



Global Economic Insight: Gen Z

Gen Z and the metaverse: Influencing the future of the economy

Economies around the world appear to be on the cusp of yet another round of fundamental secular changes (see sidebar below), with the rise of tech-savvy Generation Z and the emergence of novel, promising technologies such as the [metaverse](#) and digital currencies. The culmination of these factors and the interplay between them could prove pivotal for the payment industry and its future trajectory.

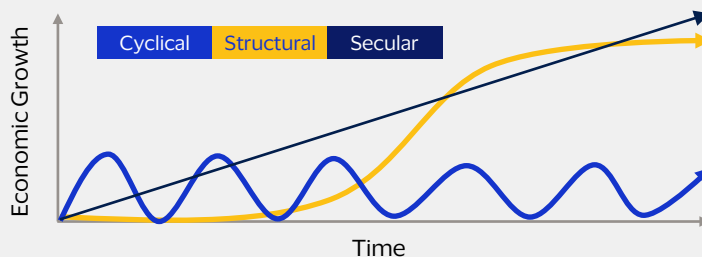
Gen Z is gaining increasing prominence globally as the cohort enters the workforce, earns income and becomes the new consumers and influencers of tomorrow. Their rise will likely drive a lasting change in the economies of the future.

Types of economic change

Economies of different shapes and structures constantly evolve over time and go through change cycles, which are often categorized into three main types: cyclical, structural or secular. Cyclical changes are subject to the fluctuation of the business cycle; the current inability of some car manufacturers to produce at their preferred levels due to the global supply-chain disruptions is an example of a cyclical change. More disruptive changes, such as the pandemic-induced abrupt shift to online channels for work, education, commerce, among others, is an example of a structural change, given that the pandemic broke the cyclicity of the cycle and caused a sudden surge in demand for better and faster technology.

But one of the most powerful and enduring types of change is secular change, as it is often driven by trends that transcend the business cycle, develop over long periods of time and are very hard to dislodge. A critical driving force of secular change is demographics.

Fig. 1:
Three types of change power the shape and growth of the economy



Sources: Visa Business and Economic Insights, UN World Population Prospects 2021

August 2022

Mohamed Bardastani
Senior CEMEA Economist

Richard Lung
Principal Global Economist

Glenn Maguire
Principal AP Economist

Mariamawit Tadesse
Global Economist

Dulguun Batbold
Global Economist

Key Points:



Gen Z takes its place as influencers of tomorrow



Look for future trends in new markets with tech-savvy, young populations



Crypto's ultimate calling could be in the metaverse



Gen Z's digital lifestyle and secular change

At first glance, by sheer numbers alone Gen Z does not appear to be a catalyst for secular change. Millennials were by far a bigger generation when they came of age in 2012. Gen Z will reach a population of around 1.7 billion by the time all Gen Zs are fully in the labor force (aged 15+), behind millennials and on par with Gen X (Figure 2).

But looking at just the size of each generation might miss the point and paint an incomplete picture. The baby boomer generation, as an example, is the smallest, but when boomers came of age they represented over one out of every two adults in the world – and consequently played a much larger role in driving change. In comparison, Gen Z will be the smallest generation as a share of the total adult population in 2026, at around one in three adults.

Beyond just the numbers, Gen Z adds something critical to the world's demographic mix – it is the only generation that is largely considered digitally native.

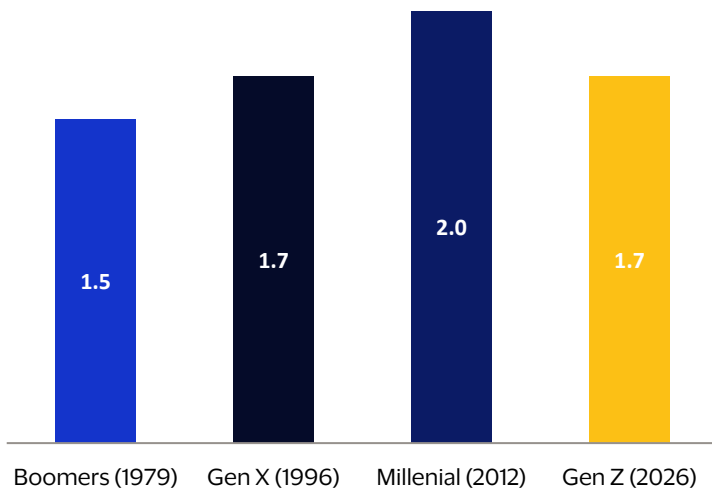
Gen Z consumers grew up in a world where the internet was always there and smartphones were ubiquitous as the means of communication, work,

commerce, entertainment, among others. These consumers grew up with the app economy, the spread of 4G technology and the 'always connected' mindset. By 2026, when Gen Z fully matures, nearly 60 percent of the global adult population will have been born in a world where the internet was an essential, constant feature of daily life (Figure 3).

