

To track the digital transformation and the growth of the connected economy, PYMNTS has developed an equity index based on 100 companies likely to be key players in its evolution. The Connected Economy 100 (CE100™ Index) is an equal-weighted equity index of 100 companies that represent 11 key components of the connected economy. Work on the CE100 Index began in April 2020 as part of a series of related research projects on the connected economy and culminated in the final selection of companies in May 2021.

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■ FEBRUARY 2022

THE CE100™ INDEX: A NEW EQUITY INDEX OF 100 PUBLICLY TRADED COMPANIES FOR TRACKING THE DIGITAL TRANSFORMATION

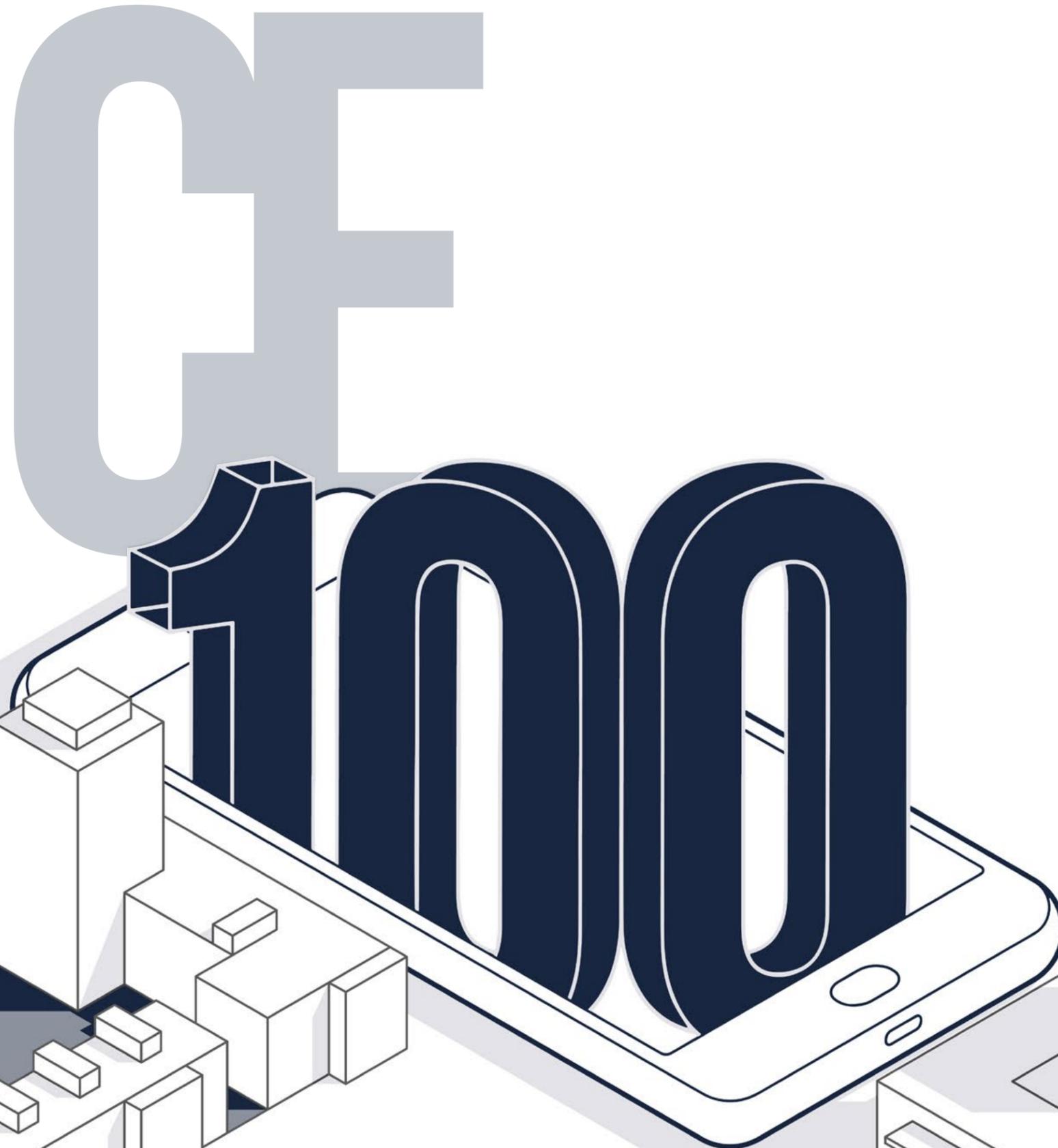


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A New Equity Index of 100 Publicly Traded Companies
for Tracking the Digital Transformation

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CE100™ INDEX

A New Equity Index of 100 Publicly Traded Companies for Tracking the Digital Transformation

A FRONT-ROW SEAT TO INNOVATION'S NEXT BIG WAVE

The integration of digital into every aspect of daily life is unmistakable. Digital is now the starting point for nearly every activity people and businesses undertake, even if they complete those activities in the physical world. During the last two years, digital has evolved from being just another channel to the cornerstone of new business opportunities and formation of new ecosystems that make it easier and more efficient for people and businesses to engage. The lines between physical and digital that began to blur in the 2010s decade are largely disappearing, as are the lines between once very discrete verticals, as platforms use their assets to capture new flows, introduce new business models and strengthen their value to customers.

