

GLOBAL X ETFs RESEARCH

The Next Big Theme: April 2021

Authored by:

Pedro Palandrani,
Andrew Little

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Topic: Disruptive
Technology, Physical
Environment, People &
Demographics



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Fintech

NFTs Coined the Latest Currency Giant

The world of cryptocurrencies is expanding to include non-fungible tokens (NFTs). Unlike regular cryptocurrencies, NFTs cannot be replicated or directly exchanged with one another. The blockchain ledger it sits on verifies who the rightful owner is of that unique digital asset. NFTs function more as value-based assets rather than a traditional currency as they are non-interoperable, indivisible, indestructible, and easily verifiable. NFTs are quickly gaining traction in the digital art space. Digital artist Beeple set a new record by selling a digital piece for \$69 million at art auction house Christie's.¹ Showcasing the diversity within NFTs, sports fans have found a niche in sports trading card, video clips, and other digital assets.² Year to date, the combined market cap of NFT projects has increased by over 18x to USD\$432 million.³

Autonomous & Electric Vehicles

Volkswagen Talks Electric on Power Day

Volkswagen is hiking up EV production capabilities with plans to build six gigafactories, plants where electric vehicle batteries are manufactured, with partners in Europe, beginning in Sweden and Germany. By 2030, they expect to have a total output of 240 GWh per year, enough to power nearly 5 million cars. Also, in the works for Volkswagen is a switch to a unified battery cell design by 2023 to be implemented across 80% of the company's vehicles. The new battery will be produced in-house, with an aim to reduce the cost and complexity of the battery and at the same time increase its range and performance. Affordability is a main goal within the electric vehicle industry as electric powertrains continue to rise in popularity. Volkswagen plans to drive down the cost of battery systems to significantly below €100 per kilowatt hour, which could make their EVs reach cost parity with traditional internal combustion engine vehicles.⁴ The company is also extending its network of electric charging stations to 18,000 in Europe and increasing the number of fast-charging stations by 3,500 in North America.⁵ There is a general consensus among car manufacturers on the finite future of internal combustion engine vehicles as Volvo announced intentions to become fully electric by 2030 with all sales moving online.⁶

Robotics



Fanuc Invests in Chinese Automation Market

Fanuc plans to invest 26 billion yen (USD\$240 million) in its Shanghai plant to expand production fivefold by 2023.⁷ The Japanese industrial robot manufacturing company recognizes the surging demand for factory automation in China and is looking to customize the robot's arm and sensor to the needs of each client. China is amid a factory automation boom prompted by rising labor costs and held a world record of 780,000 active industrial robots in 2019.⁸ However, China is still in its early stages of robot adoption with a recorded 1.9% industrial robotic density as of 2019,⁹ indicating plenty of room to grow. Fanuc competitors Yaskawa, ABB, and local manufacturers are also investing in new plants in China, evidently perceiving the opportunity.

Robots as Essential Workers

Robotics company Boston Dynamics unveiled their latest mechanical creation: "Stretch," the warehouse robot. Stretch shares similar functionality as a previous Boston Dynamics robotic, Handle, which also had a suction arm used to grab boxes and unload trucks/stack pallets. But Handle was built to balance on two wheels and required massive operating room within the warehouse and moved at a slower pace. Stretch is built to function on four wheels and each wheel is able to move independently making it significantly more energy efficient. Stretch also has the advantage of pivoting around its base unlike Handle which had to move its entire body to turn. Utilizing its ability to lift 50 pounds while being a quarter of the weight of a typical industrial robot arm, Boston Dynamics says this robot is meant to complement human warehouse labor, not replace it.¹⁰ The machine is semiautonomous, so it completes specific tasks a warehouse manager assigns it.

