



NORTH AMERICA INSIGHTS

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Virtual is reality

The great unfolding of the metaverse



The beginning of a great unfolding



“What is the metaverse?” Ask different people and you’ll get different answers, ranging from futuristic worlds accessible only by headset to mainstay activities like Zoom meetings and Peloton rides.

The metaverse is not limited to any one virtual world or one device, it is the intersection of our online lives and our physical ones. With that comes big financial implications, as the metaverse economy could be as large as eight to 13 trillion dollars by 2030 – with up to five billion users.¹

For anyone with doubt, it is important to note that the metaverse already includes multiple generations of active participants: Gen Z, Millennials, Gen X, even a subset of Boomers – each with their own ways of interacting in this growing space. Across generations, nearly eight in ten have participated in at least one metaverse activity in the past year. This engagement goes beyond gaming and headsets – there is room to participate across a range of industries from entertainment to travel to retail to healthcare, and beyond. For younger consumers in particular, who feel more comfortable expressing their true selves in virtual spaces than in real life, the metaverse is a natural extension of their current and future lives. They are ready to delve into the “twin economy,” a merging of the physical and virtual, that will forever change the way all generations shop, entertain themselves and interact with each other.

The metaverse is a paradigm shift, one that will catapult us into the next era of technology. Alongside the human need to innovate and iterate comes the opportunity to understand how to use metaverse technology to its greatest potential. Whether through the economic considerations of cross-over commerce and direct-to-avatar or navigating the sustainability of blockchain technology, Mastercard wants to do well in the metaverse space by doing good, and that starts through this research. This is the first chapter of our exploration of this topic, a foundational piece that will be routinely expanded upon as the metaverse continues to rapidly evolve.

So, “what is the metaverse?” It’s how your business will do business – and might be already.

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1. [Investment bank Citi is bullish on the metaverse](#)

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Exploring the virtual universe that is accelerating society into new interactions and new transactions

1 **The metaverse is building meta-momentum with long-term potential**

The metaverse is the intersection of how we act in the real world and the virtual world. While much of the meta-conversation has focused on headsets and futuristic words, the reality is much more tangible – and it is already here. Nearly eight in ten North American consumers have participated in at least one metaverse activity in the past year, even if they do not know it yet. Estimates project that usage could grow to five billion globally by 2030, creating an economy worth between eight and 13 trillion dollars.² Even more telling, nearly two-thirds of consumers believe that the metaverse will be as crucial to our lives as the Internet is today in the next 20 years.

2 **The metaverse encourages new forms of self-expression**

Younger consumers are bound to be affected greatly by the metaverse – in large part due to its impact on identity. The majority of Gen Z and Millennials (69%) assert that they often feel more comfortable expressing their true self in digital spaces versus in real life. This shift will have meaningful impact on how we build identity, meaning and self-expression in our lives.

3 **The metaverse extends and enhances the consumer experience**

Whether planning a trip via VR tour or trying on clothing using an AR filter, there is a strong appetite today for virtual previews. Seven in ten consumers have already or are ready to shop virtually for real-world items and six in ten online shoppers are more likely to buy a product if it is shown in 3D or AR. The metaverse also creates new opportunities to re-live experiences, from immersive travel mementos that can transport you back to a trip in an instant to virtual concerts that can be revisited again and again with the click of a button.

2. [Prediction: 5 billion people will be in the metaverse by 2030](#)

4 **The metaverse accelerates the shift to creative and interactive commerce**

As much as the metaverse is creating new opportunities for human engagement, it is also opening new doors to interactive commerce. It is shifting the conversation from liking and swiping to actively participating and creating. One example of this is the rise of Direct-to-avatar (D2A), an emerging business model selling products directly to avatars or virtual identities. In fact, more than half of younger consumers are interested in these types of opportunities to participate in the content with which they engage.

5 **The metaverse gives brands permission to play**

We are in a phase of experimentation in this new world where consumers are looking for progress over perfection as six in ten want to see brands participate in the metaverse. In addition to branded experiences, there is opportunity for brands to help consumers interact with this space more meaningfully by expanding access and equity. Nearly two-thirds of consumers say this type of experimentation today is critical to staying relevant in the future; in other words, those who don't participate in the metaverse risk being left behind.