We call this the ConnectedEconomy™ – resulting from a wave of innovation that started well before the world shut down in March 2020. The 2010s gave rise to a new class of innovator who used mobile, apps, data and the cloud to reinvent the relationship between people and the businesses and brands they loved – and introduced them to new digital and mobile native brands that grew to become big businesses. Their efforts and that innovation set the stage for the inevitable shift from the decade of the mobile phone and multiple apps to the one we live in now: a decade defined by connected ecosystems and a diversity of connected devices that allow people and businesses to take commerce wherever they desire.

The CE100™ Index is a framework for examining the impact of this connected economy throughout time. It does so by tracking the performance of 100 publicly listed stocks that our research found represent those at the tip of the spear for driving the global digital transformation of the economy. These 100 companies are distributed across 11 categories we have identified as pillars of the connected economy – the 10 daily activities in which people and businesses engage, as well as the enablers that provide the software and infrastructure that power this digital transformation.

THE 10 PILLARS of the ConnectedEconomy™



The Enablers That Power Experiences



The CE100 Index is the result of an endeavor that we began in April 2020 and reflects extensive conversations with hundreds of CEOs, studies of tens of thousands of consumers and our own analysis of the trendlines shaping the digital transformation of business throughout the 12-plus years PYMNTS has been driving these conversations.

It is important to note that we did not design the CE100 Index to “beat the other indexes,” although its performance between January 2017 and January 2022 has outperformed the Dow, the S&P 500 and the Nasdaq. It is intended to assess the impact of a portfolio of companies that may not move the market daily but whose relevance within the connected economy in the long term will be significant. The top five performers from January 2020 to January 2022 reflect that thesis: Tesla, Nvidia, CrowdStrike, Fiverr and MongoDB.

As with any new wave of innovation, businesses and investors find it useful to have a framework for assessing the impact of macro trends on their business decisions — something particularly important given the pervasiveness of the digital shift we now witness.

Like any index, the CE100 Index will have its highs and lows, and its significance will evolve throughout time. Our goal is to use the CE100 Index, along with the original content PYMNTS publishes about the connected economy’s innovators and innovations, to provide anyone with a stake in the future of the connected economy a relevant source of information and data with which to navigate it.

THE DIGITAL TRANSFORMATION IS GIVING RISE TO THE CONNECTED ECONOMY

The digital transformation refers to changes in the production and distribution of goods and services throughout the economy resulting from the integration of internet-based technologies. It began with the launch of the commercial internet in the mid-1990s. As with most general-purpose technologies, the commercial internet, combined with other innovations, has gradually changed the economy through disruptive and incremental innovation. The result is the creation of new products and services and the reinvention of how things are done.

Nearly every point of physical space now has internet connectivity because of the spread of mobile broadband, with exponentially rising speeds, through most populated areas of the world. That, along with faster and more pervasive fixed broadband, has resulted in nearly every person having access to powerful computers, software and other technologies most of the time. Through the internet, everyone in all points of physical space can connect with everyone else. Smartphones and mobile apps, and increasingly voice-activated devices, provide access, along with personal computers.

These technologies make new ways of doing things possible. Fast grocery delivery is enabled through the interconnection, in real time, of the store, customer, shopper and driver. Telemedicine is aided by linking the doctor, patient, medical records and diagnostic apps. Connected cars receive software updates through mobile broadband and services provided in the cloud.

While much has happened since the launch of the commercial internet, and change seems rapid for those who have lived through the last three decades, it is apparent that these still are early days. Some areas seem far along, such as search, social and, to a lesser extent, eCommerce. Others are just catching on after more than a decade of gestation, such as ride-sharing, grocery delivery and telemedicine. Many new areas, such as the metaverse and decentralized finance, hold unknown promise. Then there are all the areas we don't know about or have yet to be thought of. The pandemic has sped this transformation by enabling people to try digital solutions and overcoming inertia.

The digital transformation likely will take many decades to work its way through the economy. After a quarter century, eCommerce accounts for just 13% of retail sales overall in the United States and less in many highly developed countries. It will take time for startups to seize opportunities in new areas, businesses and consumers to adopt and use it and new innovations to grow and reach scale. As with other general-purpose technologies such as electricity or the combustion engine, the full effects of the digital transformation will occur over many more decades.



THE CE100 INDEX TRACKS THE DIGITAL TRANSFORMATION

To track the digital transformation and the growth of the connected economy, PYMNTS has developed an equity index based on 100 companies likely to be key players in its evolution. The companies were selected based on a lengthy research project we began in April 2020, culminating in the final selections in May 2021, and a soft launch of the CE100 Index in June 2021.

Based on PYMNTS' research, we divided the connected economy into 10 pillars that involve the relatively distinct ways in which peoples' lives are affected by the digital transformation, as well as enabling technologies that support these pillars. Table 1 lists these 11 categories.

The pillars reflect the change in how people do these basic activities. For example, to eat, people now use online channels and effortlessly move between them by ordering groceries online or takeout from restaurants (and now increasingly ghost kitchens). In both cases, they can have their food delivered, pick it up or eat in a physical establishment. A new ecosystem of connected movement — move — is transporting people and goods, such as retail products, groceries and meals, including by themselves using connected cars, some of which will be driverless.