Artificial Intelligence

Companies Process New Chip Technology

Intel Corp. intends to invest \$20 billion on new chip-making plants in Arizona following its announcements of entering the foundry business. This is only the beginning for the company as they move towards manufacturing the majority of their chips in-house.¹¹ Intel's internal foundry service will also manufacture chips for other companies using Intel's x86 technology. Arm Ltd., a longtime competitor of Intel, is remodeling its technology following news of Intel's upgrades to capacity and business expansion. Arm's new chips should be able to handle machine learning processing demands, advanced security features, and deliver 30% performance increases over the next two generations of processors.¹²

Renewable Energy

Generators that Help Reduce Carbon Emissions

Linear generators use air and fuel to move magnets through copper coils to create a current - and they could be the future of electricity. NextEra Energy Inc. is collaborating with startup Mainspring Energy Inc. in releasing this latest technology for companies looking to reduce greenhouse-gas emissions while maintaining their own power generation and avoiding grid outages. The generators, which hit full capacity in seconds, run on natural gas or biogas/hydrogen, both of which can be much cleaner than oil or coal.¹³ Linear generators are also cost efficient with an estimated 10-20% saved on electricity for a typical grocery store in comparison to the grid. The new generators were circulated across many companies last year and clients are continually impressed with its ability to supply power whenever needed, independent of weather and time of day.



Lithium

Lithium-Ion Batteries Underestimated

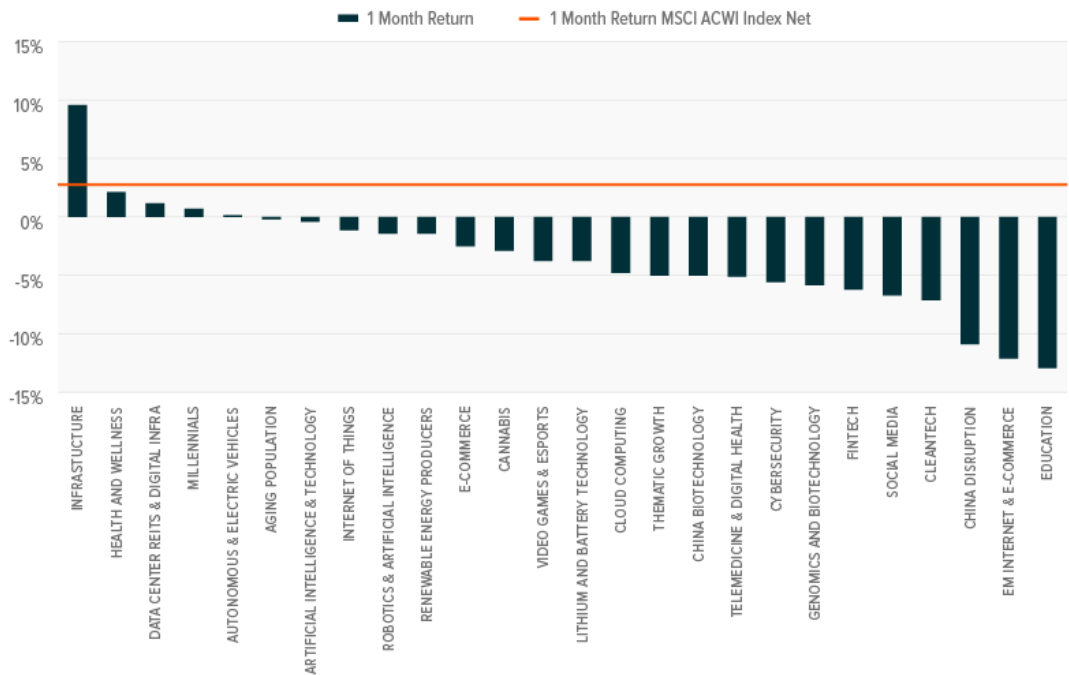
A recent study by a research team at Massachusetts Institute of Technology (MIT) gives insight into the rate of lithium-ion battery improvement and it has been immensely understated. Findings show that the real price of the battery cells, relative to capacity, has declined about 97% since inception in 1991.¹⁴ Furthering this analysis, price per energy capacity declined 13% per year from 1992 to 2016, while cumulative market size doubled.¹⁵ The rapidly improved battery life directly correlates with lower overall costs for electric vehicles, making them much more competitive with internal combustion engine cars.

THE NUMBERS

The following charts examine returns and sales growth expectations by theme, based on their corresponding ETFs.