While it is still unclear how Gen Z and the emerging technologies will transform the economies and marketplaces of tomorrow, a look back at previous transformative generations provides guidance. Baby boomers, after all, came to define capitalism, consumer trends and payment technologies in the latter half of the last century. We could potentially see yet another round of defining changes that affect those areas with Gen Z.

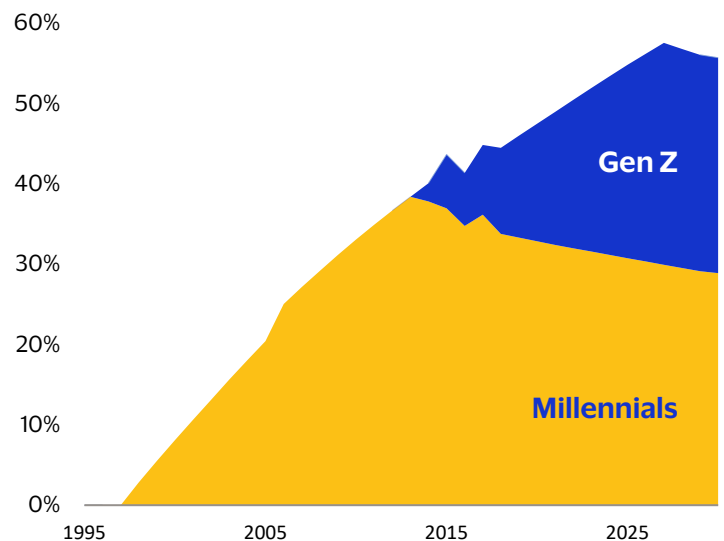
Beyond just the numbers, Gen Z adds something critical to the world's demographic mix

Fig. 2: Population of each generation when all its members are 15+, in billions



Source: U.S. Census International Population Database

Fig. 3: Share of the world's population aged 15 years and older by generation (percent of total)

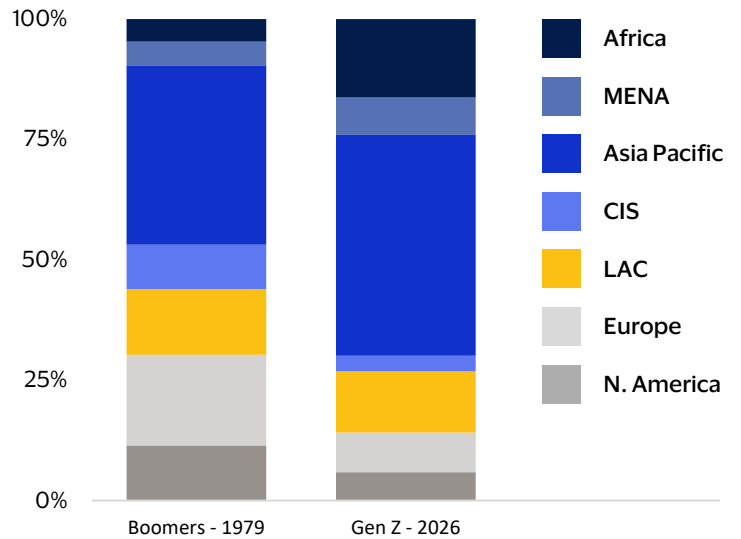


Source: U.S. Census

New cities could emerge as global trend-setting and innovation hubs

Major innovations and trends are often set in cities, generally due to younger demographics, better access to technology and the networking effect of having young, tech-savvy, similar minded people clustered in close proximity, fostering new ideas and innovations. Looking back, many major global innovations and trends such as the television, shopping centers and payment cards, were pioneered by baby boomers and were set in North Atlantic cities. This is not necessarily surprising, as 25 percent of the global boomers' urban population resided in North American or European cities in 1971 (Figure 4). It is not so clear, however, that new innovations and trends for Gen Z will necessarily once again be set in the North Atlantic, as the share of Gen Z in North Atlantic cities dwindles to around 14 percent in 2026. New innovations could very well come from the Middle East, Africa, Latin America or Asia Pacific, driven by rapid technological progress and a high concentration of young, tech-savvy Gen Zs.

