

Salesforce's revenues are virus resistant. This isn't to say share prices won't go down in a panic. But we can feel confident that over the long term, this company will benefit from the work-from-home trend and the growth in popularity of cloud enterprise software. Let's take this as an opportunity to invest while the company is still at a reasonable valuation.

**Action to Take:** Salesforce (CRM) is a buy up to \$175. For our most up-to-date risk management, please refer to our online portfolio [here](#).

**Note:** If this stock is trading above our recommended buy price at the time of reading, my official recommendation is patience. Technology stocks experience natural volatility that almost always gives us a great entry point. I want to make sure readers invest in the best companies at a great price.

## Recommendation No. 2: Security for the Cloud

As we've just discussed, more and more companies have been transitioning to cloud-based services. Cloud computing simply refers to large data centers – usually close to cheaper electricity and situated in remote locations – that host software programs and store data. Anyone who uses Gmail or Hotmail or Apple's iCloud for email services is using the cloud. In fact, any computer user who uses Google's search engine is using cloud computing.

Accessing the cloud is easy. Anyone with an internet connection or mobile phone is already connected. But constant connectivity opens the possibility for hackers to gain access to our computers, accounts, and information. All it takes is mistakenly opening the wrong attachment or clicking on a bad link. This is a problem for

individuals, corporations, and governments.

The truth is, most organizations and government networks aren't equipped to fend off malware attacks. Their networks may be secure, but malware gets around that by tricking people into installing the virus.

I receive at least 10 phishing emails a day. Common examples are emails that appear to come from Amazon, UPS, or FedEx. Please, never click on these links. The quickest way to check whether an email is legitimate is to simply click on the "From" name in the email to see what the actual email address is. It is pretty easy to spot email addresses that are not genuine.

Hackers also hide malware in files like Microsoft Word or Excel documents. In these programs, advanced users can run something called a macro. Most people use macros to perform repetitive tasks or import numbers... But macros can be malicious if programmed by hackers.

Bad actors then send these files to employees within organizations from emails that appear to be from a colleague. Thinking it's from a trusted source, the employee opens the document and the macro automatically runs... downloading and installing the malware to the computer.

That's the easiest way to get around network security. And no matter how hard an information technology (IT) department tries to train everyone not to fall for these tricky emails and files, it is going to happen.

Malware attacks are becoming increasingly popular among not only state-sponsored hackers but smaller, private hacking groups. Once these smaller groups get their malware installed on a network, they often block access to files until they receive a ransom. We call these "ransomware" attacks.

According to a report from cybersecurity

research firm Emsisoft, ransomware attacks have impacted at least 966 government agencies, educational establishments, and health care providers. This cost them an estimated \$7.5 billion to repair.

To stop these attacks, organizations need a bleeding-edge cybersecurity system. But these agencies have other spending priorities... Cybersecurity is often seen as an expense line item rather than a vital and necessary technology.

But if an organization has one of the best cybersecurity solutions, it can fend off attacks. And that's where our next company, **Palo Alto Networks (PANW)**, comes in.

## The Leader in Cybersecurity

Palo Alto made a name for itself building the best next-generation firewalls. We can think of a firewall like your front door security system. The firewall sits between an enterprise's internal network and the external internet. Similarly, your front door is a barrier between the inside of your home and the outside world.

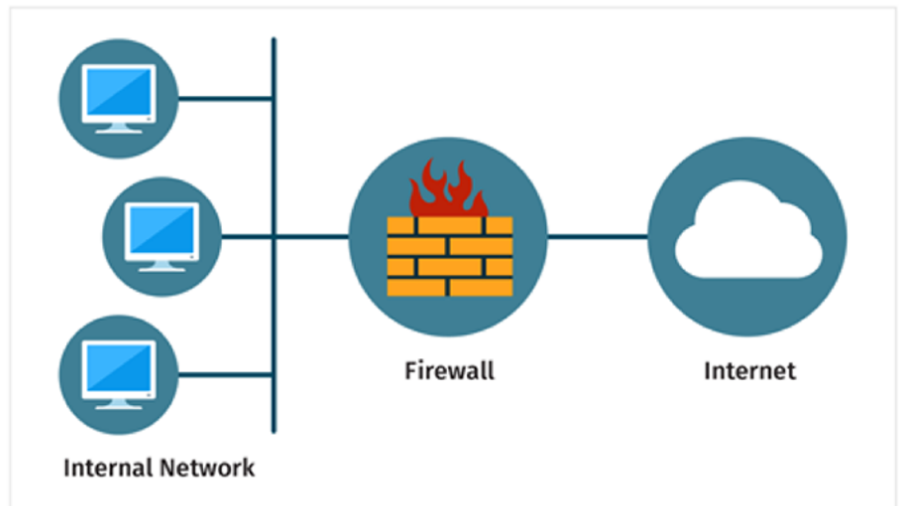
For example, at home, you'd first have a look at who's at your front door. Perhaps through the peephole. Or even through a security camera. If you recognize the person as friendly, you'd invite them in.

If you don't recognize your visitor, but they don't look like a threat, you'd likely ask them to state their business. Then you'd determine whether to open the door.

If you identify a known threat, you'd keep that front door locked... and call the authorities.

Early firewalls were simply a secure connection

## Simple Diagram of a Network Firewall



[brownstoneresearch.com](http://brownstoneresearch.com)

to other networks. Next-generation firewalls are far more advanced, with the ability to inspect all data traffic and filter out anything that doesn't look right.

Every piece of data traffic trying to enter a company's network is analyzed and determined to be "good" traffic, "suspicious" traffic, or "malicious" traffic.

The firewall allows good traffic to pass through the "front door." Suspicious traffic is further examined before a decision is made. And the firewall blocks malicious traffic from entering.

Where Palo Alto Networks really innovated was in the inspection of every packet of data wanting access to a network and the prevention of the intrusion of malicious data and applications.

The best firewalls will stop suspicious traffic even from unknown or new threats.