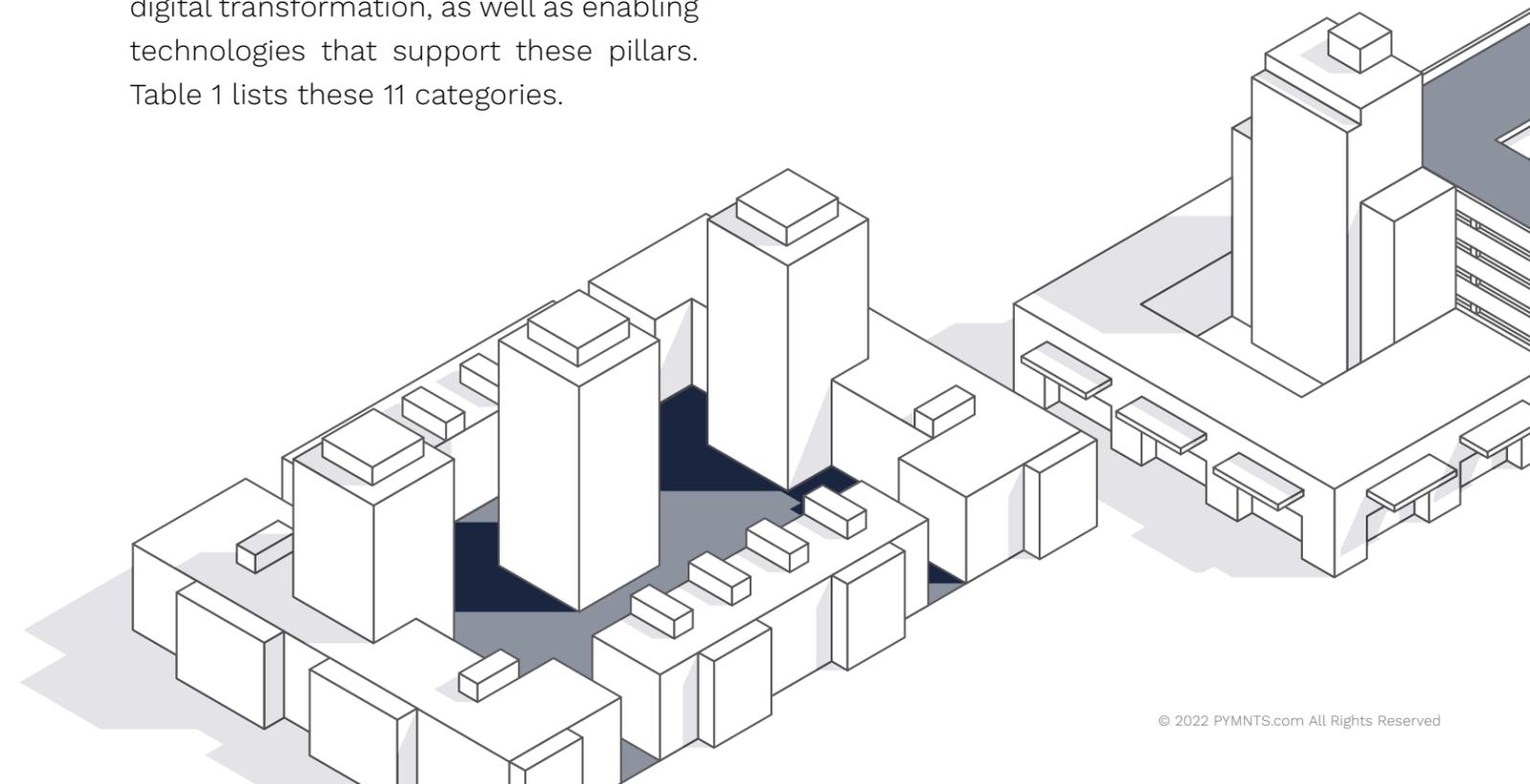


TABLE 1:
The pillars and enablers of the CE100™ Index

CATEGORIES	DESCRIPTION	Number of firms in CE100 Index™
• BANK	How and where people save, store and access their money	6
• BE WELL	How and where people consume healthcare services to stay healthy	11
• COMMUNICATE	How people keep in touch with family, friends and business partners	3
• EAT	How and where people buy and eat food	5
• HAVE FUN	How and where people spend their leisure time	10
• LIVE	How smart technologies change how people use their homes and their interactions in the locations in which they live	9
• MOVE	How and where people and products move from point A to point B	8
• PAY	How people are paid and pay others	11
• SHOP	How and where people find items to buy and buy them	9
• WORK	How and where people work	13
• ENABLERS	The companies that make all of this possible	15
TOTAL		100

We selected between three and 15 companies for each category based on the extent to which companies showed their likelihood of being significant and innovative contributors to the connected economy. These selections were made based on our original research into the connected economy and input from eight experts from the investment community. The final list of 100 is a stratified sample of key players in the connected economy across the 11 categories. Many firms operate in multiple categories, and we classified each based on its core capability.

The CE100 Index is an equal-weighted index of the stock prices of these companies (adjusted for splits and dividends over time). By adopting equal weights, the CE100 Index summarizes the performance of diverse companies across the connected economy. A market-cap weighted index would have been driven almost entirely by BigTech firms. Throughout time, we will adjust the composition of the CE100 Index as firms exit and enter public markets, and more information about the evolution of the connected economy becomes available.

The methodology is described in detail in an appendix at the end of this report.