Fig. 4: Generation's urban population by region



Source: VBEI analysis of United Nations, World Population Prospects 2019

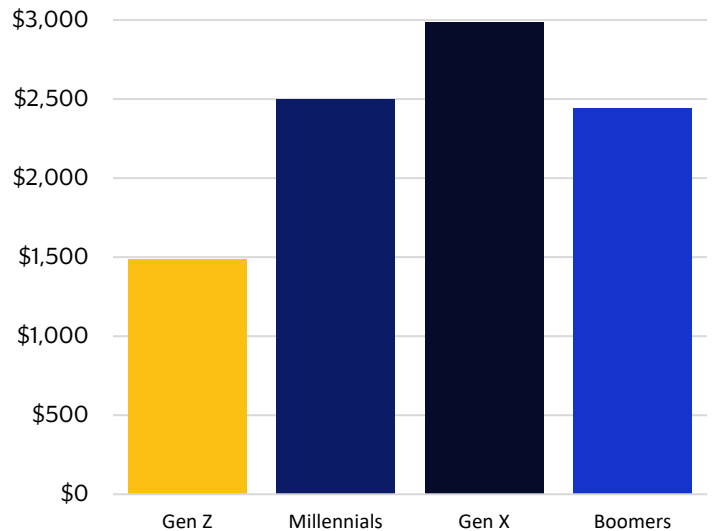
Capturing Gen Z's spending power

Gen Zs are slowly gaining prominence and emerging as a key consumer segment as they enter the workforce, earn higher income and become the new consumers and influencers of tomorrow.

An analysis of VisaNet data of average monthly spend per active credit card by generation shows Gen Zs have been gradually closing the gap with preceding cohorts, with an average of US\$1,500 of monthly spend in 2021. This opportunity will only grow larger as Gen Z's share of total income increases as they progress in their careers.

Perhaps supporting the notion that future trends and innovations will be set in new markets rather than legacy ones, internet users in some emerging markets tend to spend more time online on average.

Chart 5: Average monthly spend per active credit card by generation (2021), U.S.