## Palo Alto Is the Biggest and the Best

Palo Alto Networks is the biggest cybersecurity company in the world by revenue.

Note that Cisco may be larger than PANW, but its cybersecurity-only revenues are smaller than Palo Alto Networks.

And PANW isn't just the biggest. It's also growing its revenue the fastest, at 28% a year. The company keeps up this growth by innovating quicker than anyone else.

For the ninth time in a row, Gartner named Palo Alto the clear leader in network firewalls. For unfamiliar readers, Gartner's Magic Quadrant ranks companies based on completeness of vision and their ability to execute. The higher and farther right a company is in the top-right quadrant, the better.

While these quadrant charts are basic, they do provide a good quick snapshot of the competitive landscape of a given industry.

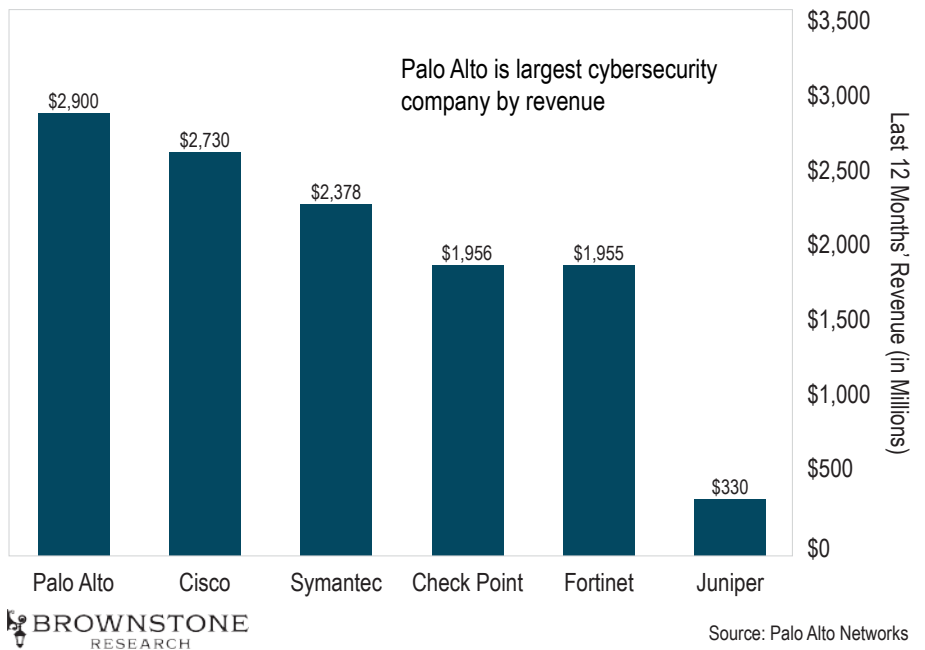
And as we can tell, PANW ranks highest in both the ability to execute and the completeness of vision (product offerings).

PANW does this by consistently putting almost 20% of its revenue back into research and development (R&D). R&D is extremely important in cybersecurity because evildoers are constantly looking for new ways to breach a network. If a company stops innovating, it doesn't take long for hackers to figure out how to circumvent its security platform.

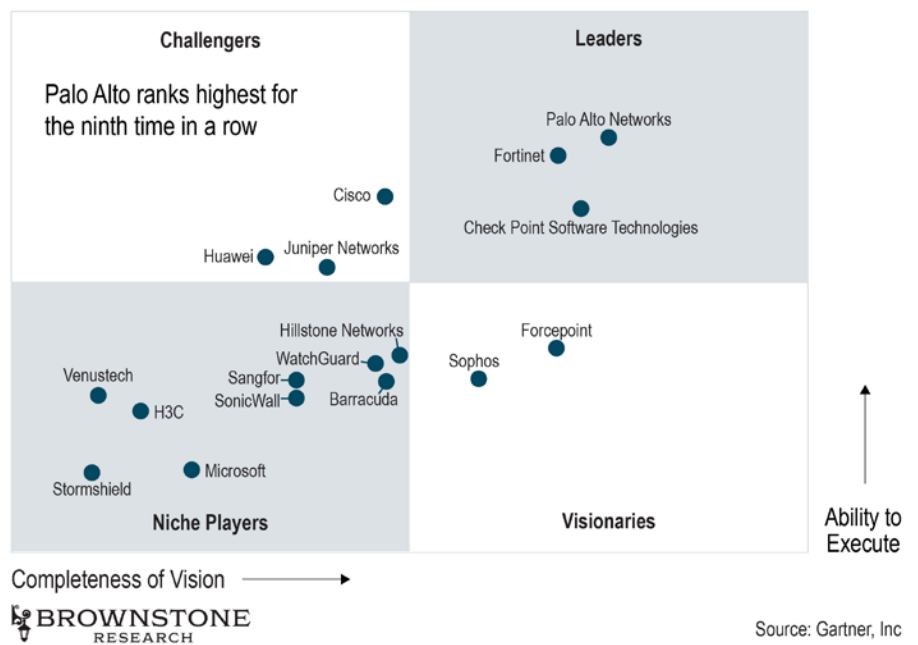
## Palo Alto Networks Moves to the Cloud

Longtime readers know cloud computing is one of the most important technological trends that we are following, and the COVID-19 pandemic has only increased its importance. This trend has completely changed network architectures and

## Cybersecurity Companies by Revenue



## Magic Quadrant for Access Management



how companies deploy and sell software. It has also enabled software companies to grow like wildfire.

According to a report from the Cloud Security Alliance, nearly 70% of organizations are moving data and applications to the cloud. And the biggest providers of cloud computing services are growing like weeds.

And each company moving to the cloud must protect its network and the data in its

applications. And it must protect each computer, phone, or tablet connecting to the network.

This is no easy task. Right now, many companies use dozens of different products to protect different points of the network. To make matters worse, these programs often don't communicate with one another to pinpoint threats.