Methodology

This research is based on a multi-pronged approach, including qualitative exploration in the form of in-depth interview sessions conducted among metaverse experts and Mastercard internal stakeholders. The research also included a quantitative portion based on a survey of 4,211 North American consumers. This research was conducted by The Harris Poll, led by Libby Rodney, Abbey Lunney and Morgan Rentko. For more information about The Harris Poll, please reach out to abbey.lunney@harrispoll.com.



Part 1:
Venturing into
the metaverse

Navigating the next trillion-dollar industry

The metaverse is a fundamental shift of what our lives and livelihood will look like as technology accelerates humanity into new worlds, spaces and interactions. This evolution of the Internet is our future and users are already immersed – even if they don't know it.

The metaverse is now

74% of North American consumers have already heard of the metaverse

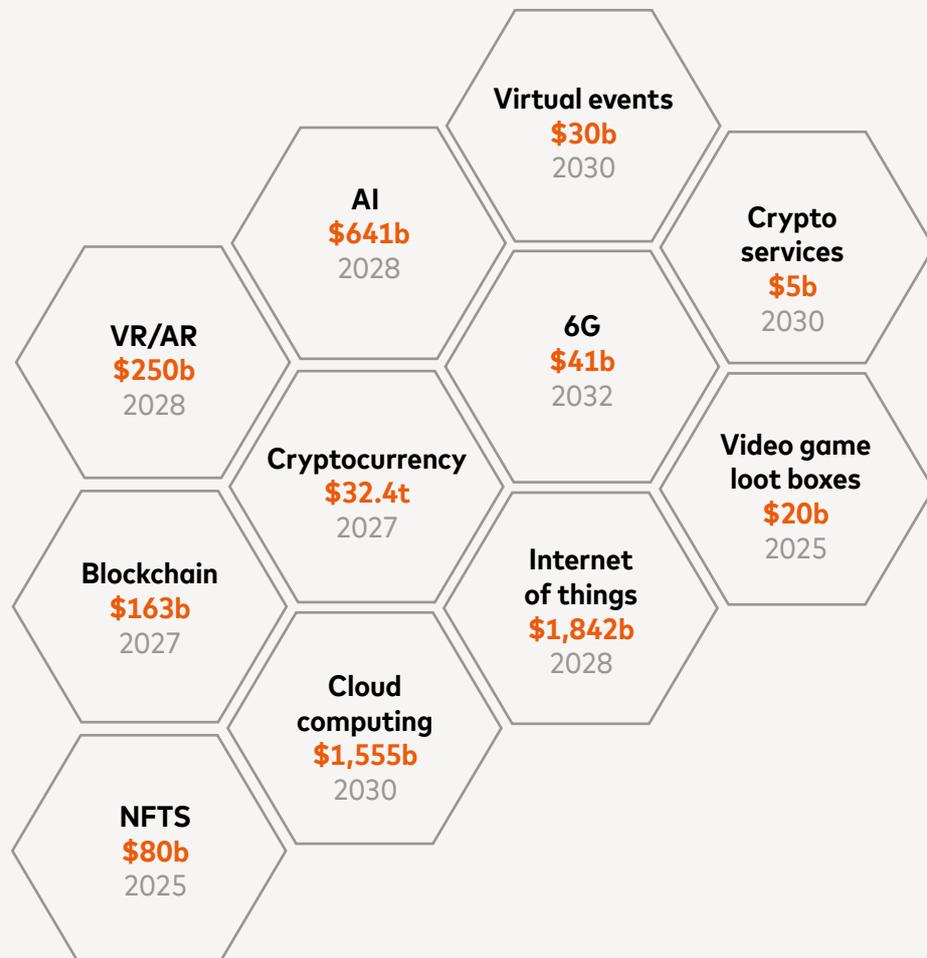
61% agree we are already working/living in the metaverse

Nearly **8 in 10** have participated in at least one metaverse activity

When trying to define the landscape of the metaverse, specific technologies like virtual or augmented reality or corporations like Meta may come to mind. While these examples certainly contribute to the metaverse, it is crucial to recognize that it is not defined by one company or device; the metaverse is device- and company-agnostic and has the ability to create change not only virtually, but in the real world too.