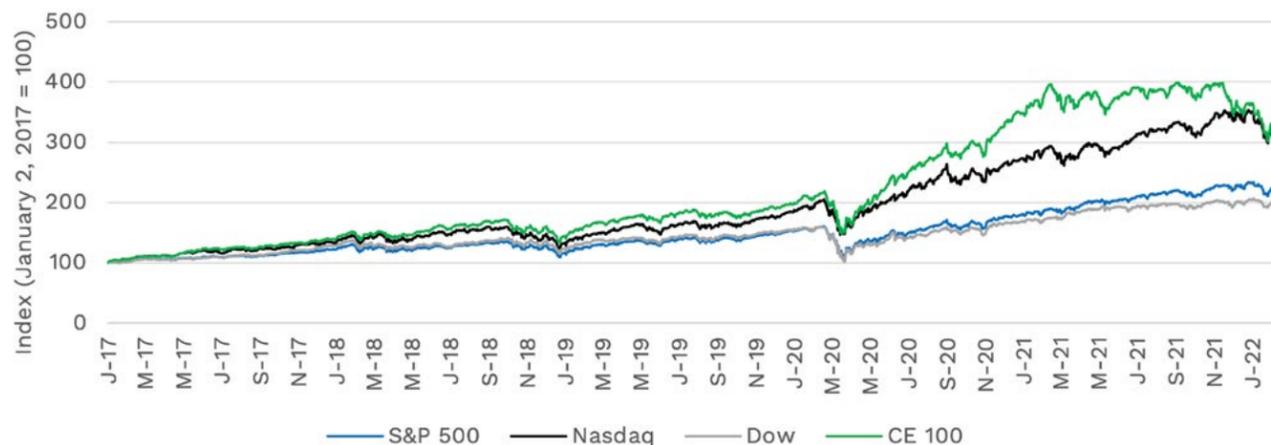
CE100™ INDEX

A New Equity Index of 100 Publicly Traded Companies for Tracking the Digital Transformation

THE CE100 INDEX HAS OUTPERFORMED OTHER INDEXES BETWEEN 2017 AND 2021

Just as with traditional equity indexes, the CE100 Index will rise and fall over time as new information is realized about the nature and speed of transition. So far, however, the highly curated CE100 Index has done relatively well, although it underperformed other indexes in 2021. Figure 1 shows the CE100 Index from 2017 through Jan. 31, 2022 compared to the S&P 500, Dow Jones Industrial Average and Nasdaq, where we have normalized each index to 100 as of Jan. 1, 2017.

FIGURE 1:
5-year performance of the CE100™ Index and traditional indexes



The CE100 Index increased 97% between Jan. 1, 2017 and Dec. 31, 2019 compared to 84% for the Nasdaq Composite, 54% for the Dow and 52% for the S&P 500. It rose 65% between Jan. 1, 2020 and Jan. 31, 2022 compared to 44% for the S&P 500, 28% for the Dow and 73% for the Nasdaq. As of Feb. 8, 2022, compared to Jan. 1, 2017, the CE100 Index is 62% higher than the Dow, 47% higher than the S&P 500 and 3% higher than Nasdaq. Note that the Dow Jones and Nasdaq indexes are market-cap weighted and that the performance of Nasdaq is heavily influenced by the large tech firms.

THE CE100 INDEX HAS INCREASED SHARPLY DURING THE PANDEMIC

Based on analyses of observations in May 2020, the pandemic would have *two major impacts* on the evolution of the connected economy. As the physical world was shut down, many people had no choice but to use digital alternatives. That overcame inertia that had adhered them to the physical world. There was a spike in the demand for online alternatives. Once people had tried digital alternatives, at least some of them would decide to stick with them as the pandemic receded. Even though the pandemic has receded more slowly than anticipated at many points in the last two years, the CE100 Index shows that these predictions have become reality.

We would expect the stock prices of connected economy companies to increase as markets anticipate increased profits from the short-run boost in demand during the pan-

demic and, importantly, because of the long-run increase in demand resulting from the acceleration of the transition to the connected economy as a result of the pandemic. Not surprisingly, that's what has happened.

Figure 2 shows the CE100 Index, fixed at 100 starting on Jan. 1, 2020. It tracks key dates during the pandemic: the declaration of a public health emergency in the U.S. on Feb. 3, 2020 and the spread of lockdowns; the announcement of the successful trial of the Pfizer vaccine on Nov. 9, 2020; the May 11, 2021 reports of the delta variant and its significance; and the Nov. 26, 2021 reports of the omicron variant and its significance.

All indexes declined sharply at first but, as lockdowns spread, the CE100 Index diverged sharply from the others. It rose more rapidly than the other indexes through February 2021 and has remained substantially higher than the Dow and the Nasdaq.

Toward the end of the period, the CE100 Index declined and has recently converged with and tracked the Nasdaq closely. The CE100 Index rose most sharply during 2020 and then leveled off, resulting in the other indexes showing faster appreciation during 2021.