Palo Alto is working on getting all of a company's cybersecurity needs on one platform. That platform is known as the Prisma cloud security product line.

Prisma is still a new offering, made available in late 2018. But Palo Alto already has over 9,000 customers using Prisma cloud solutions.

Palo Alto has been innovating quickly on its new Prisma cloud platform. It also filled in other small holes through smart acquisitions. And now it has one of the most robust cloud security offerings in the world.

So let's make sure to position ourselves in this powerhouse in cybersecurity.

**Action to Take:** Palo Alto is a buy up to \$330. For our most up-to-date risk management, please refer to our online portfolio [here](#).

**Note:** If this stock is trading above our recommended buy price at the time of reading, my official recommendation is patience. Technology stocks experience natural volatility that almost always gives us a great entry point. I want to make sure readers invest in the best companies at a great price.

### Recommendation No. 3: The "Next Generation" of Wireless Technology

Our next recommendation will get a boost from

COVID-19 due to "contact tracing."

You've likely heard of contact tracing on the news. It's the technology designed to alert citizens if they have come in contact with a person who has COVID-19. Our phones will share information with other phones automatically using a technology called Bluetooth.

Apple and Google are already adding contact tracing technology directly into their smartphones' operating systems. The functionality isn't just an application that a citizen can download by choice. Instead, it is being written directly into the Apple and Android operating systems.

Over 70% of the world's smartphone users use Google's Android operating system. Another 25% use Apple's iOS. That means that virtually every smartphone user on the planet – billions of people – will be "forced" to use this software whether they like it or not.

Unfortunately, the Bluetooth technology built into our smartphones is not the best technology to use for contact tracing. There is, however, a technology that is perfectly designed for an application like this.

We can think of it as a revolutionary upgrade to Bluetooth. A technology that addresses all of the weaknesses of Bluetooth and delivers marked performance improvements on all metrics.

And I've identified the company that will quickly become the leader in this new "Bluetooth upgrade" technology.

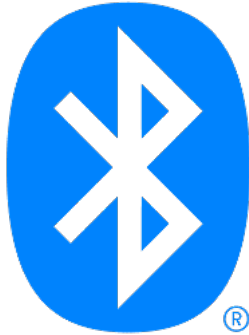
Even better, this company has exposure to two other technology trends that we're closely tracking: Wi-Fi 6 and 6E and the 5G wireless build-out.

### Major "Bluetooth Upgrade"

For perspective, an estimated 5 billion Bluetooth-enabled devices will be manufactured in 2021. Bluetooth is an industry standard that

allows data to be transferred between two devices. It requires small electronic components in every device to make Bluetooth connectivity work. It's so widely deployed that many of us don't even realize that we are using it.

### Bluetooth's Logo



Source: Bluetooth

This technology enables wireless headphones like Apple's AirPods and other earbuds or headsets for hands-free phone calls. It allows wireless keyboards to connect to both Macs and PCs. And Bluetooth also allows us to listen to music from our phone over a Bluetooth-enabled wireless speaker. In fact, 1.1 billion Bluetooth audio streaming devices like headphones and speakers were shipped in 2019.

And every new smartphone comes equipped with Bluetooth. Companies sold over 1.5 billion smartphones in 2020.

Cisco estimates that by this year more than 5.5 billion people will own a smartphone. That's more than the 5.3 billion people who have access to running water. More people use Bluetooth than indoor plumbing.

Bluetooth has other uses as well. Smart homes and security systems can use Bluetooth to determine if the right people have accessed the property. These location-based services alone will be an over \$10 billion market by 2024. This

COMPARISON OF UWB AND BLUETOOTH		
Technology	UWB	Bluetooth
Where Used		
Accuracy	Centimeter	1-5 meters
Reliability	★★★★★ Strong immunity to multi-path and interference	★☆☆☆☆ Very sensitive to multi-path, obstructions and interference
Range/Coverage	★★★★ Typ. 70m Max 250m Typ. 250m <sup>2</sup> per anchor	★★★★ Typ. 15m Max 100m Typ. 250m <sup>2</sup> per beacon (for 2m accuracy)
Data Communications	 Up to 27Mbps	 Up to 2Mbps
Security (PHY Layer)	★★★★★ Distance-Time bounded protocol	★☆☆☆☆ Can be spoofed using relay attach
Latency	★★★★★ Typ. <1ms to get XYZ	★☆☆☆☆ Typ. >3s to get XYZ
Scalability Density	★★★★☆ >10's of thousands of tags	★★☆☆☆ Hundreds to a thousand tags
Power and Battery	 5nJ/b TX - 9nJ/b RB Coin Cell	 15nJ/b RX/TX Coin Cell

Source: Omdia

is a fast-growing market that's projected to grow 95% a year through 2025.

The total Bluetooth-enabled device market is in the hundreds of billions of dollars. We might think that this technology is here to stay. But it's about to experience a major upgrade. Here's why...

### Ultra-Wideband – the Next Generation of Near Field Wireless Technology

Bluetooth has its limitations. It consumes a lot of power. Its location services aren't very precise. It's only good for relatively close communications. And Bluetooth signals are easy to hack.

And ultra-wideband (UWB) technology will provide a solution to these problems...

As we can see above, UWB consumes less power than Bluetooth. In fact, a UWB company called Decawave estimates that UWB batteries will last

for seven years without needing a replacement.

UWB is also more secure than Bluetooth. Due to how UWB communicates with other devices, it is impervious to man-in-the-middle relay attacks. That's when a cybercriminal alters communications between two parties who believe they are communicating with each other directly.

And UWB location accuracy is down to centimeters. Compare that to Bluetooth, which is only accurate within a one- to five-meter (over 16 feet) range.

This will allow countless new applications. We can imagine having a UWB sensor in our car keys or TV remote controls. Whenever we misplace them, another device (like our smartphone) will be able to tell us – down to the centimeter – where they are.