Source: Visa Business and Economic Insights, VisaNet

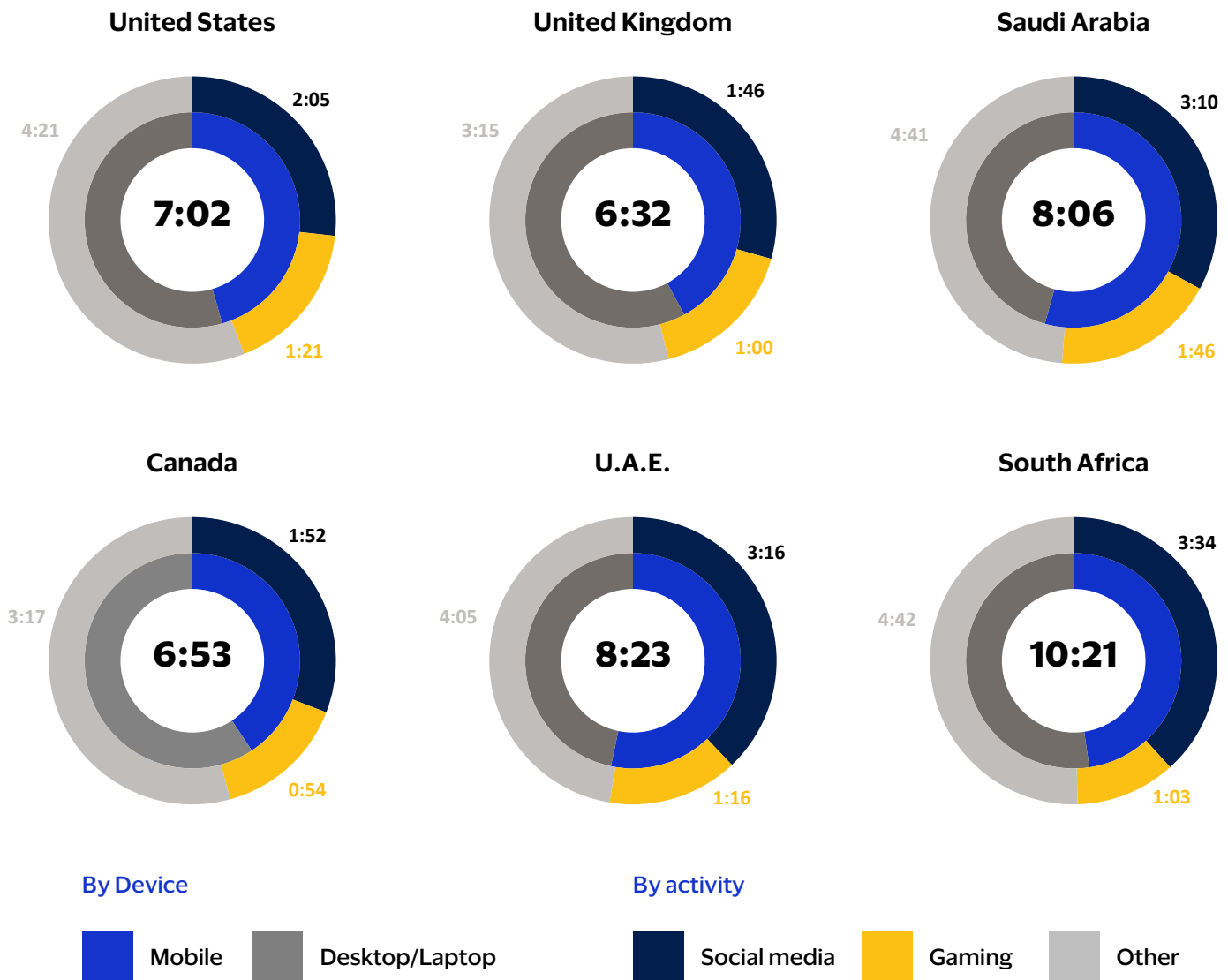


Capturing Gen Z's spending power (continued)

As an example, internet users in Saudi Arabia and the U.A.E. spend slightly over eight hours online per day, compared to seven hours in the U.S. and 6.30 hours in the U.K. (Figure 6). In addition, internet usage in these markets tends to be dominated by mobile activity rather than desktop, signaling greater convenience and flexibility in accessing the internet. Once broken down by activity, a common thread among many markets is that users often allocate a significant amount of their daily online hours between social media and gaming.

In fact, the blending of both social media and gaming is laying the foundation for one of the most promising technologies today: the metaverse.

Fig. 6: How internet users divide their time between online activities, hours per day



Source: Insider Intelligence

*Note total hours online may not always add up to the sum by activity online hours



Gen Z and gaming: Importance to the metaverse

The metaverse foundation was laid out by the blending of social media and online gaming.

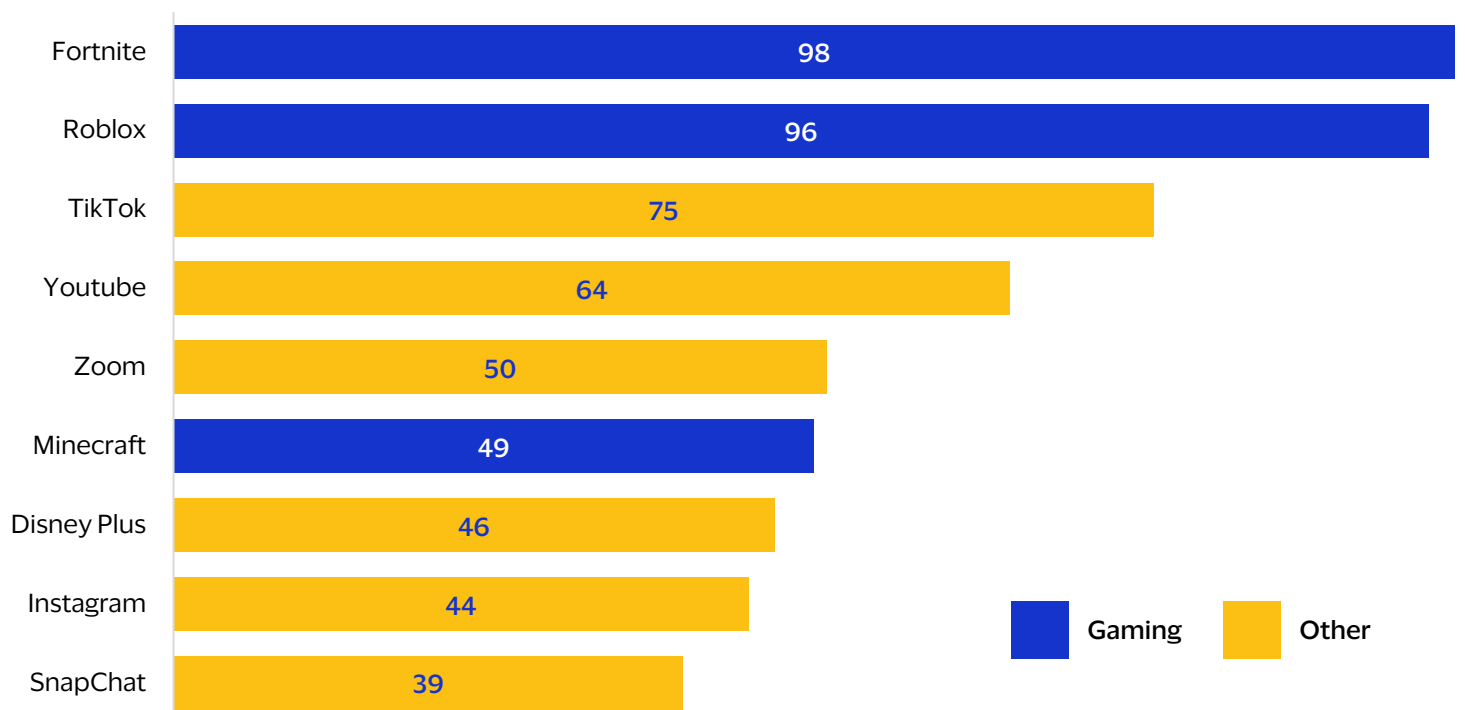
Metaverse-like open gaming platforms are already among the most popular apps. Some of the existing open-gaming platforms offer a glimpse of how the metaverse is likely to evolve in the future. Games such as Fortnite and Roblox, which incorporate a social element where users can simply “hang-out” are already among the most popular apps by time spent per day – surpassing even some of the top social media platforms such as TikTok, YouTube and Instagram (Figure 7). Instead of just passively scrolling through an endless stream of pictures or short videos, users in metaverse-like gaming apps are actively engaged by socializing, playing, networking, exploring and so on.