FIGURE 2:
The CE100™ Index and traditional indexes during the pandemic

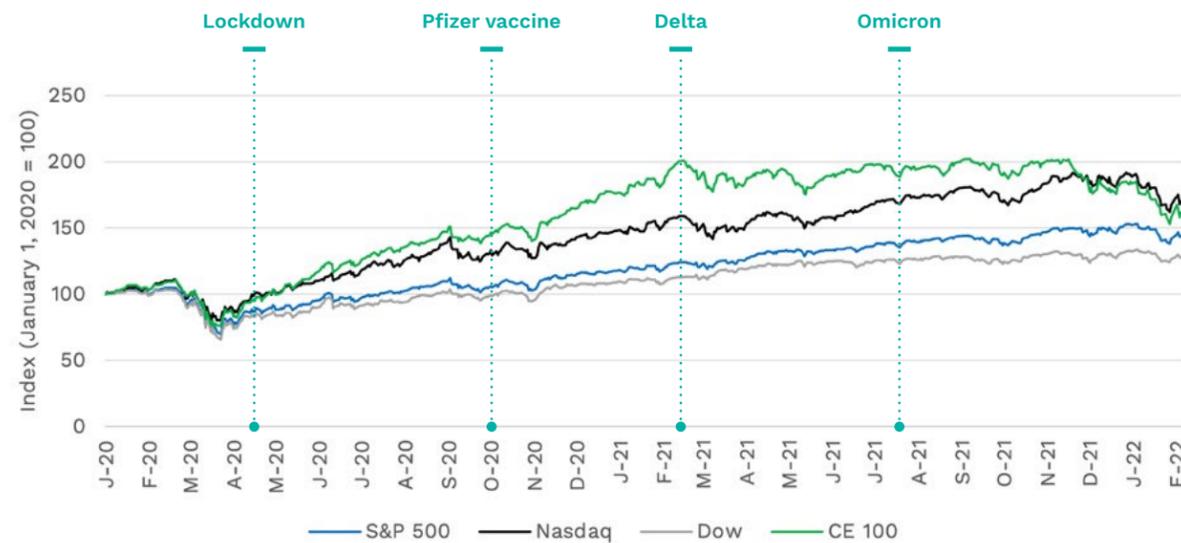


Table 2 shows the compound annual growth rates (CAGR) for the CE100 Index and other benchmark indexes. During the period from Jan. 1, 2020 through Jan. 31, 2022, the CE100 Index grew at a CAGR of 27.2%, a very close second to the Nasdaq’s 29.9%. Both were significantly greater than the Dow and the S&P 500, which had CAGRs of 15.5% and 20.1%, respectively.

TABLE 2:
Performance of the CE100™ Index and other indexes, Jan. 1, 2020 through Jan. 31, 2022

	2020	2021*	CAGR
CE100	76.4%	-6.0%	27.2%
DOW	9.6%	15.5%	12.6%
NASDAQ	48.2%	15.0%	29.9%
S&P 500	18.3%	20.1%	19.2%

*Includes January 2022.

FIVE TOP PERFORMERS SINCE JANUARY 2020 ILLUSTRATE THE FORCES AT PLAY DRIVING THE CONNECTED ECONOMY

To identify the five top performers in the CE100 Index between Jan. 1, 2020 and Jan. 31, 2022, we calculated the CAGR in stock prices for the CE100 Index between those dates and selected the five with the highest CAGRs. The top five were: Tesla, Nvidia, CrowdStrike, Fiverr and MongoDB. In reverse order of performance, this is what they do and where they make their greatest impact:

#5 MongoDB.

MongoDB provides an application platform for developers that helps them manage and analyze data and build applications more quickly. Many of its customers are digital-first companies, ranging from giants such as Google to startups such as Nanopore. MongoDB went public in October 2017. It is one of enablers for the connected economy.

#4 fiverr.

Fiverr operates a large global gig platform for buyers and sellers of freelance services such as logo design or voiceovers. It serves all businesses, but four of the five buyers it highlights on its website are large digital-first companies (Facebook, Google, Netflix and PayPal). Fiverr launched its IPO in June 2019, on the NYSE. It is in the work pillar for the connected economy.

#3

CrowdStrike provides cloud-based cybersecurity technology. According to The Wall Street Journal, it aims “to do for security what other companies have done for human resources, customer-relationship management and other sectors” by shifting cybersecurity from on-premise to the cloud. Its platform solution is designed to stop breaches, ransomware and cyberattacks. It launched its IPO in June 2019. It is an enabler for the connected economy.

#2

Nvidia, the oldest of the top performers, launched in 1993 and went public in 1999. A leading chip designer, it specializes in graphics processing units (GPUs) for personal computers. GPUs are used heavily in gaming and increasingly are used in artificial intelligence (AI) applications and data centers. Nvidia has become an important enabler for the digital economy.

#1

Tesla is the largest of the top performers by market capitalization, \$936.7 billion as of Jan. 31, 2022. It was the pioneer in connected cars which, in addition to leading the move to electric, is revolutionizing transportation. It is one of the leading players in the move pillar of the connected economy.

Table 3 tracks the CAGRs of the top performers, which ranged from 71.5% to 218.5%, from Jan. 1, 2020 through Jan. 31, 2022, compared to a median of 13% for the CE100 Index. Both CrowdStrike’s and Fiverr’s stocks lost ground in 2021, but their 2020 performance launched them into the top five.

TABLE 3:
Top five performing CE100™ Index companies from Jan. 1, 2020 through Jan. 31, 2022

	Ticker	Pillar	2020	2021*	CAGR
Tesla Inc.	TSLA	Move	738.5%	29.9%	218.5%
Nvidia Corp.	NVDA	Enablers	121.8%	79.0%	98.4%
CrowdStrike Holdings Inc.	CRWD	Work	725.4%	-53.4%	85.6%
Fiverr International Ltd.	FVRR	Work	323.1%	-13.7%	85.4%
MongoDB Inc.	MDB	Enablers	172.1%	11.8%	71.5%
MEDIAN FIRM IN THE CE100 INDEX™			34.1%	-0.7%	13.0%

*Includes January 2022.