The metaverse is fundamentally shifting how we interact with the world, bringing with it a massive economic opportunity. According to recent estimates, the total addressable market for the metaverse economy could be between \$8 trillion and \$13 trillion by 2030, with up to five billion users.³ Economic implications for the metaverse could range from smart manufacturing technology to virtual advertising to online events like concerts, as well as digital forms of currency such as cryptocurrencies like bitcoin.

When considering the different industries that make up the metaverse as a whole, the metaverse economy could be worth **\$13 trillion** by 2030³



3. Investment bank Citi is bullish on the metaverse



Part 2:
Exploring
meta-motivators

Creating an inflection point of identity and self-expression

The metaverse is more than just fun and games. Especially for Gen Zers and Millennials, who are currently experiencing the metaverse and will be most impacted by its future, the metaverse is a space for identity, meaning and connection. The majority of Gen Z and Millennials in North America (69%) assert that they often feel more comfortable expressing their true self in digital spaces versus in real life. Additionally, they believe that the metaverse can converge identities that may be separate in the physical world.

The reality is that we spend much of our time networking, discovering and connecting digitally, with consumers anticipating that this will only increase in the future. For example, seven in ten Gen Z and Millennials say, "The metaverse will make the distinction between the physical and digital worlds less important." For younger generations, this represents the opportunity for deeper connections with others. Seventy-one percent of Gen Z and Millennials are hopeful the metaverse will create stronger connections between people, online and offline.

Gen Z and Millennials say...

81% | 76% TOTAL

"The ways we connect to each other/establish a sense of belonging are happening in digital spaces."

76% | 74% TOTAL

"How I present myself online today is as important as how I present myself in the physical world."

69% | 56% TOTAL

"I am looking forward to a future where people can express multiple versions of themselves and their personalities in the metaverse (e.g., lawyer, DJ, designer, etc.)"

Consumers anticipate spending more time in digital spaces in the next three years in these industries



