

Evolve Innovation Index Fund

EDGE provides investors with access to global companies that are involved in innovative or disruptive trends across a broad range of industries.

TSX

EDGE

ETF TICKERS: EDGE (HEDGED); EDGE.U (USD)

MUTUAL FUND FUNDSERV CODE: EVF160 (CLASS F); EVF161 (CLASS A)

Investment Thesis: Innovation is a long-term, key driver of global economic growth. Access 8 themes that are reshaping our world. Data and AI are at the center of technological innovation.

8 Themes

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| <p>1. Cybersecurity: Non-discretionary need to protect our data infrastructure</p> <p>2. Cloud Computing: Store and access data through the internet</p> <p>3. 5G: Increasing wireless delivery speeds and efficiencies to connect the world</p> <p>4. Automobile Innovation: The car is becoming digital: Autonomous, Connected & Electric</p> | <p>5. Genomics: Better drugs, developed in a fraction of the time at lower costs</p> <p>6. Robotics and Automation: The rise of robots will boost productivity and economic growth</p> <p>7. Fintech: Transforming how financial services are delivered and consumed</p> <p>8. eGaming: Largest and fastest-growing entertainment sector</p> |
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GENERAL INDUSTRY UPDATE

Cybersecurity

This month, **Biden** signed the \$1 trillion infrastructure bill into law which includes **almost \$2 billion for cybersecurity**. Specifically, \$1 billion over the next four years will go toward funding a Federal Emergency Management Agency grant program. The funds will be used by local governments to modernize their systems to detect cyberattacks. \$100 million cyber response and recovery fund will be developed for the private sector and an additional \$21 million will go towards staffing at the Office of National Cyber Director.^{1,2}

Another industry that is threatened by cybersecurity is **electric vehicles**. EVs are becoming increasingly connected and these 'computers on wheels' could become a risk to security. In the future, it's possible a vehicle could have thousands of different connectivity points in a day - charging, Bluetooth syncing, GPS communication etc. Cyberattacks could range in severity from viruses taking out charging services to a vehicle being remotely taken over and used for malicious intent. Sean Cho, the President of Autocrypt North America, said "when electric vehicles plug into the charger there is the point where the charge point operator and the vehicle act as an open door for a potential data breach."³

Cloud Computing

A recent report published by Fortune Business Insights found that the **global cloud computing market is expected to reach \$800 billion by 2028, which is more than three times its current 2021 valuations** at \$250 billion. This estimate equates to a 17.9% compounded annual growth rate (CAGR). Governments around the world are increasing their focus on cloud solutions. The US, UK, China, and India are among the top nations implementing cloud solutions in conjunction with

other technologies like AI and machine learning. Asia Pacific is expected to see the greatest surge in growth as demand for cloud-based solutions in manufacturing and healthcare increases. One hurdle for widespread adoption of cloud-based solutions continues to be data security and privacy concerns. Organizations will need to increase their cybersecurity spend simultaneously with their transition to the cloud.⁴

5G

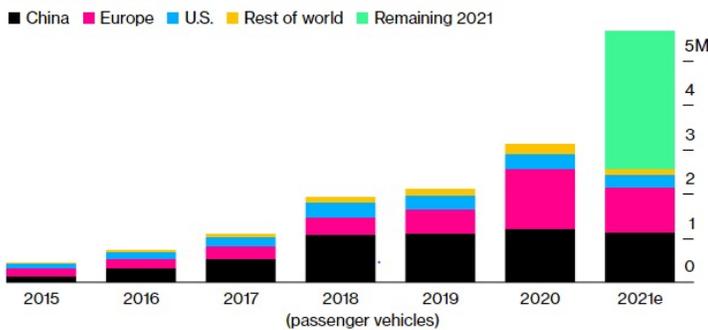
This month **Qualcomm** posted strong earnings that beat analyst expectations. The company reported **56% year over year growth** in chip sales despite the global chip shortage. The growing adoption of 5G has fueled a lot of the company's growth. CEO Cristiano Amon told CNBC that the "handset business is on fire" as demand for devices that run on the new and faster 5G networks is increase significantly. **T-Mobile** is continuing its mission to fuel 5G innovation. They are now the exclusive 5G launch partner in North America for Qualcomm's new Snapdragon Spaces™ XR Developer Platform. Qualcomm is working with T-Mobile and others to help launch AR glasses as companions to smartphones. "5G is powering more immersive experiences that better connect us to people and things around the world, and glasses will be one of the first disruptive new product categories," said Neville Ray, President of Technology at T-Mobile.^{5,6}