Or imagine if we used UWB to track tools and parts in a factory. This real-time tracking will drastically improve quality control in the manufacture of large electronics. We'll know precisely where tools are within centimeters of their location – all enabled in real time.

But this location accuracy also has important implications for the technology I mentioned above: contact tracing.

## **UWB Will Enable Contact Tracing**

As I mentioned above, governments and organizations have turned to contact tracing to attempt to stop the spread of COVID-19. Remember, contact tracing would enable smartphones to automatically exchange data over Bluetooth. This will determine how close a smartphone is to another smartphone.

But as I outlined above, Bluetooth can be very inaccurate in identifying position. The range is so large, it can mean the difference between your phone perceiving that you have come in contact

with someone infected by a virus... or not.

In early May 2020, a professor at Carnegie Mellon University outlined Bluetooth's weakness in proximity detection. He stated that someone Bluetooth identifies as being two feet away may actually be 20 feet away, and someone 20 feet away may be seen by Bluetooth as only two feet away. And even the inventors of Bluetooth have noted that problems of accuracy are very real. This makes me very uncomfortable.

We can imagine being forced into quarantine because the government's contact tracing system said we came within a couple feet of someone known to have a virus. Our lives would be uprooted, when in reality, the infected person may have been 20 feet away and not a risk at all.

And, of course, the opposite can also be true. The system may miss people who have actually been exposed.

I'm just going to say it... Bluetooth is a terrible technology for contact tracing. It shouldn't be used. It just isn't accurate enough.

But with centimeter-level precision, UWB would allow contact tracing apps to know precisely when you are in close contact with an infected person. This degree of precision would avoid any false positives or negatives. And the app could alert us to quarantine for 14 days or take other actions only when necessary.

We should think of COVID-19 as a practice run for an airborne virus or even bioterrorism. A threat in the future could be far more dangerous than COVID-19 or a severe strain of influenza.

And UWB's security, accuracy, and low power consumption are catalysts for industries to "upgrade" from Bluetooth to UWB. After all, there are numerous applications for UWB. The technology can even be used in industries that might not be obvious, like the agriculture industry. We could use UWB in tags to track

livestock. And soon, virtually every smartphone on the planet will include UWB technology.

And the company that will be the industry leader in this space is **Qorvo (QRVO)**.

## Qorvo's Hidden Value

Founded through a merger of TriQuint Semiconductor and RF Micro Devices in 2015, Qorvo is a semiconductor company most well-known for its power semiconductors.

These semiconductors are used in high-value 5G base stations as well as smartphones. And in a call with JPMorgan, Qorvo CEO Robert Bruggeworth said, "I can't tell you a 5G phone that's going to be launched that we're not in."

Qorvo is also essential to another major communications upgrade... the upgrade from Wi-Fi 5 to Wi-Fi 6 and 6E.

And in February 2020, Qorvo just completed one of the smartest acquisitions I've seen. It acquired a company called Decawave (which I mentioned earlier). Decawave is the leader in UWB semiconductor manufacturing. This strategic acquisition resulted in Qorvo's immediate access to the world's best UWB technology as well as the leading team of experts in the industry. It got the best of the business in one fell swoop.

And there's a key reason why I'm certain UWB will soon be adopted into our consumer electronics.

Apple designed and manufactured a UWB chip for its iPhone 11, which it released in September 2019. And it is included in its 5G iPhone as well. What's happening is that Apple is seeding its market with technology so that when the next major upgrade cycle for iPhones is complete, more than half of Apple users will have UWB capabilities in their phones.

Apple is using UWB technology for wireless

charging and data transfer in its latest generation of phones. The technology is not going away. As Apple's customers phase out old iPhones for the 5G-enabled version, UWB will become available to the majority of all iPhone users.

## Qorvo Powers 5G

If the COVID-19 pandemic has made anything clear, it's that we desperately need to upgrade our networks. 4G hasn't been enough.

Back in March 2020, Nokia put out some data that puts this into perspective.

Nokia's data showed that most wireless networks around the world see 30–45% growth in traffic over a whole year. But peak usage had jumped 20–40% in just four weeks. Imagine what that would do to any network... a year's growth in just four weeks.

With people working from home, more mobile phone calls are happening. Verizon said it had 800 million calls a day – that's double the number of calls on Mother's Day, which is one of the busiest call days of the year. And these calls are 33% longer... Probably because business meetings that would have normally happened in person are taking place over mobile phones.

And these people are using Virtual Private Networks (VPNs) to log onto company servers. This is a secure way for employees to login to a company's network. VPN traffic is up 50% at the same time traffic from gaming is up 107% and streaming traffic has surged. Research firm KPMG estimated internet traffic increased as much as 70% during peak social isolation.

We can see the problem. In fact, for many of us, we are already experiencing reduced network performance.

Phone calls are dropping more frequently. Videoconferencing calls have audio lags and video that freezes or jitters. Sometimes our web

browsers just sit and spin.

The reality is that internet service providers are overloaded, cellular networks are overloaded, and data centers are overloaded. They weren't built to manage this level of traffic in this short of a time period.

As the nearby chart shows, we've reached over 50 exabytes per month in traffic. As a reminder, a single exabyte can hold the equivalent of 100,000 times the printed material of the Library of Congress.

The world needs to upgrade both its wireless networks and the data centers that support those wireless networks. Basically, the world's internet infrastructure needs to be upgraded... And 5G technology is the most critical upgrade we need.