For a digitally-native population, “hanging-out” online or attending virtual concerts is as good as the real thing – perhaps even better. As an example, a typical performance by the famous rapper Travis Scott draws around 50,000 attendees and nets 1.7 million USD.

He held a virtual concert in Fortnite during the height of the pandemic that drew more than 12.3 million users (almost 246x) and grossed almost 20 million USD (more than 11x).¹ This showcases the potential opportunities that the metaverse offers as it is unbound by physical limits. Key enabling technologies of an immersive metaverse experience are augmented reality and virtual reality. While yet to be a typical household staple, the technologies have been gaining ground recently. Shipments of AR and VR headsets worldwide are expected to increase from 9 million in 2021 to 40 million by 2025.²

As these devices become cheaper and more widespread, the metaverse could really take off. Many big tech firms are already putting their money where their mouth is by pouring billions of dollars into startups or companies that are heavily involved in the development of the metaverse – from Meta, Microsoft, and Alphabet, to Apple.³

Fig. 7: Time spent by app per day, minutes, 2020



Source: Qustodio

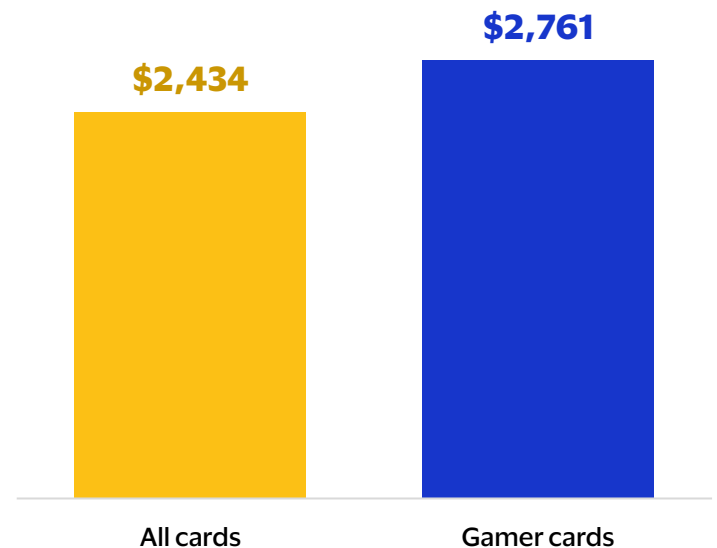


Gamers are an attractive consumer segment

Active immersion in virtual worlds is already quite prevalent among cardholders. In the U.S., as an example, as many as 1 in 10 U.S. consumers have made purchases in one of the major online gaming platforms, such as Fortnite or Roblox, in the last 12 months ending in May 2022. These users are already natives in digital worlds and represent early adopters of metaverse-like platforms, most receptive and comfortable working, socializing, and spending money in virtual marketplaces.