Automobile Innovation

The **COP26 United Nations Climate Change Conference** was hosted this month. Bloomberg reported on the progress that has been made toward global net zero in the road transportation sector. **12 automakers** have pledged to phase out sales of internal combustion engine (ICE) vehicles and **18 national governments** have ICE phase-out commitments.⁷

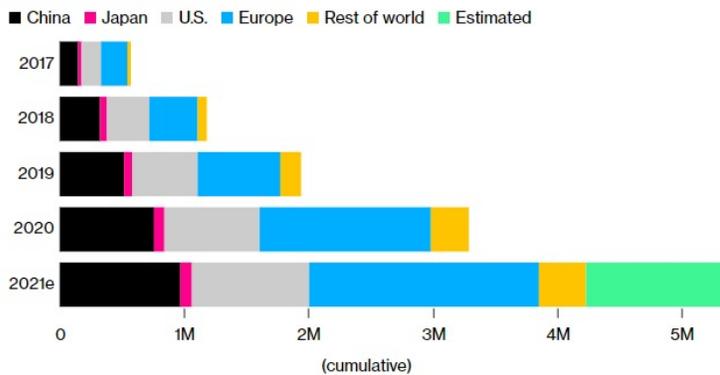
Bloomberg also released a report in conjunction with the conference that **estimated global electric passenger vehicle sales will reach \$5.6 million this year**. This is almost double the number purchased last year and represents about **8% of all vehicle sales**. EV sales are 20% or more of total vehicle sales for several European automakers. The increased EV demand can be partially attributed to larger consumer choice of vehicles. There are currently more than **500 EV models and fuel cell vehicles available for sale today, six years ago that figure was under 100**. The number of charging stations is also increasing. Bloomberg estimates that 2.1 million vehicle chargers will be installed in private garages and parking lots, a 63% increase since the beginning of the year.⁸

Global EV Sales

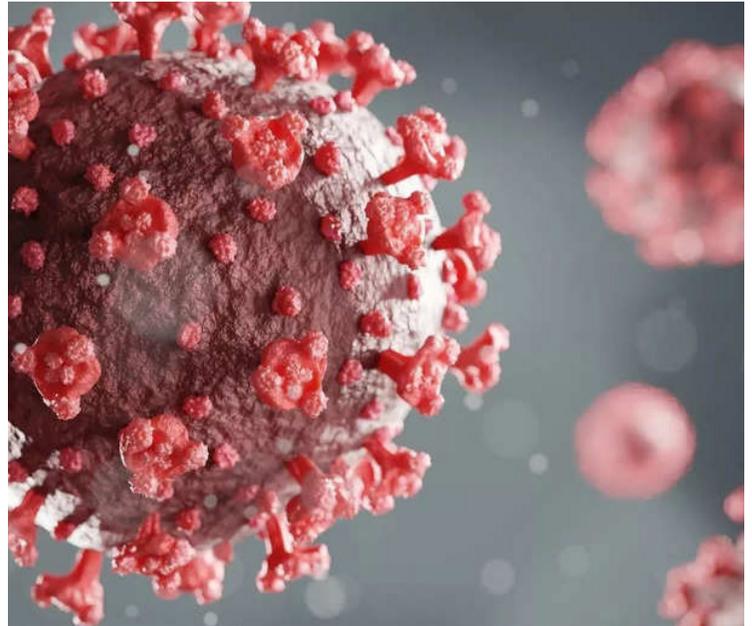


Source: BloombergNEF

Home Charger Installations



Source: BloombergNEF



Genomics

COVID-19 was back in focus this month with news of the **Omicron** variant, which originated in South Africa, spreading across the globe. On November 26, the WHO officially designated Omicron as a variant of concern. It is still unclear exactly what the impact of this new strain will be, however, several nations have already started announcing travel restrictions to prevent the spread. Genomics has been key to developing the vaccines and boosters to protect against the spread of the pandemic. Harvard released an article discussing how quantitative genomics is being used and applied to track and understand COVID-19. Through tracking virus mutations and identifying them in sequences, scientists have been able to identify variants of concern and track them. Omicron is another reminder that the pandemic is still not behind us, but studies like genomics are instrumental in the fight against it.⁹

Genomics goes beyond just tracking and preventing COVID-19. The technology will be leveraged to accomplish several other scientific breakthroughs like faster cancer detection. Illumina Inc's CEO pointed out one concern he has around gene data collection by pointing out how gene-based therapies could end up being skewed to a subset of the global population if businesses and governments don't collect more gene data from different backgrounds and communities. **"Over 70% of the genomes we have today are Caucasian genomes** and unless we distribute this more globally, we're systemically building that bias into our medicine for the future." This is an opportunity for organizations to expand their genetic sequences analysis to include all populations.¹⁰