Fitness: +6 increase



Shopping: +5 increase



Working: +5 increase

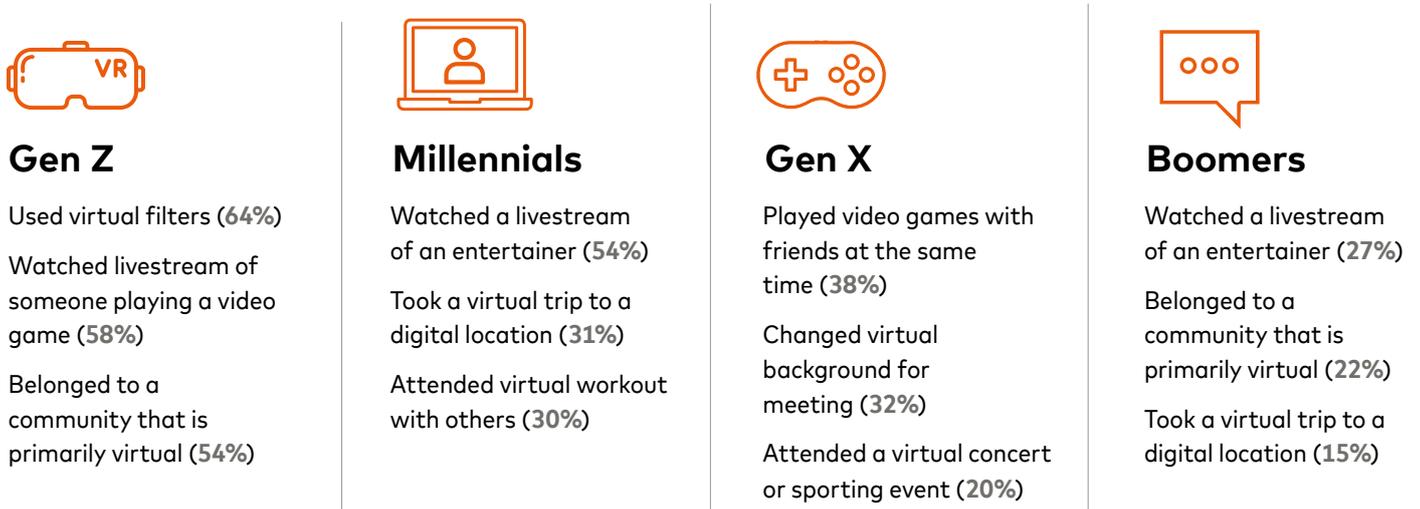


Dating: +4 increase

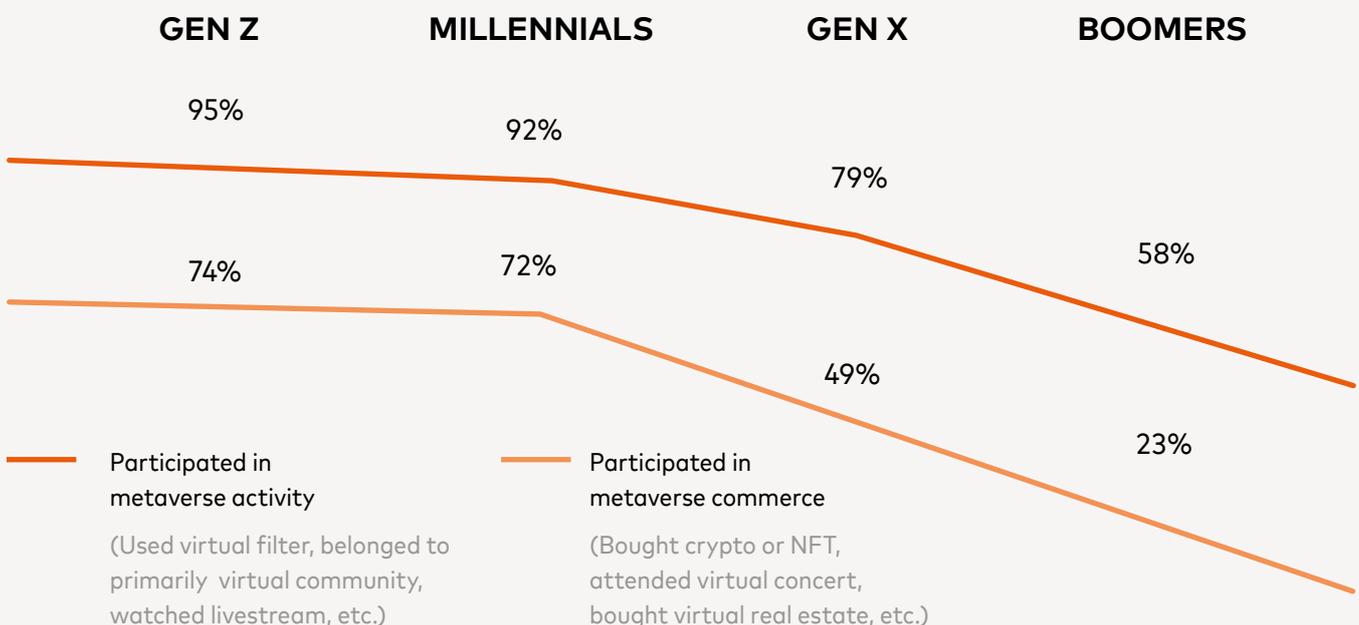
Defining a metaverse for every age

Different virtual habits are coming to the fore for different generations. For instance, Gen Z tends to be leveraging more of their digital identity, using VR filters and searching for their own primarily virtual communities, while Millennials are leaning into the metaverse for entertainment purposes. Even Gen X and Boomers are playing video games with their friends, watching livestreams of entertainers, joining virtual communities and attending sports events.

Top virtual activities in the last year by generation



The metaverse is not just being accelerated by teens in their parents' basement



Quantifying commerce in the metaverse

76%

would be more likely to shop in the metaverse if it was backed by their credit card's fraud protection

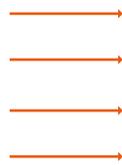
As we shift from social media timelines to immersive virtual spaces, the metaverse creates more opportunities for interactive commerce than ever before. Consumers are looking for all-encompassing, priceless experiences. Fifty-seven percent of Gen Z and Millennials assert that they would rather participate in content than just watch it and this sentiment translates to what they are looking for in their retail experiences.