MARCH 2021 THEMATIC ETF RETURNS

Source: Bloomberg, March 31, 2021, Global X ETFs.



Note: The performance data quoted represents past performance and does not guarantee future results.



THEMATIC SALES GROWTH

Source: Bloomberg, March 31, 2021, Global X ETFs.



Note: Forward looking based on data and analysis from 03/31/2021.
1 year annualized forward sales growth is the consensus analyst expectations for total sales growth in the next 12 months.

Standard Performance				Cumulative % Data as of month end 3/31/21			Avg. Annualized % Data as of quarter end 3/31/20					
	Gross Expense Ratio	Net Expense Ratio	Ticker	1 Month	3 Month	Since Inception	1 Year	3 Year	5 Year	10 Year	Since Inception	
Robotics & Artificial Intelligence Inception Date 9/12/2016	0.68%	0.68%	BOTZ	NAV	-1.49%	-0.30%	128.24%	80.86%	12.27%	-	-	19.89%
				Market Price	-1.43%	--	129.28%	82.58%	12.02%	-	-	20.01%
				Index	-1.57%	-0.26%	130.78%	81.42%	12.20%	-	-	20.17%
FinTech Inception Date 9/12/2016	0.68%	0.68%	FINX	NAV	-6.30%	-5.76%	192.71%	82.01%	23.64%	-	-	26.62%
				Market Price	-6.23%	-5.52%	193.51%	82.05%	23.70%	-	-	26.70%
				Index	-6.26%	-5.61%	201.41%	83.14%	24.45%	-	-	27.44%
Internet of Things Inception Date 9/12/2016	0.68%	0.68%	SNSR	NAV	-1.19%	4.43%	130.13%	81.87%	19.57%	-	-	20.10%
				Market Price	-1.16%	4.84%	130.83%	82.82%	19.63%	-	-	20.18%
				Index	-1.16%	4.49%	133.48%	82.73%	19.91%	-	-	20.48%
Cloud Computing Inception Date 4/12/2019	0.68%	0.68%	CLOU	NAV	-4.81%	-7.71%	71.00%	75.94%	-	-	-	31.36%
				Market Price	-4.81%	-7.74%	71.68%	76.06%	-	-	-	31.63%
				Index	-4.76%	-7.60%	72.97%	76.94%	-	-	-	32.07%
Social Media Inception Date 11/14/2011	0.65%	0.65%	SOCL	NAV	-7.13%	7.24%	356.10%	124.26%	24.33%	29.61%	-	17.57%
				Market Price	-6.74%	7.96%	358.29%	125.80%	24.42%	29.79%	-	17.63%
				Index	-7.10%	7.38%	380.06%	125.54%	25.13%	30.39%	-	18.20%
Artificial Intelligence & Technology Inception Date 5/11/2018	0.68%	0.68%	AIQ	NAV	-0.63%	4.19%	91.94%	81.94%	-	-	-	25.34%
				Market Price	-0.42%	4.63%	92.89%	83.55%	-	-	-	25.55%
				Index	-0.60%	4.29%	93.85%	82.76%	-	-	-	25.73%
Autonomous & Electric Vehicles Inception Date 4/13/2018	0.68%	0.68%	DRIV	NAV	-0.19%	10.62%	84.50%	138.34%	-	-	-	22.96%
				Market Price	0.15%	10.72%	85.07%	140.13%	-	-	-	23.08%
				Index	-0.10%	10.74%	85.15%	139.35%	-	-	-	23.07%
Lithium & Battery Technology Inception Date 7/22/2010	0.75%	0.75%	LIT	NAV	-5.29%	-6.49%	117.55%	165.84%	22.73%	24.47%	4.44%	7.54%
				Market Price	-3.79%	-5.54%	120.52%	171.03%	23.04%	24.82%	4.61%	7.68%
				Index	-5.29%	-6.42%	127.89%	165.07%	22.48%	24.50%	4.82%	8.00%