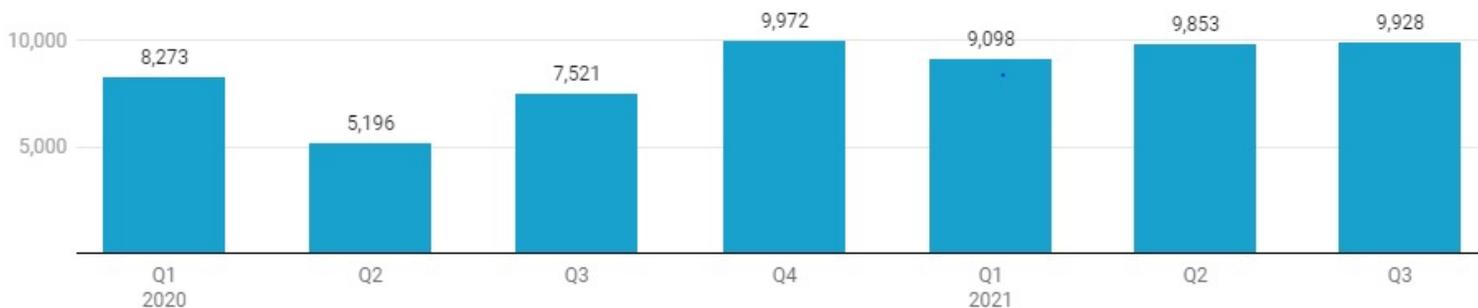
Robotics and Automation

CNN recently reported that companies in North America added a record number of robots in the first nine months of the year. Robotics are allowing companies to increase speed and efficiency in their manufacturing process to keep up with increased demand. The pandemic has also made it more difficult to hire and retain employees as these machines are reducing the amount of human capital required. Factories and other industrial users **ordered 29,000 robots valued at**

\$1.48 billion, a 37% increase from last year. In the past, the auto industry had dominated the market for industrial robots, however, in 2020 other industries surpassed the automakers for the first time. In the first nine months of the year, **auto-related orders for robots grew 20% to 12,544 units**, while orders **by non-automotive companies expanded 53% to 16,355.**^{11,12}

North American robot orders over the last two years

Units ordered per quarter



Source: Association for Advancing Automation • [Get the data](#) • Created with [Datawrapper](#)

Nvidia is a great example of a company that has recently increased its focus on autonomous machines, including all forms of robotics. Nvidia has pivoted their GPU Technology Conference from gaming into one of the leading AI events. A broad range of industries have increased their interest in using

robotics since the pandemic started including agriculture, healthcare, life science, logistics, manufacturing, smart cities, retail and more. Nvidia's expertise with AI in other industries like automotive gives them a competitive advantage in the space.¹³

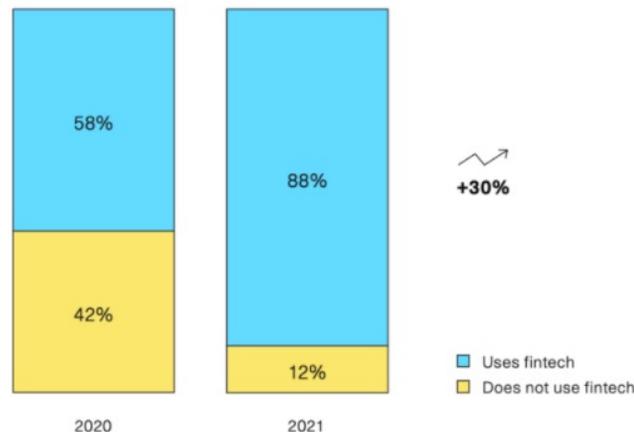
Fintech

A recent report showed that **88% of American consumers use fintech on a regular basis.** That represents a **52% growth rate from 2020 to 2021.** The pandemic accelerated the shift to fintech across several demographics. In fact, 69% of individuals in the survey felt that fintech was a pandemic lifeline.