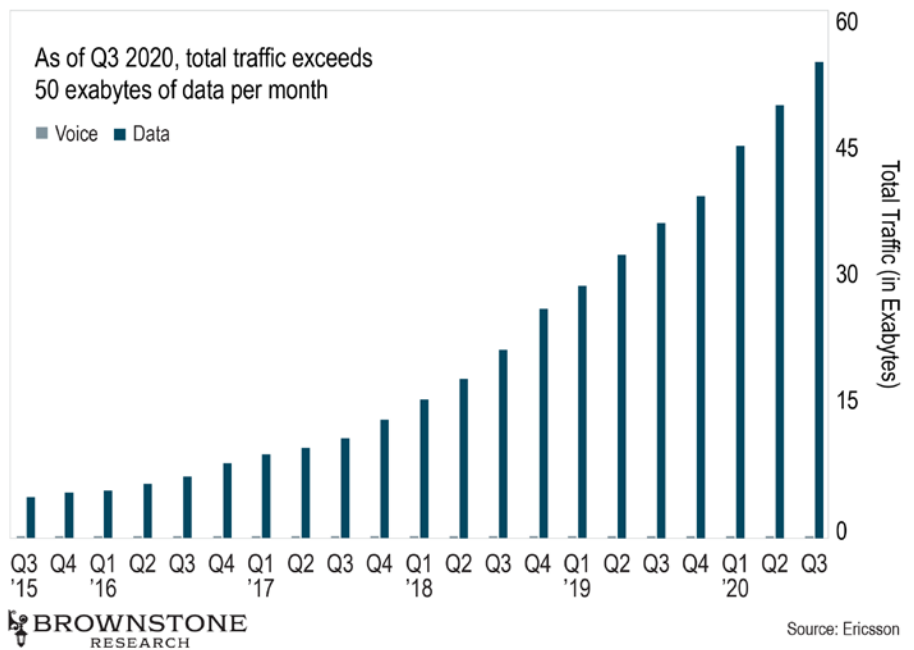
The 5G network architecture has changed compared to 4G. 3G and 4G technology used wireless towers that could cover 30–45 miles over flat terrain.

But 5G is completely different. It uses “small cell” architecture, which requires far more cell phone tower locations. For major metropolitan areas, this could mean one small cell phone tower on almost every street corner.

Today, there are more than 200,000 cell phone towers scattered across the U.S. Yet when the 5G network has been completely constructed, there will be more than a million cell phone towers to support the higher bandwidth, higher speeds, and new services delivered over 5G.

That's at least a five times increase in the number of towers needed for 5G compared to the previous generation. And I am predicting that the number will be much larger as network coverage extends to indoor building coverage,

## Global Growth of Mobile Data Traffic



subways, underground passages, parking garages, and other harder to reach spaces.

Qorvo plays an integral part in these base stations.

The company specializes in power management. It sells low-noise power amplifiers. Noise, or electrical interference, causes garbled communication. This is a problem with all networks.

These chips are used in cellular base stations and cell phones. But with each new generation, noise becomes a bigger problem. Too much noise causes problems with how your device connects with the network. And when electronics get more complex, more advanced power semiconductors are needed for them to function properly. And that's what Qorvo specializes in – power management semiconductors.

Qorvo specializes in a very specific kind of radiofrequency (RF) power chip. That's a chip built with gallium nitride, otherwise known as GaN.

GaN field-effect transistors use the same design as traditional silicon-based semiconductors. But this material can provide anywhere from 5 to 50 times performance improvements over silicon.

As a semiconductor material, GaN is 10 times faster than silicon. It can operate at much higher voltages and is a more efficient material to manage power conversion. As if that weren't enough, GaN provides better thermal performance – basically, it puts out less heat even at higher power levels. This is extremely important in electronic equipment.

GaN also allows electronic equipment to be designed with fewer components, which results in a smaller overall design. Fewer components and smaller design also mean less expensive products.

To sum it up, GaN is a far superior material for semiconductors used for power management than the materials used today. And it is an essential material in transistors for the higher frequencies and thus higher power requirements of 5G technology.

And as manufacturing costs drop, GaN technology will become the predominant radio frequency power solution. Qorvo understood the direction of the market and invested heavily in GaN technology. And it's perfectly positioned to lead in this space as a result.

But it's not just 5G that Qorvo has exposure to. The company will be an essential player in the next generation of Wi-Fi technology.

## **Qorvo Will Power Another Major Tech Upgrade**

That upgrade is the one from Wi-Fi 5 technology to Wi-Fi 6 and Wi-Fi 6E. This is the biggest upgrade to Wi-Fi in decades.

Wi-Fi 6(E) refers to the 6 GHz frequency band. That's what's being unlocked by this new spectrum.

This is a big deal because our current 2.4 GHz and 5 GHz Wi-Fi bands are congested. We can see this by looking at all the different Wi-Fi networks in range of our home or office.

If you're curious, simply click on the Wi-Fi icon on your computer and count how many networks are within range of your computer.

I've got 12 other Wi-Fi networks in range of my home, and I live in a suburban neighborhood. If you live in an apartment building or condo, the congestion is much worse.

And because we are all using the same frequencies, our networks interfere with each other. This slows down our speeds, and it sometimes leads to connectivity issues.

That's one of the reasons our internet access drops out at times or slows down or we have difficulty reconnecting.

And here's the kicker – the amount of spectrum unlocked for Wi-Fi 6E in this latest auction is quadruple the amount available for Wi-Fi today. That means this new frequency band will be wide open. We'll see an impressive jump in performance on our home and office networks.

Qorvo's chips for Wi-Fi will go into these new routers for the same reason as its chips will go into 5G base stations: to reduce the noise in the network and increase overall performance.

Let's take stock of what we know so far.

Qorvo is positioned to benefit from not one... not two... but *three* major technology trends: the 5G wireless rollout, the migration to the next generation of Wi-Fi, and the emerging UWB market – the next generation of wireless networking technology.

Qorvo is an essential company for just about every major communications upgrade planned for the next five years. It will have the best UWB chips. It is in every major 5G smartphone and most 5G wireless base stations. And it is in the new upgraded Wi-Fi routers.

Let's power on and build our position in this

company that will help not only with contact tracing... but also with the connectivity needed with more people working, socializing, and entertaining themselves online.

**Action to Take:** Qorvo (QRVO) is a buy up to \$130. For our most up-to-date risk management, please refer to our online portfolio [here](#).