Genomics & Biotechnology Inception Date 4/5/2019	0.50%	0.50%	GNOM	NAV	-6.00%	-5.00%	46.86%	77.53%	-	-	-	21.35%
				Market Price	-5.86%	-4.83%	50.07%	78.23%	-	-	-	22.68%
				Index	-5.94%	-4.91%	48.49%	78.46%	-	-	-	21.99%
Millennials Inception Date 5/4/2016	0.50%	0.50%	MILN	NAV	0.75%	7.25%	174.46%	100.66%	26.66%	-	-	22.85%
				Market Price	0.70%	7.24%	173.68%	100.76%	26.66%	-	-	22.78%
				Index	0.79%	7.39%	180.83%	101.88%	27.32%	-	-	23.41%
Aging Population Inception Date 5/10/2016	0.50%	0.50%	AGNG	NAV	-0.36%	-1.25%	88.63%	37.23%	12.81%	-	-	13.85%
				Market Price	-0.22%	-0.61%	93.16%	37.70%	12.79%	-	-	14.40%
				Index	-0.37%	-1.22%	91.25%	37.64%	13.07%	-	-	14.16%
Health & Wellness Inception Date 5/9/2016	0.50%	0.50%	BFIT	NAV	2.25%	3.21%	83.17%	68.30%	15.45%	-	-	13.17%
				Market Price	2.12%	3.79%	85.99%	69.56%	15.40%	-	-	13.52%
				Index	2.29%	3.25%	87.01%	69.09%	15.86%	-	-	13.64%
E-Commerce Inception Date 11/27/2018	0.50%	0.50%	EBIZ	NAV	-2.71%	7.43%	129.85%	127.75%	-	-	-	42.68%
				Market Price	-2.53%	7.51%	130.45%	127.90%	-	-	-	42.84%
				Index	-2.67%	7.55%	132.39%	128.38%	-	-	-	43.33%
US Infrastructure Development Inception Date 3/6/2017	0.47%	0.47%	PAVE	NAV	9.45%	17.86%	70.85%	102.90%	16.74%	-	-	14.08%
				Market Price	9.58%	18.15%	71.19%	103.31%	16.74%	-	-	14.13%
				Index	9.51%	18.13%	74.34%	104.17%	17.32%	-	-	14.63%
Cannabis Inception Date 9/7/2019	0.51%	0.51%	POTX	NAV	-4.21%	61.56%	-30.22%	86.38%	-	-	-	-20.88%
				Market Price	-2.90%	62.12%	-31.38%	84.43%	-	-	-	-21.74%
				Index	-4.29%	61.45%	-37.22%	75.68%	-	-	-	-26.13%
Video Games & Esports Inception Date 10/25/2019	0.50%	0.50%	HERO	NAV	-4.26%	1.00%	110.46%	92.16%	-	-	-	68.09%
				Market Price	-3.77%	1.19%	111.32%	92.37%	-	-	-	68.57%
				Index	-4.19%	1.15%	111.98%	93.30%	-	-	-	68.94%
Cybersecurity Inception Date 10/25/2019	0.50%	0.50%	BUG	NAV	-5.67%	-11.37%	64.83%	68.73%	-	-	-	41.73%
				Market Price	-5.58%	-11.30%	68.46%	69.86%	-	-	-	43.91%
				Index	-5.64%	-11.27%	64.46%	69.51%	-	-	-	41.51%
Thematic Growth Inception Date 10/25/2019	0.50%	0.50%	GXTG	NAV	-4.89%	9.23%	91.12%	116.53%	-	-	-	57.16%
				Market Price	-5.03%	9.56%	93.24%	118.02%	-	-	-	58.37%
				Index	-4.93%	9.08%	90.67%	116.17%	-	-	-	56.89%
Education Inception Date 7/10/2020	0.50%	0.50%	EDUT	NAV	-13.24%	-8.37%	8.68%	-	-	-	-	-
				Market Price	-12.96%	-8.49%	9.14%	-	-	-	-	-
				Index	-13.22%	-8.30%	9.01%	-	-	-	-	-
Telemedicine & Digital Health Inception Date 7/29/2020	0.68%	0.68%	EDOC	NAV	-5.16%	-0.93%	25.45%	-	-	-	-	-
				Market Price	-5.11%	-0.83%	25.58%	-	-	-	-	-
				Index	-5.11%	-0.82%	25.87%	-	-	-	-	-
China Biotech Inception Date 9/22/2020	0.67%	0.67%	CHB	NAV	-4.56%	-1.22%	6.89%	-	-	-	-	-
				Market Price	-5.03%	-0.79%	7.55%	-	-	-	-	-
				Index	-4.56%	-1.13%	7.21%	-	-	-	-	-
CleanTech Inception Date 10/27/2020	0.50%	0.50%	CTEC	NAV	-7.68%	-3.49%	45.15%	-	-	-	-	-
				Market Price	-7.14%	-2.68%	46.74%	-	-	-	-	-
				Index	-7.63%	-3.44%	45.33%	-	-	-	-	-
Data Center REITs & Digital Infrastructure Inception Date 10/27/2020	0.50%	0.50%	VPN	NAV	1.63%	0.71%	4.39%	-	-	-	-	-
				Market Price	1.17%	0.32%	4.72%	-	-	-	-	-
				Index	1.54%	0.69%	4.36%	-	-	-	-	-
Emerging Markets Internet & E-commerce Inception Date 11/9/2020	0.65%	0.65%	EMBD	NAV	-12.28%	-2.48%	6.22%	-	-	-	-	-
				Market Price	-12.14%	-1.37%	7.17%	-	-	-	-	-
				Index	-12.22%	-2.29%	6.50%	-	-	-	-	-
Renewable Energy Producers Inception Date 5/27/2015	0.65%	0.65%	RNRG	NAV	-1.55%	-12.04%	33.81%	34.48%	14.73%	13.03%	-	5.11%
				Market Price	-1.43%	-12.45%	33.94%	33.73%	14.69%	12.95%	-	5.13%
				Index	-1.49%	-11.90%	36.73%	34.99%	15.20%	13.51%	-	5.49%
China Innovation Inception Date 2/22/2021	0.75%	0.75%	KEJI	NAV	-11.53%	-	-20.52%	-	-	-	-	-
				Market Price	-10.91%	-	-19.64%	-	-	-	-	-
				Index	-6.35%	-1.50%	-11.91%	-	-	-	-	-