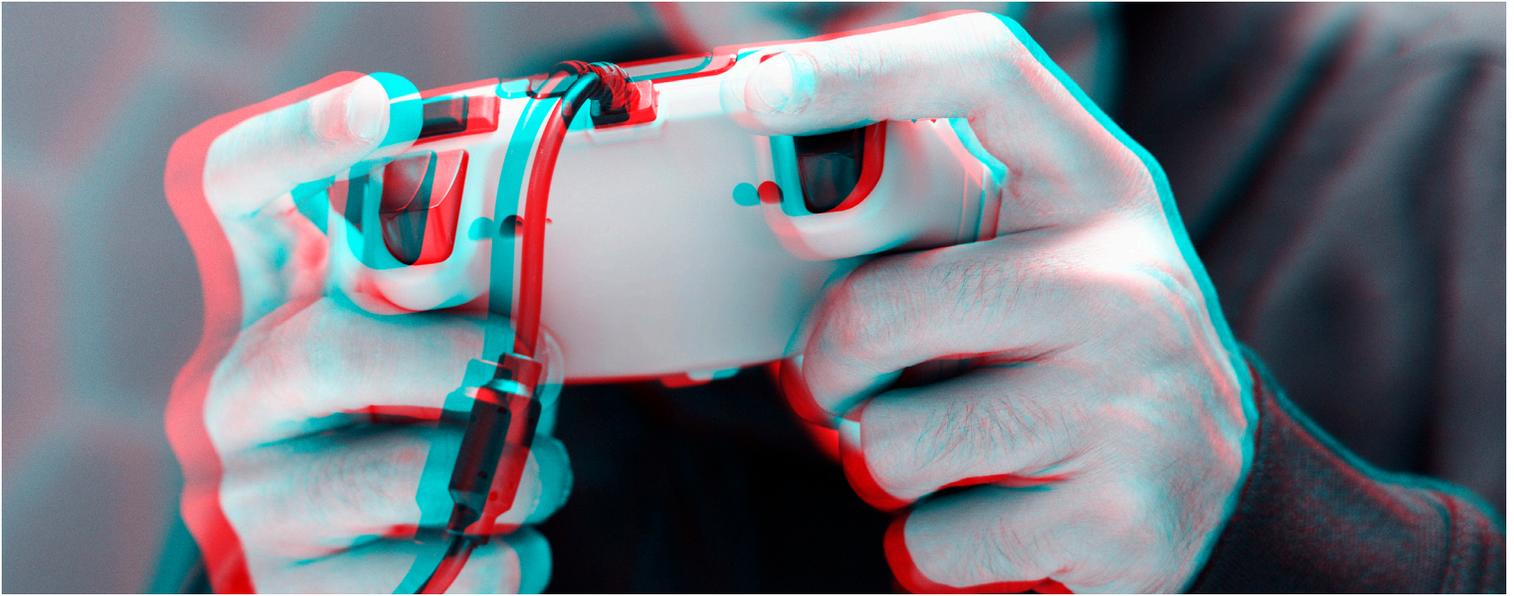


One question is if consumers will maintain the same level of usage once the pandemic is behind us. The report found that between 80-90% of those who used fintech in the past year plan to use it the same amount going forward.¹⁴

A strong majority of Americans now use fintech



Source: Plaid



eGaming

The **metaverse** is an exciting new theme that has garnered lots of media attention this month. The metaverse is not a company or a product, it's the next generation of the internet enabled by real time 3D. It connects the digital and physical worlds through virtual or augmented reality technologies.

Bloomberg estimates that the metaverse could be worth **\$800 billion by 2024** and **Morgan Stanley** estimates it could be worth **\$8 trillion over time**.

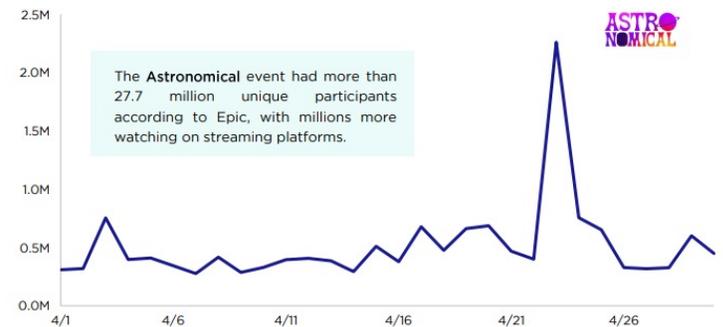
The video game industry has been creating virtual worlds for years. **EverQuest** was an online game that launched in 1999 and had half a million subscribers at its peak. **World of Warcraft** launched in 2004 and hit 12 million users. Today, **Roblox** has 200 million active monthly users hanging out in their virtual worlds.¹⁵

One revenue opportunity for e-gaming companies is **digital events**. Bloomberg estimates live **entertainment businesses may exceed \$200 billion by 2024**. As an example, the Travis Scott Fortnite concert was attended by 27.7 million unique users with millions more watching on streaming platforms.¹⁶

The Astronomical Impact of Travis Scott

Peak Concurrent Viewers in April 2020; YouTube & Twitch Combined

FORTNITE



PERFORMANCE (%)

TOTAL RETURNS*	1 MTH	YTD	1 YR	2 YR	3 YR	SI**
EDGE (HEDGED)	-0.70	13.30	20.91	33.64	28.77	21.98

Source: Bloomberg, as at November 30, 2021.

** Performance of EDGE since inception on April 30, 2018.

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