**Note:** If this stock is trading above our recommended buy price at the time of reading, my official recommendation is patience. Technology stocks experience natural volatility that almost always gives us a great entry point. I want to make sure readers invest in the best companies at a great price.

## Recommendation No. 4: The King of Fiber

Much like Qorvo, the next recommendation for this report is helping us handle the overflow traffic from increased internet usage. We were already heading in this direction due to trends like artificial intelligence and 5G, and now that people are spending more time online working, socializing, and entertaining themselves, we need companies like **Corning (GLW)** to help us keep up with the growth in traffic more than ever before...

The biggest part of Corning's business is producing fiber-optic cables – the fastest way to transmit data around the globe. Fiber-optic cables are long strands of extremely pure glass.

Information passes through the fiber-optic cables as short bursts of light. Nothing moves faster than light, making fiber optics the most efficient way to transmit data.

Believe it or not, wireless networks are very “wired.” The majority of any wireless network infrastructure is, in fact, a vast fiber-optic

network.

### Example of a Wireless Network Tower



*Source: Wikipedia*

Take the wireless network tower shown above. It holds the antennas, transmitters, and receivers that are necessary for wireless transmission. Phone calls don't bounce from tower to tower to tower between two people speaking on their smartphones.

Instead, there are fiber-optic cables that connect to each tower. And in order to have wireless calls or fast internet browsing over a mobile device, those calls need to be routed as quickly as possible to a fiber-optic network. Put more simply, each of our calls connects to the nearest tower, gets transferred immediately to a fiber-optic network, and then is routed over fiber to the tower closest to the other caller. Finally, the call switches from fiber to wireless again.

And in the world of fiber-optic cables, Corning is the 800-pound gorilla.

Estimates say it'll take 1.4 million miles of fiber just to wire the 25 largest cities in the U.S. It will take millions more to wire the nation. And as more consumers get onto 5G networks, even more fiber will be required to support the exponential growth in data traffic. Corning's management has said 5G needs 100 times the fiber as the 4G build-out did. And that's going to get expensive.

Consulting firm Deloitte released a study a

couple of years ago predicting that companies will need to spend up to \$150 billion on fiber alone over the next 5–7 years... just in the U.S.

Corning has 16.3% of the fiber-optic cable market. Using those numbers, Corning should get about \$24.5 billion in revenue from fiber optics. Depending on how long the build-out takes, Corning will get \$3.5–4.9 billion per year.

Remember, that's just from the U.S. – where Corning only gets 35% of its total business. Corning can grow its revenue from U.S. demand alone, but the international business opportunity is even larger.

## Shatter-Resistant Screens

And that's not Corning's only opportunity here. As we build out the 5G networks, billions of phones will get upgraded to use the new 5G capabilities. And that means another segment of Corning's business will thrive...

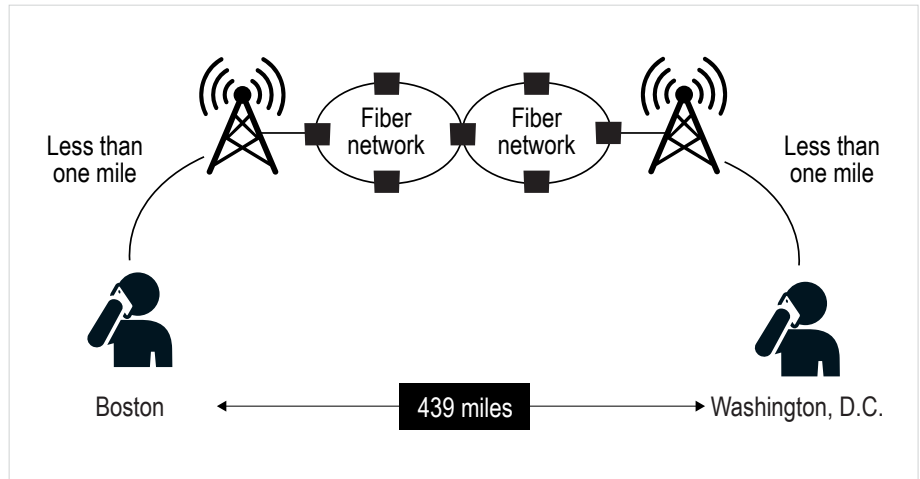
We've all done it. The slip, twist, juggle, fat-fingered, distracted drop of our smartphones. No one is immune. Somewhere along the line, it happens to all of us. We cringe as we watch the expensive device flip through the air before it smashes on a hard surface...

And the first thing we do is check the screen. Did it shatter? If it did, chances are the phone manufacturer didn't use Corning's Gorilla Glass.

Gorilla Glass 6 can withstand 15 falls from a one-meter height. One meter is about the average height when someone drops a cell phone after taking it out of a pocket or purse.

And the latest upgrade, Gorilla Glass Victus, has

## How a Wireless Phone Call Actually Takes Place



BROWNSTONE  
RESEARCH

twice the scratch resistance of Gorilla Glass 6. A phone with Victus glass can survive up to a six-and-a-half-foot drop (roughly 2 meters) – which means even if your phone is up by your ear when you drop it, it should have no problem surviving the fall.

Because of this resilience, Gorilla Glass goes into just about every high-end cell phone. Samsung, Motorola, LG, Apple, and other manufacturers all use Gorilla Glass on high-end phone screens.

And one of the major trends in the industry has been to use Gorilla Glass not just on the touch screen of the phone; manufacturers are now using the glass on the back of the phone as well.

Radio frequency antennas in smartphones perform better when there is a glass back on the phone. And glass backs also perform better for wireless charging. Corning figured out how to put copper wires in the glass on the backs of the phone. This is the fastest, most efficient way to charge wirelessly.

The key point is that 5G-enabled smartphones will use more Gorilla Glass compared to all previous generations of smartphones.