Performance data quoted represents past performance and does not guarantee future results. Investment return and principal value of an investment will fluctuate so that an investors' shares, when sold or redeemed, may be worth more or less than their original cost. Current performance may be higher or lower than the performance quoted. High short-term performance of the fund is unusual and investors should not expect such performance to be repeated. For performance data current to the most recent month end, please call 1-888-493-8631 or visit www.globalxetfs.com. *Net expense ratio reflects fees incurred by the Fund after waivers and reimbursements.



P/S AND EV/S

Source: Bloomberg, data is as of 3/31/21 and 2/28/21, Global X ETFs.

Ticker	Name	P/S		EV/S	
		3/31/21	2/28/21	3/31/21	2/28/21
GNOM	Global X Genomics & Biotechnology ETF	13.36	14.41	12.93	14.03
CLOU	Global X Cloud Computing ETF	9.33	9.85	9.92	10.40
CHB	Global X China Biotech Innovation ETF	8.80	9.80	8.69	10.34
BUG	Global X Cybersecurity ETF	8.37	8.89	8.21	8.71
POTX	Global X Cannabis ETF	8.35	6.49	13.99	16.03
FINX	Global X FinTech ETF	8.05	8.52	9.07	9.69
SOCL	Global X Social Media ETF	6.90	7.83	7.96	7.74
VPN	Global X Data Center REITs & Digital Infrastructure ETF	6.55	6.52	9.19	9.13
EDOC	Global X Telemedicine & Digital Health ETF	5.35	5.84	5.86	6.53
HERO	Global X Video Games & Esports ETF	5.31	5.63	5.32	5.67
KEJI	Global X China Disruption ETF	5.16	6.17	5.70	6.48
EWEB	Global X Emerging Markets Internet & E-commerce ETF	4.68	5.87	4.64	5.82
AIQ	Global X Future Analytics Tech ETF	4.11	4.19	4.29	4.35
AGNG	Global X Aging Population ETF	4.02	4.04	4.74	4.67
EDUT	Global X Education ETF	3.91	4.55	4.22	4.96
RNRG	Global X Renewable Energy Producers ETF	3.79	3.78	6.27	6.12
MILN	Global X Millennials Thematic ETF	3.43	3.41	3.95	3.92
BOTZ	Global X Robotics & Artificial Intelligence ETF	3.26	3.33	3.22	3.27
SPX	S&P 500 Index	2.95	2.83	3.34	3.22
SNSR	Global X Internet of Things ETF	2.91	2.92	3.56	3.56
EBIZ	Global X E-commerce ETF	2.67	2.78	2.58	2.87
LIT	Global X Lithium and Battery Tech ETF	2.49	2.76	2.85	3.14
CTEC	Global X Cleantech ETF	2.18	2.53	2.70	3.16
ACWI	ACWI Index	2.16	2.13	2.62	2.58
PAVE	Global X U.S. Infrastructure Development ETF	1.76	1.61	2.12	1.95
BFIT	Global X Health & Wellness Thematic ETF	1.68	1.65	1.89	1.97
DRIV	Global X Autonomous & Electric Vehicles ETF	1.31	1.32	1.53	1.55