Interestingly, these users are much more widely dispersed beyond major metro cities. Digital platforms can therefore play a key role in expanding the reach of businesses beyond core urban areas to communicate with the digital generation customers in their native habitats. Active users of these gaming platforms represent an attractive segment for issuers and merchants alike. Consumers already immersed in virtual worlds show much greater comfort in using digital payments and utilize their cards much more intensively even in the real world (cardholders active in online gaming platforms spend US\$300 more per month on average than an average consumer, despite being younger and therefore likely earning less, Fig. 8).

Fig. 8: Average monthly spend per credit card included in SMI (12 months ending May 2022), U.S.



Source: Visa Business and Economic Insights, VisaNet

The Internet and the future of the metaverse

While gaming laid the foundation for the emergence of the metaverse, the broad-based potential use cases of the technology are what make it such an exciting concept. It could potentially alter the way we socialize, shop, play, work, study and more.

Take socialization as an example. The internet, smartphones and social media have transformed how we socialize, connect and date. In the past, social or professional networks were much smaller, as in-person experiences limited the geography and physical distance that people socialized and met.

But the socializing experience was transformed dramatically with technology; people are simply a click or a swipe away. Users can just add someone on Facebook or LinkedIn, follow them on Instagram, or simply swipe right on them on a dating app. The number of global dating app users reached 323 million in 2021.⁴

All this could change again with the metaverse by adding a three-dimensional element to the experience. Instead of exchanging texts or voice notes, users could potentially be socializing with friends or going out on dates from the comfort of their couches.

And not only that, the internet and smartphones proved transformative beyond just elevating the socializing experience. Shopping, as an example, appears to be on the cusp of another round of change. After all, shopping has constantly evolved over time. In the past, it was a mostly in-person experience, where consumers had to drive to malls or brick and mortar shops, and physically see, feel and inspect the product before buying it.

This has changed with e-commerce as consumers can browse, order or return a product from the comfort of their homes.



The Internet and the future of the metaverse (continued)

With the metaverse, avatars are going to be an extension of consumers or a digital representation of them in a 3D virtual world. Gen Zs are embracing this in a big way. Many fashion brands are experimenting with ways to tap this metaverse opportunity and the blurring of lines between real and virtual worlds by establishing virtual showrooms or selling virtual clothes; from Gucci, LV and Balenciaga, to Burberry and so on.⁵

The metaverse and crypto

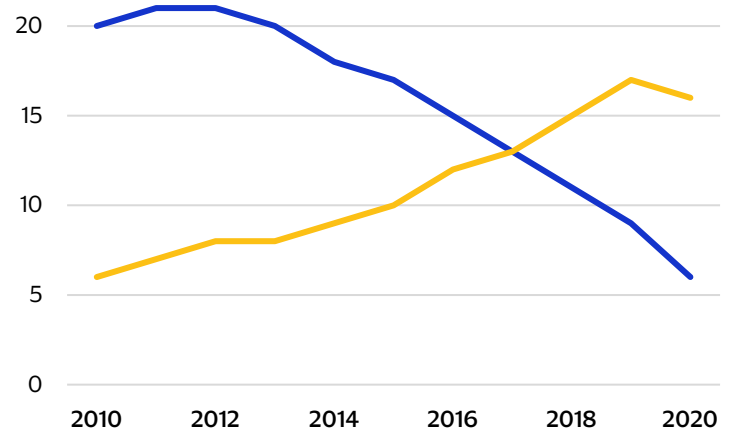
Just as the metaverse is likely to alter the way consumers socialize, shop and play, it will also change the way they transact and pay.

In the past decade, digitized and card-based payments were already on the rise, rapidly displacing cash (Figure 9) – U.K. data used as an illustrative example, but similar trends were observed in many developed and emerging markets. The pandemic has only accelerated the cash-to-card conversion and caused a surge in the usage of digitized forms of payments, unleashing the power of e-commerce globally. The development of the metaverse could pave the way for greater adoption of [cryptocurrencies](#). Cryptocurrencies have lost billions of dollars in valuation since the start of the year, leading to renewed skepticism over their future and that of blockchain-based payments. Behind the headlines, a more nuanced story emerges of a technology that continues to gain currency with an expanding user base, as shown by the rising number of users of stable coins such as Ethereum (Figure 10). The next stage of the web's evolution pushed by a more digital-focused population might prove to be their ultimate calling as crypto wallets emerge as the main transacting mechanism in the metaverse.