THE PERFORMANCE OF THE CE100 INDEX HAS VARIED ACROSS PILLARS AND ENABLERS SINCE JANUARY 2020

Some pillars, and the enabler category, have performed better than others during the last two years. We have calculated sub-indexes for the 11 categories. Table 4 shows the cumulative average rate of return in the sub-indexes from Jan. 1, 2020 to Jan. 31, 2022, plus the CE100 Index and the three traditional indexes for comparison.

The top three performing categories were the Communicate and Move pillars and the Enablers. The bottom three were Eat, Bank and Be Well. All but one pillar performed better than the Dow and the S&P 500 in this period.

TABLE 4:
Cumulative annual performance of the CE100™ Index pillars and other indexes from Jan. 1, 2020 through Jan. 31, 2022

	2020	2021*	CAGR
PILLARS			
• Bank	0.3%	39.8%	19.2%
• Be Well	49.9%	-3.1%	19.5%
• Communicate	196.1%	-18.0%	52.0%
• Eat	16.2%	-1.1%	6.9%
• Have Fun	75.7%	-6.5%	26.6%
• Live	55.8%	-2.6%	22.1%
• Move	86.9%	8.1%	40.6%
• Pay	86.3%	-16.5%	22.9%
• Shop	147.6%	-38.7%	20.0%
• Work	85.0%	-14.9%	23.6%
• Enablers	80.5%	1.4%	33.8%
INDEXES			
• CE100	76.4%	-6.0%	27.2%
• Dow	9.6%	15.5%	12.6%
• Nasdaq	48.2%	15.0%	29.9%
• S&P 500	18.3%	20.1%	19.2%

*Includes January 2022.

CONCLUSION: WHERE WE GO FROM HERE

We are confident that most every part of the physical economy will become connected and that this will lead to disruptive innovation. Around the globe we see the landscape of the physical economy changing — from green shoots of baby startups to massive redwoods of tech giants.

What we don't know, and really can't know, is what those innovations will be, who will spawn them and how they will impact our lives. And we have no idea how long all of this will take, although both the history of the diffusion of innovations — and the nearly three decades of experience with the internet boom — strongly suggest that it will occur throughout many decades.

The CE100 Index will evolve with this and will be our guidepost for tracking the movers and shakers of this digital transformation. We will post updates of the CE100 Index daily on the PYMNTS site and release weekly updates examining the performance of the top and bottom performing companies. Throughout time, many of its companies will change as new giants emerge and earlier innovators slow. We look forward to watching how our inaugural 100 companies fare as the connected economy evolves.

CE100™ INDEX

A New Equity Index of 100 Publicly Traded Companies for Tracking the Digital Transformation

METHODOLOGICAL APPENDIX

To track the digital transformation and the growth of the connected economy, PYMNTS has developed an equity index based on 100 companies likely to be key players in its evolution. The Connected Economy 100 (CE100™ Index) is an equal-weighted equity index of 100 companies that represent 11 key components of the connected economy. Work on the CE100 Index began in April 2020 as part of a series of related research projects on the connected economy and culminated in the final selection of companies in May 2021.

SELECTION OF COMPANIES

The companies were selected based on the following methodology:

01 Based on our extensive research, including surveys of thousands of consumers, we decomposed the connected economy into 10 “pillars” that involve relatively distinct ways in which consumers’ lives are being affected by the digital transformation.

 <p>BANK</p> <p>How and where people save, store and access their money</p>	 <p>BE WELL</p> <p>How and where people consume healthcare services to stay healthy</p>	 <p>COMMUNICATE</p> <p>How people keep in touch with family, friends and business partners</p>	 <p>EAT</p> <p>How and where people buy food and eat</p>	 <p>HAVE FUN</p> <p>How and where people spend their leisure time</p>
 <p>LIVE</p> <p>How smart technologies change how people use their homes and their interactions in the locations they live and work</p>	 <p>MOVE</p> <p>How and where people and products move from point A to point B</p>	 <p>PAY</p> <p>How people are paid and pay others</p>	 <p>SHOP</p> <p>How and where people find items to buy and buy them</p>	 <p>WORK</p> <p>How and where people work</p>

While these categories provide a helpful organizational framework, our research found that companies are forging connections across pillars and this increasing interconnect- edness across sectors is driving the overall growth of the digital economy. We also have identified an eleventh category of enabling technologies (Enablers), such as cellular and operating systems, that provide a foundation for these pillars. As with any classification there are gray areas, and we relied on our extensive industry expertise to make judgment calls on how to categorize these.

02 For each of the 11 categories (10 pillars plus the enablers) we selected com- panies based on the following four criteria:

- 1. Whether they had highly evolved digital capabilities in the core pillar for which they were being considered.**
- 2. Whether there was evidence that they had or were beginning to expand into adjacent areas from their core capability.**
- 3. Whether they had technology and data assets that provide a foundation for innovating in the connected economy.**
- 4. The extent to which they were investing in key digital capabilities, including R&D, partnerships and acquisitions.**

We did not consider the historical performance or market capitalization of candidate companies. The selections were made by Karen Webster based on her deep knowledge from researching the connected economy throughout the last decade, including inter- views with more than 700 CEOs and C-Suite executives since 2019, and basic research conducted by the PYMNTS data analytics team. The results were a list of 140 candidate companies. Other senior members of the PYMNTS team reviewed the initial choices, leading to several iterations of the list.