Note: P/S and EV/S refer to price-to-sales and enterprise value-to-sales, respectively.

F12M SALES GROWTH, PSG, AND EVSG

Source: Bloomberg, data is as of 3/31/21 and 2/28/21, Global X ETFs.

Ticker	Name	F12M Sales (%)		PSG		EVSG	
		3/31/21	2/28/21	3/31/21	2/28/21	3/31/21	2/28/21
POTX	Global X Cannabis ETF	59.7%	48.0%	0.14	0.14	0.23	0.33
CHB	Global X China Biotech Innovation ETF	47.1%	52.5%	0.19	0.19	0.18	0.20
EWEB	Global X Emerging Markets Internet & E-commerce ETF	44.3%	49.8%	0.11	0.12	0.10	0.12
KEJI	Global X China Disruption ETF	37.3%	42.0%	0.14	0.15	0.15	0.15
EDUT	Global X Education ETF	36.8%	41.2%	0.11	0.11	0.11	0.12
LIT	Global X Lithium and Battery Tech ETF	33.4%	35.2%	0.07	0.08	0.09	0.09
EBIZ	Global X E-commerce ETF	33.1%	33.1%	0.08	0.08	0.08	0.09
HERO	Global X Video Games & Esports ETF	28.1%	27.4%	0.19	0.21	0.19	0.21
SOCL	Global X Social Media ETF	24.8%	29.1%	0.28	0.27	0.32	0.27
CLOU	Global X Cloud Computing ETF	23.5%	22.6%	0.40	0.44	0.42	0.46
BUG	Global X Cybersecurity ETF	21.7%	21.7%	0.39	0.41	0.38	0.40
FINX	Global X FinTech ETF	21.3%	20.5%	0.38	0.41	0.43	0.47
AIQ	Global X Future Analytics Tech ETF	20.6%	20.4%	0.20	0.21	0.21	0.21
BFIT	Global X Health & Wellness Thematic ETF	19.9%	21.4%	0.08	0.08	0.10	0.09
MILN	Global X Millennials Thematic ETF	18.0%	17.5%	0.19	0.20	0.22	0.22
EDOC	Global X Telemedicine & Digital Health ETF	16.6%	17.2%	0.32	0.34	0.35	0.38
VPN	Global X Data Center REITs & Digital Infrastructure ETF	16.5%	16.3%	0.40	0.40	0.56	0.56
RNRG	Global X Renewable Energy Producers ETF	15.5%	13.0%	0.24	0.29	0.40	0.47
BOTZ	Global X Robotics & Artificial Intelligence ETF	14.6%	15.2%	0.22	0.22	0.22	0.22
ACWI	ACWI Index	14.6%	14.4%	0.15	0.15	0.18	0.18
DRIV	Global X Autonomous & Electric Vehicles ETF	14.0%	15.2%	0.09	0.09	0.11	0.10
SPX	S&P 500 Index	14.0%	13.4%	0.21	0.21	0.24	0.24
AGNG	Global X Aging Population ETF	13.4%	13.4%	0.30	0.30	0.35	0.35
SNSR	Global X Internet of Things ETF	12.5%	18.1%	0.23	0.16	0.29	0.20
PAVE	Global X U.S. Infrastructure Development ETF	12.4%	10.2%	0.14	0.16	0.17	0.19
GNOM	Global X Genomics & Biotechnology ETF	11.2%	11.4%	1.20	1.26	1.16	1.23
CTEC	Global X Cleantech ETF	4.0%	12.0%	0.55	0.21	0.68	0.26