Footnotes

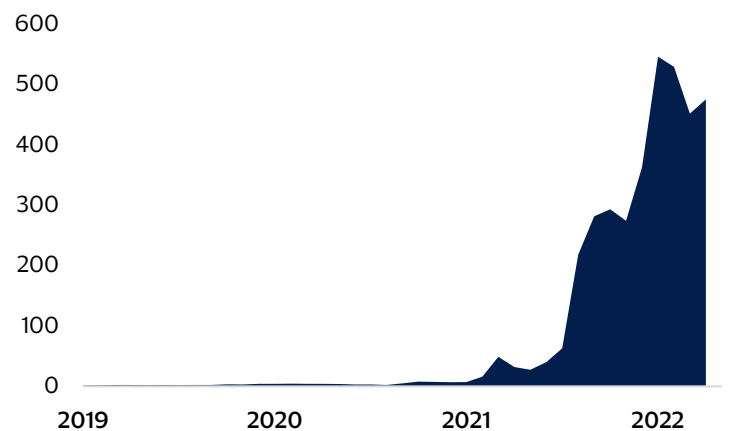
1. "Travis Scott reportedly grossed roughly \$20m for Fortnite concert appearance", Gamesindustry.biz, December 2020. <https://www.gamesindustry.biz/articles/2020-12-01-travis-scott-reportedly-grossed-roughly-USD20m-for-fortnite-concert-appearance>
2. Insider Intelligence's Tech Trends to Watch in 2022, December 2021. The Metaverse, Space, and AI Will Face Consumer Privacy and Bias Concerns.
3. "2022 will be the biggest year for the metaverse so far", CNBC, January 2022. <https://www.cnbc.com/2022/01/01/meta-apple-google-microsoft-gear-up-for-big-augmented-reality-year.html>
4. "Dating App Revenue and Usage Statistics (2022)", Business of Apps, May 2022. <https://www.businessofapps.com/data/dating-app-market/>
5. "From Louis Vuitton and Gucci to Burberry and Nike, Metaverse Will Bring You a Wide Range of Virtual Fashion Choices", News 18, January 2022. <https://www.news18.com/news/lifestyle/from-louis-vuitton-and-gucci-to-burberry-and-nike-metaverse-will-bring-you-a-wide-range-of-virtual-fashion-choices-4683329.html>

Fig. 9: Number of payments made, cash vs debit cards, in billions (U.K.)



Source: U.K. Finance

Fig. 10: OpenSea monthly active traders (Ethereum)



Source: OpenSea



Forward Looking Statements

This report may contain forward-looking statements within the meaning of the U.S. Private Securities Litigation Reform Act of 1995. These statements are generally identified by words such as “outlook”, “forecast”, “projected”, “could”, “expects”, “will” and other similar expressions. Examples of such forward-looking statements include, but are not limited to, statement we make about Visa’s business, economic outlooks, population expansion and analyses. All statements other than statements of historical fact could be forward-looking statements, which speak only as of the date they are made, are not guarantees of future performance and are subject to certain risks, uncertainties and other factors, many of which are beyond our control and are difficult to predict. We describe risks and uncertainties that could cause actual results to differ materially from those expressed in, or implied by, any of these forward-looking statements in our filings with the SEC. Except as required by law, we do not intend to update or revise any forward-looking statements as a result of new information, future events or otherwise

Disclaimer

Case studies, comparisons, statistics, research and recommendations are provided “AS IS” and intended for informational purposes only and should not be relied upon for operational, marketing, legal, technical, tax, financial or other advice. Visa Inc. neither makes any warranty or representation as to the completeness or accuracy of the information within this document, nor assumes any liability or responsibility that may result from reliance on such information. The Information contained herein is not intended as investment or legal advice, and readers are encouraged to seek the advice of a competent professional where such advice is required.

Visa Business and Economic Insights Staff

Wayne Best, Chief Economist

wbest@visa.com

Bruce Cundiff, Vice President, Consumer Insights

bcundiff@visa.com

Michael Brown, Principal U.S. Economist

michael.brown@visa.com

Adolfo Laurenti, Principal European Economist

laurenta@visa.com

Richard Lung, Principal Global Economist

rlung@visa.com

Glenn Maguire, Principal Asia Pacific Economist

gmaguire@visa.com

Mohamed Bardastani, Senior CEMEA Economist

mbardast@visa.com

Jennifer Doettling, Director, Content and Editorial

jdoettli@visa.com

Michael Nevski, Director, Consumer Insights

mnevski@visa.com

Dulguun Batbold, Global Economist

dbatbold@visa.com

Travis Clark, U.S. Economist

wiclark@visa.com

Ben Wright, U.S. Economist

bewright@visa.com

Angelina Pascual, European Economist

anpascua@visa.com

Mariamawit Tadesse, Global Economist

mtadesse@visa.com

Woon Chian Ng, Asia Pacific Economist

woonng@visa.com

Juliana Tang, Executive Assistant

jultang@visa.com

For more information, please visit us at [Visa.com/EconomicInsights](https://www.visa.com/EconomicInsights) or VisaEconomicInsights@visa.com.