## More Glass Equals More Revenue Per Phone

A Credit Suisse report said during the time of 3G, Corning got 50 cents of revenue per phone. But now, \$12 of Gorilla Glass goes into each Samsung S10.

During this global 5G phone upgrade cycle, we'll see 4.5 billion phones manufactured and sold over the next five years.

If Corning just maintains its current market share of the cell phone glass market of 48% and only gets \$5 per phone on average for its Gorilla Glass, that's \$10.8 billion in revenue over the next five years... Averaged out, that implies that annual Gorilla Glass sales will double.

The 5G build-out alone, which is becoming ever more needed with the increased data traffic from COVID-19, will double these two segments of Corning's business. This alone is justification for making Corning a strong buy.

**Action to Take:** Corning (GLW) is a buy up to \$40. For our most up-to-date risk management, please refer to our online portfolio [here](#).

**Note:** If this stock is trading above our recommended buy price at the time of reading, my official recommendation is patience. Technology stocks experience natural volatility that almost always gives us a great entry point. I want to make sure readers invest in the best companies at a great price.

## Recommendation No. 5: Profiting From Hyperscale Growth

Last, but certainly not least, is **Arista Networks (ANET)**.

Before we get to our analysis on Arista Networks, we must understand the larger trends behind this story.

With every month that passes, every human on the planet with a computer and/or smartphone produces more and more data, which gets sent to hyperscale data centers for routing, processing, and sometimes storage. The industry refers to these massive data centers around the world loosely as the "cloud."

Data traffic is the driver behind this explosion in hyperscale computing. Like we mentioned earlier, mobile data traffic currently produces over 50 exabytes of traffic a month. And data center traffic, measured in zettabytes (1 zettabyte = 1,000 exabytes), doubled from 2016 to 2018. And that trend is continuing.

For context, a zettabyte is one billion terabytes. If your computer has a 1 TB hard drive, it's a pretty big drive.

Where does all this data come from?

Facebook creates 4,000 TB of data a day, which includes 350 million pictures and 100 million hours of video watch time.

We send 294 billion emails daily.

Twitter users send 500 million tweets every day.

Connected cars daily produce 4 TB of data.

This year, it's predicted that wearable devices will create 28,000 TB of data each day.

This is just the beginning. With the release of 5G technology, we will see even more data traffic. Longtime readers need no reminding that 5G networks will be, on average, 100 times faster than 4G. And with that increased bandwidth comes some exciting applications.

Self-driving cars, advanced virtual reality, health monitors that will collect and transmit your

vitals in real time... all of these will be possible over 5G networks.

And with these new applications comes even more data creation and data traffic. Tech research and consulting firm IDC predicts by 2025 we will create 463 exabytes of data PER DAY. Over a year, that will be four times greater than the total amount of data humans collectively created in history by 2020.

All this data has to be transmitted and routed to data centers, where it is processed, analyzed, and stored. And this all happens in hyperscale data centers.

And look at the impressive growth we're seeing in this area.

Since 2016, the number of hyperscale data centers has increased by 50%, and the scale of each new hyperscale data center and the hardware inside just gets larger.

And the green data points in the image above tell an even stronger story... This year, over 50% of all data center services will be in hyperscale data centers.

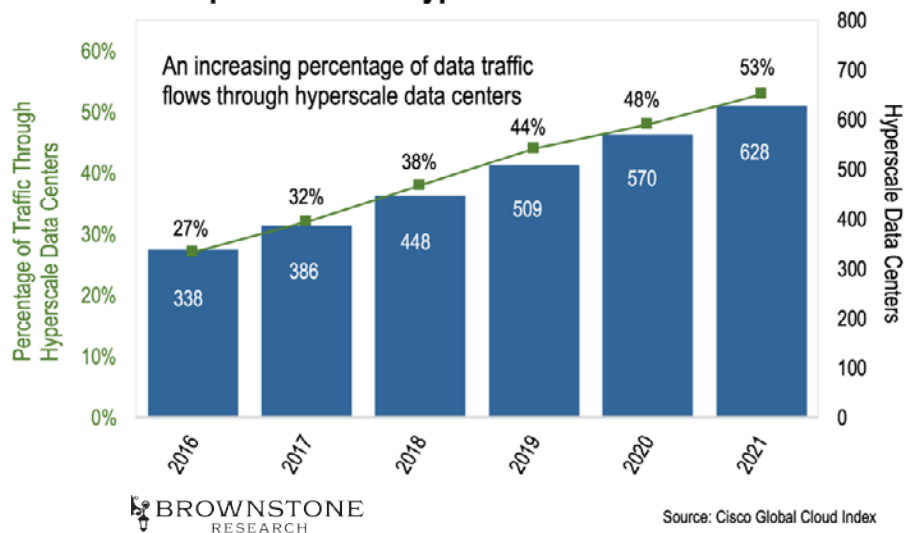
Amazon Web Services has the largest share of this market, with over 40%. And in 2019, Amazon grew this segment's revenues 37% to \$35 billion.

Microsoft's Azure service grew over 60% in 2019. And Google's Cloud service was up 53% year over year in Q4 2019.

Facebook and Apple are both building out multiple hyperscale data centers to support their products as well.

Not one of these companies is slowing down its

## The Rapid Growth of Hyperscale Data Centers



data center build-outs... They can't afford to.

Hyperscale data centers can receive requests for data from thousands – or even millions – of places at once. To spread out the workload among the entire server farm, the network utilizes “Ethernet switches.”

We can think of Ethernet switches like air traffic controllers directing planes in busy airspace like the greater New York metropolitan area. Air traffic controllers need to get every plane routed through traffic and on its way to a final destination in the most efficient way without losing any of them.

Smart Ethernet switches route data traffic in much the same way. They make sure that data is sent to its destination in the most efficient way without losing any data packets. They increase the data throughput and efficiency of any network.

With data traffic increasing about 50% every year, data centers will need faster and smarter Ethernet switches. And they will need a lot of them.

That's where Arista Networks comes back into the story. It is the undisputed leader in this technology.