03 We recruited a group of eight highly experienced investors, primarily from venture capital and private equity firms, and asked them to identify com- panies based on the four criteria above for each pillar with which they were familiar. To ensure they provided independent input, we did not share our initial list. Many of their choices were the same as ours. Some were different and led to replacing our initial choices with their selections. In a small number of cases, we rejected recommen- dations from one or more advisors in favor of our own choices informed by our research.

We then narrowed the list to 100 firms. To ensure representation across categories we selected at least three and no more than 15 companies as the enablers and each of the 10 pillars based on the depth of participation in those categories. The CE100 Index, therefore, is based on a stratified sample of companies across the 11 categories with oversampling of nascent sparsely populated categories. This feature is important for making the CE100 Index representative of the dynamic growth of the connected economy.

The final list of 100 companies includes a wide diversity of firms, ranging from mature, traditionally non-digital firms that are making significant inroads into digital businesses to venture-backed, digital-only firms that recently have gone public. It includes firms that partici- pate in multiple pillars of the connected economy as well as firms that are nar- rowly focused. The median market cap of the members of the list is \$46 billion as of Feb. 4, 2022, with a range from \$1.5 billion to \$2.8 trillion. Of the 100 compa- nies, 39 firms are listed on the Nasdaq, 53 on the NYSE, 3 on the OTC and 5 on foreign exchanges.

Table 5 shows the number of firms in each of the 11 categories, with category allocation based on each firm’s most sig- nificant digital capability.

TABLE 5:
Number of firms in each category for the CE100™ Index

CATEGORIES	Number of firms
• Bank	6
• Be Well	11
• Communicate	3
• Eat	5
• Have Fun	10
• Live	9
• Move	8
• Pay	11
• Shop	9
• Work	13
• Enablers	15
TOTAL	100

CALCULATING AND UPDATING THE CE100 INDEX

The CE100 Index is an unweighted index based on the average percent change in equity prices throughout time (adjusted for splits and dividends). The index at time t is equal to the index at time $t-1$ plus the average percent changes between time t and $t-1$ where t is any chosen unit of time.

$$CE100_t = CE100_{t-1} * \left(1 + \frac{\sum_{i=1}^{n_t} \frac{P_t^i - P_{t-1}^i}{P_{t-1}^i}}{n_t} \right), n_t \in \{1, \dots, 100\}$$

We did not do a market-cap weighted index, as doing so would have made the index heavily dependent on a small number of highly valued companies (sometimes known as Big Tech or FAANG). Furthermore, unweighted indexes have been found to perform better than market-cap weighted indexes and similar to other alternatives.¹

The composition of the CE100 Index is updated based on three criteria:

1. We replace companies that exit the public markets, which happens as a result of acquisitions by other publicly traded companies, a company decision to go private or failure. In each case we replace the firm with another firm in the same category.
2. Whenever there is an IPO of a significant company that is relevant to the connected economy, we consider replacing an existing member of the CE100 Index with that company. In addition, we will not choose to remove a firm if that results in the pillar having fewer than three firms.
3. Each June, we reconsider the composition of the CE100 Index through an internal review and by asking our internal advisors to identify top contenders for each category in which they have expertise. Firms will be added or dropped as new information is revealed about companies based on the four selection criteria above, including evidence of their likely success or failure in driving innovation in the connected economy.

¹ See, for example, Hsu, Jason C. and Hsu, Jason C. and Chow, Tzee-man and Kalesnik, Vitali and Little, Bryce, A Survey of Alternative Equity Index Strategies (March 3, 2011). Financial Analysts Journal, Vol. 67, No. 5, September/October 2011, Available at SSRN: <https://ssrn.com/abstract=1696333>.

As a result of these compositional changes, the CE100 Index will be rebalanced in time and the number and identity of the participants in each of the 11 categories may change. It is possible that we will merge or add categories as more information is revealed about the evolution of the connected economy.²

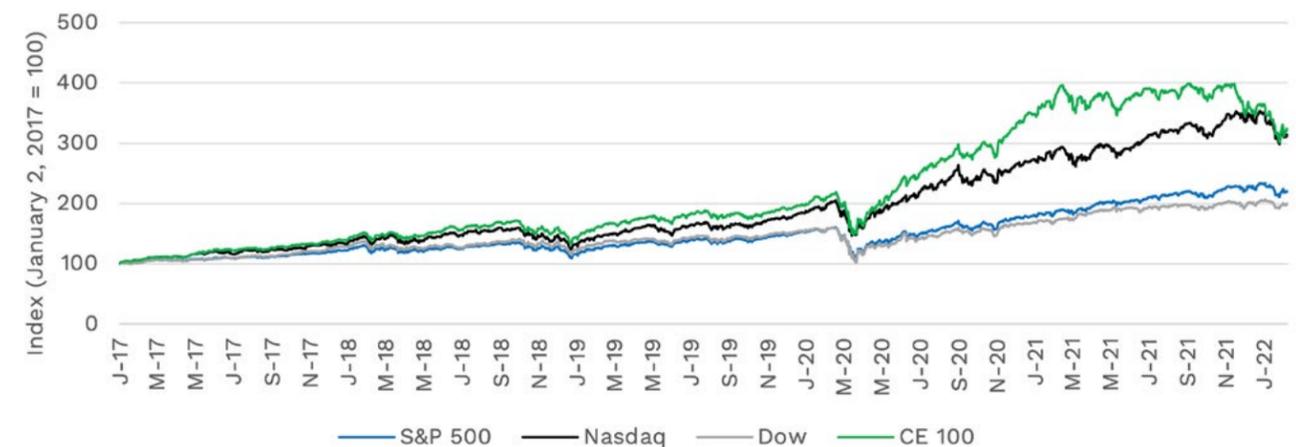
THE RELATIVE PERFORMANCE OF THE CE100 INDEX