Accessibility notes

Fig1. Line chart showing the three types of economic change, with time represented on the horizontal axis and economic growth represented on the vertical axis. Cyclical change goes up and down over time, but economic growth is maintained within a range. Structural change starts out steady in the lower left part of the chart, then breaks the business cycle and accelerates up rapidly, leading to a new level of economic growth over an extended time period. Secular changes occur over long periods and lead to a continued rise in economic growth, appearing as a vertical line from the lower left corner to the upper right corner.

Fig2. Bar chart showing population by generation when all its members are above the age of 15. All boomers were older than 15 in 1979 and their population is 1.5 billion. All members of Gen X were older than 15 in 1996 and their population is 1.7 billion. All millennials were older than 15 in 2012 and their population is 2.0 billion. All members of Gen Z will be older than 15 in 2026 and their population is 1.7 billion.

Fig3. Area chart showing the share of the world's population at or above the age of 15 by generation as a percent of the total. In 2013, millennials at or above the age of 15 were 38.4 percent of the total while Gen Z was zero. By 2030, millennials are expected to be 28.9 percent while Gen Z will be 26.8 percent.

Fig4. Bar chart showing urban population of boomers vs. Gen Z by region. In 1971, boomers' share of the urban population was 11 percent in North America, 19 percent in Europe, 14 percent in LAC, 9 percent in the Commonwealth of Independent States (CIS), 37 percent in Asia Pacific, 5 percent in the Middle East/North Africa (Mena) and 5 percent in Africa. By 2026, Gen Z's share of the urban population is expected to be 6 percent in North America, 8 percent in Europe, 13 percent in LAC, 3 percent in CIS, 46 percent in Asia Pacific, 8 percent in Mena and 16 percent in Africa.

Fig5. Bar chart showing average monthly spend per active credit card by generation for the U.S. Gen Z's monthly credit card spend in 2021 was \$1,485, millennials \$2,498, Gen X \$2,989 and boomers \$2,439.

Fig6. Pie chart showing how internet users divide their time between online activities and by device. Internet users in the United States, spend 7:02 hours online, with 45 percent of the time used on mobile devices to access the internet and the rest on the desktop. By activity, 27 percent of the time is used for social media, 17 percent for gaming and 56 percent for other activities. Internet users in the United Kingdom spend 6:32 hours online, with 42 percent of the time on mobile and the rest on desktop. By activity, 29 percent of the time is used for social media, 17 percent for gaming and 54 percent for other activities. Internet users in Saudi Arabia, spend 8:06 hours online, with 54 percent of the time on mobile and the rest on desktop. By activity, 33 percent of the time is used for social media, 18 percent for gaming and 49 percent for other activities. Internet users in Canada spend 6:53 hours online, with 41 percent of the time on mobile and the rest on desktop. By activity, 31 percent of the time is used for social media, 15 percent for gaming and 54 percent for other activities. Internet users in the U.A.E. spend 8:23 hours online, with 53 percent of the time used on mobile and the rest on desktop. By activity, 38 percent of the time is used for social media, 15 percent for gaming and 47 percent for other activities. Internet users in South Africa spend 10:21 hours online, with 48 percent of the time used on mobile and the rest on desktop. By activity, 38 percent of the time is used for social media, 11 percent for gaming and 50 percent for other activities.

Fig7. Bar chart showing time spent by app per day in minutes. People spent 98 minutes per day on Fortnite, 96 minutes on Roblox, 75 minutes on TikTok, 64 minutes on YouTube, 50 minutes on Zoom, 49 minutes on Minecraft, 46 minutes on Disney Plus, 44 minutes on Instagram and 39 minutes on SnapChat.



Accessibility notes

Fig 8. Bar chart showing the average monthly spend per credit card included in SMI for the U.S. The spend on all cards was \$2,434 while for gamer cards it was \$2,761.

Fig 9. Line chart showing the number of payments made by cash versus debit cards for the U.K, with cash showing a steady decline over time from 20 billion in 2010 to 6 bil. in 2020 while debit showed a steady increase during the same period from 6 bil. to 16 bil. in 2020.

Fig 10. Area chart showing OpenSea monthly active traders of Ethereum. In January 2019, the number of traders was 1,446. In April 2022, the number rose to 475,238.