Note: F12 Sales Growth refers to the consensus analyst expectations for total sales growth in the next 12 months. PSG and EVSG refer to Price-to-Sales over F12 Sales Growth and Enterprise Value over F12 Sales Growth, respectively. N/As reflect a negative growth number in the denominator and similar to traditional PEG ratios aren't typically displayed as such (hence the N/A).



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- **Disruptive Technology:** [Future Analytics Tech ETF \(AIQ\)](#), [Robotics & Artificial Intelligence ETF \(BOTZ\)](#), [Cybersecurity ETF \(BUG\)](#), [Cloud Computing ETF \(CLOU\)](#), [Autonomous & Electric Vehicles ETF \(DRIV\)](#), [FinTech ETF \(FINX\)](#), [Video Games & Esports ETF \(HERO\)](#), [Lithium and Battery Tech ETF \(LIT\)](#), [Internet of Things ETF \(SNSR\)](#), [Social Media ETF \(SOCL\)](#), [China Biotech Innovation ETF \(CHB\)](#), [Data Center REITs & Digital Infrastructure ETF \(VPN\)](#), [Emerging Markets Internet & E-Commerce ETF \(EWEB\)](#), [China Innovation ETF \(KEJI\)](#)
- **People and Demographics:** [Cannabis ETF \(POTX\)](#), [Millennial Consumer ETF \(MILN\)](#), [Health & Wellness ETF \(BFIT\)](#), [E-Commerce ETF \(EBIZ\)](#), [Genomics & Biotechnology ETF \(GNOM\)](#), [AGNG Population ETF \(AGNG\)](#), [Telemedicine & Digital Health ETF \(EDOC\)](#), [Education ETF \(EDUT\)](#)
- **Physical Environment:** [U.S. Infrastructure Development ETF \(PAVE\)](#), [CleanTech ETF \(CTEC\)](#), [Renewable Energy Producers \(RNRG\)](#)
- **Multi-Theme:** [Thematic Growth ETF \(GXTG\)](#)

1. The Verge, "Beeple sold an NFT for \$69 million", Mar 11, 2021.
2. Axios, "NFTs give sports trading cards a digital upgrade", Mar 30, 2021.
3. Forbes, "NFT Market Rages On: NFTs Market Cap Grow 1,785% In 2021 As Demand Explodes", Mar 29, 2021.
4. Autoweek, "VW Power Day Spells Out Group's Battery Strategy", Mar 15, 2021.
5. Ibid.
6. CNBC, "Volvo says it will be 'fully electric' by 2030 and move car sales online", Mar 2, 2021.



7. Nikkei Asia, "Fanuc plans biggest investment in China to expand robot plant", Mar 22, 2021.
8. Ibid.
9. International Federation of Robotics, "IFR presents World Robotics Report 2020", Sept 24, 2020.
10. Wired, "Boston Dynamics' New Robot Doesn't Dance. It Has a Warehouse Job", Mar 29, 2021.
11. Bloomberg, "Intel Spending Billions to Revive Manufacturing, Chase TSMC", Mar 23, 2021.
12. Bloomberg, "Arm Takes Aim at Intel Chips in Biggest Tech Overhaul in Decade", Mar 30, 2021.
13. Bloomberg, "NextEra Bets on New Power Generator That Runs Without Combustion", Mar 9, 2021.
14. CleanTechnica, "MIT Takes Deep Dive Into Dropping Lithium-Ion Battery Costs", Mar 27, 2021.
15. Ibid.

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