When it comes down to it, Ethernet switches are all about the amount of data the switches handle.

Different classes of Ethernet switches can handle different amounts of data.

For example, a 10G switch can handle up to 10 gigabits a second. Data gets transmitted through a series of ones and zeros. A 10G switch can direct 10 billion 1s and 0s per second. As impressive as that is, 10G technology is over a decade old. Most new data centers use either 40G or 100G switches. And now the cutting-edge hyperscale data centers are installing 400G switches.

Right now, Arista is the leading supplier of 100G switches, with a 34% market share. The 100G market is going to be the biggest market for the next couple of years as 400G ramps up.

With more and more businesses turning to cloud-based services during the COVID-19 pandemic, the demand for services from hyperscale data centers will only grow. And the demand for more advanced Ethernet switches will grow too.

Hyperscale data centers will continue to turn to Arista. That's because Arista consistently leads the industry in data center networking technology. Let's be sure we add this stock to our portfolio today.

**Action to Take:** Arista Networks (ANET) is a buy up to \$300. For our most up-to-date risk management, please refer to our online portfolio [here](#).

**Note:** If this stock is trading above our recommended buy price at the time of reading, my official recommendation is patience. Technology stocks experience natural volatility that almost always gives us a great entry point. I want to make sure readers invest in the best companies at a great price.

## Bonus Recommendation: Profiting From the Future of Contactless Payments

These five stocks will do incredibly well in the “post-COVID” years ahead. But before you go, I'd like to give you one more bonus recommendation.

Investors are likely familiar with **Square (SQ)**.

You may have seen one of Square's beautifully designed POS terminals at one of your favorite local small businesses. I see them everywhere – restaurants, coffee shops, my local wine and spirits store, my butcher, etc.

### Square Terminal



*Source: Square*

It looks like an iPad... because it is an iPad. Square innovated by using already-existing hardware (which some small business owners may already have) to create a fantastic software and service business solution for its target customers. Small businesses can simply buy the white plastic stand, download the Square POS software to their iPad, and pop it in. It really is that easy... Up and running in minutes.

For businesses that don't need a cash register, Square created something even more simple. Called the Square Reader, it's a small, square device that plugs into a smartphone. It's essentially a credit card reader that connects to Square's POS smartphone application.

Square's early market strategy was to innovate in the two areas that were most critical to small businesses. First was to make a POS system so simple to use that it could be set up in minutes – the complete opposite of legacy POS systems.

Second was the business model. Square created one simple business model, making it affordable for small businesses to accept credit cards. Originally, it charged a 2.75% fee on all transactions. That's it. No subscription fees, no integration fees, no maintenance fees... nothing else.

Since the release of its new products, Square has maintained that simple business model, while adding some additional incentives for adopting the Square Terminal, or the new Square Register.

Now, I know what we may be thinking...

How could a company that's most known for facilitating in-person consumer purchases thrive during a pandemic? After all, many small businesses closed during the economic lockdowns. But Square has another project that few investors see. It's an application that is quickly becoming the preferred method for "contactless" transactions.

It comes down to Square's Cash App.

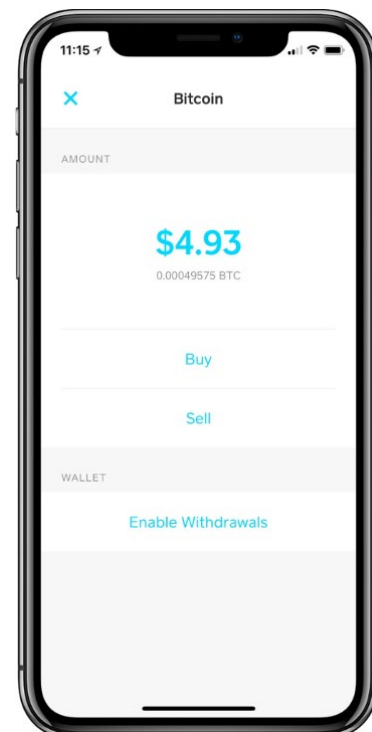
The Cash App is one of the best payment applications available today. The design is clean. It's simple to use. And it enables users to send dollars back and forth, just like top competitor Venmo. Square's Cash App allows users to send money back and forth without ever coming into contact with another person. And the adoption of the Cash App will only accelerate as the world moves permanently to contactless transactions.

And Square has another trick up its sleeve with the Cash App.

The Cash App also allows users to buy and send digital assets like bitcoin. And it makes dealing with digital assets so simple that anyone can do it.

Just type in how much bitcoin you want to buy, press the button, and boom – it is done. The bitcoin shows up in the Cash App instantly.

### Square's Cash App



*Source: Square*

Cash App is something of a "Trojan horse" because Square developed it largely under the radar.

It didn't appear to be a big part of Square's business. In fact, the Cash App accounted for only 20% of Square's revenue in the second quarter of 2019.

Fast forward to today, and the Cash App accounts for 62% of Square's revenue. Its growth has been astonishing.

And much of that growth is due to bitcoin. Square customers purchased \$1.2 billion worth of bitcoin in 2020. That's compared to just \$516

million for all of 2019.

And in total, the Cash App generated over \$2 billion in Q3 2020.

This is a great company to own in the post-COVID world.

**Action to Take:** Square (SQ) is a buy up to \$85. For our most up-to-date risk management, please refer to our online portfolio [here](#).

**Note:** If this stock is trading above our recommended buy price at the time of reading, my official recommendation is patience. Technology stocks experience natural volatility that almost always gives us a great entry point. I want to make sure readers invest in the best companies at a great price. And I will always alert readers if it makes sense to raise our buy prices.

Regards,

Jeff Brown

Editor, *The Near Future Report*

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To contact us, call toll free Domestic/International: 1-800-681-1765, Mon-Fri: 9am-5pm ET or email [memberservices@brownstoneresearch.com](mailto:memberservices@brownstoneresearch.com).

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