The purpose of the CE100 Index is to track companies that will drive the digital transformation to a connected economy. Just like traditional equity indexes (the S&P 500, the Dow and the Nasdaq Composite), we expect the CE100 Index to rise and fall as new information is realized about the nature and speed of transition. Note that the Dow Jones and Nasdaq are market-cap weighted indexes.

Figure 3 shows the five-year performance of the CE100 Index from Jan. 1, 2017 to Jan. 31, 2022, relative to the S&P 500, the Dow and the Nasdaq indexes. Figure 4 shows the two-year performance (from Jan. 1, 2020 to Jan. 31, 2022) of the CE100 Index TM relative to the broader indexes. The CE100 Index roughly tracked others until the early part of 2020, after which the CE100 Index diverged sharply from the other indexes as the pandemic accelerated the shift to the connected economy.

FIGURE 3:

Five-year performance of the CE100™ Index and traditional indexes



² We have replaced one firm from those selected in May 2021 to achieve broader representation across geographies and focus: we replaced U.S.-focused AT&T with Airtel which operated mobile networks in Africa, India and other countries. We have not dropped any firms because of acquisitions or added any firms because of IPOs as of Feb. 11, 2022.

FIGURE 4:
Two-year performance of the CE100™ Index and traditional indexes

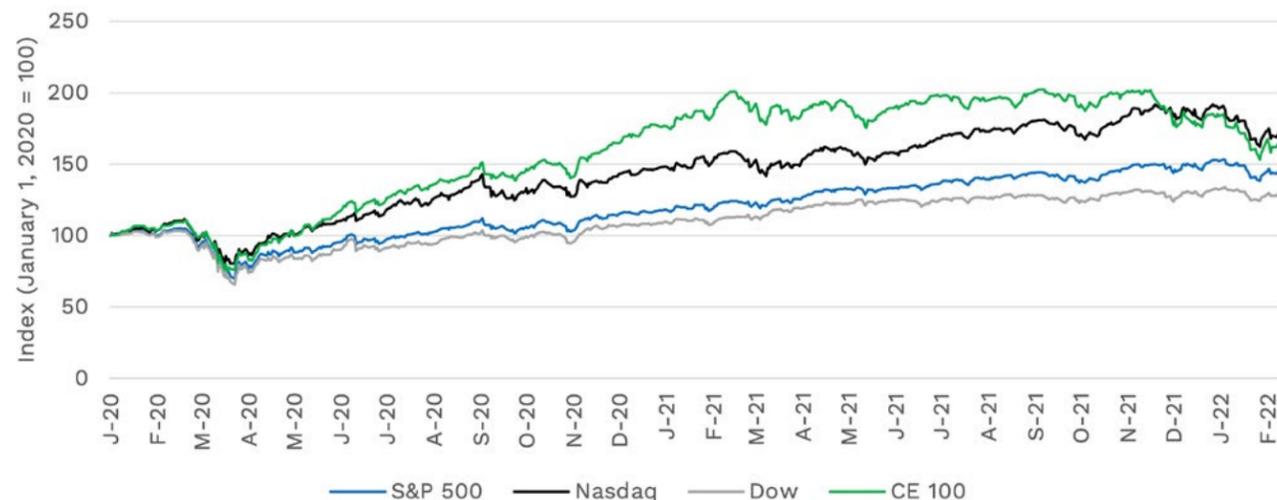


Table 6 shows the annual percent change in the indexes by year, from January 2017 through Jan. 31, 2022. For this period, growth in the CE100 Index led the other three major indexes, with an average annual rate of return of 26.2%. This was slightly greater than the Nasdaq, which returned 25.5% on average, and nearly 10 percentage points higher than the S&P 500, which returned 16.8% per year.

TABLE 6:
Cumulative Annual Percent Change of CE100™ Index and other indexes

Time Period	Length	S&P 500	Nasdaq	Dow	CE 100
1/1/2017- 12/31/2017	1 Year	21.8%	32.8%	28.2%	38.9%
1/1/2018 - 12/31/2018	1 Year	-4.6%	-0.1%	-3.7%	3.6%
1/1/2019 - 12/31/2019	1 Year	31.2%	39.0%	25.0%	37.1%
1/1/2020 - 12/31/2020	1 Year	18.3%	48.2%	9.6%	76.4%
1/1/2021 - 1/31/2022	1 Year	20.1%	15.0%	15.5%	-6.0%
1/1/2017 - 1/31/2022	5 Years	16.8%	25.5%	14.3%	26.2%
1/1/2017 - 12/31/2019	3 Years	15.1%	22.6%	15.5%	25.4%
1/1/2020 - 1/31/2022	2 Years	19.2%	29.9%	12.6%	27.2%

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