Direct-to-avatar (D2A) is just one example of this, referring to an emerging business model selling products directly to avatars or virtual identities. In many cases, there is desire to have the object in both spaces (for example, the digital twin of a physical good). Luxury fashion brands like Balenciaga, Ferrari and Gucci have collaborated with the online game Fortnite to launch their own D2A experiences. Sneaker retailers are also playing in this space, as on-screen wear becomes the new streetwear.

Accelerating the shift to interactive commerce

Web 2.0

- Liking
- Swiping
- Planned events
- Timeline



Web 3.0

- Participating
- Creating
- Serendipitous moments
- Spaces

57%

**GEN Z +
MILLENNIALS**

"I would rather participate in content (for example, remix it, add my video to it) than just watch it."

Shoppers are excited to use the metaverse to...



Consumers today are using the metaverse to have fun, learn and save time, but they imagine increasing engagement in the future to save money.



Part 3:
Navigating the
future of the
metaverse

Exploring industry spotlights

More than half of consumers feel that entertainment is the industry most likely to deliver engaging experiences in the metaverse (52%)

67%
have interest in watching
TV or movies in VR
12% have done it

The metaverse is already coming to life across many industries. Gaming, entertainment, education, travel and retail have been among early adopters paving the way, though applications will also become commonplace in health care, financial services, government and other spaces in the near future.

Metaverse and entertainment

Entertainment may be the space that people are most currently associating with the metaverse. With the COVID pandemic accelerating the innovation of these transportive forms of entertainment, virtual and augmented reality have become increasingly popular ways to experience art, video games and movies. Entertainment is always on the forefront of technological advancement because the end benefits (such as connection, enjoyment, fun, pleasure) are enough of a driver to form new habits and adopt new technology. The added benefit of entertainment in the metaverse is that it is less confined by traditional boundaries of time and space.

As a result, experiences like concerts are no longer "one-night-only" events. Virtual concerts are popping up across virtual platforms, with over half of North Americans (54%) excited by the prospect. As just one example, Travis Scott's concert series on Fortnite was viewed more than 179 million times on YouTube, while over 45 million experienced it in Fortnite. This event can be experienced from any place, at any hour and as many times as one would like. Some acknowledge these experiences do not replace the real life experience, but instead expand the scope of what a consumer can choose as entertainment.



66%
have interest in
virtual trip planning and
previews
14% have done it

Metaverse and travel

The metaverse allows people to take greater advantage of physical travel experiences, while also giving them the opportunity to virtually discover new places and relive memories. For example, VR services are being offered to allow customers to virtually explore hotels and travel destinations while considering real-world travel purchases. This virtual "trial run" provides an opportunity for consumers to immerse themselves in a world, while considering which areas to focus spend from tours to dining experiences to room upgrades and beyond.



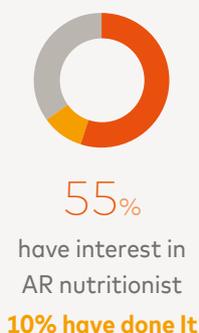
65%
have interest in
virtual tourism
14% have done it

There is also the chance to immerse oneself in a virtual travel experience. Two-thirds of North Americans (65%) are interested in taking virtual tours, experiencing far-off places that they may never get the chance to visit in real life. This experience won't replace real life travel, but it opens up new doors to make travel more accessible and affordable, expand cultural knowledge, and contribute to globalization. In addition, the urge to relive a perfect vacation can be solved through VR memories, allowing people to re-experience past trips through virtual reality.

Metaverse and retail or CPG

No longer limited by the nature of physical stores, the metaverse can enable new types of shopping experiences for consumers. When it comes to retail experiences, seven in ten consumers have or are ready to shop virtually for real-world items. For consumer-packaged goods, consumers are ready to dive into virtual shopping for real-world items and are particularly excited by the prospect of virtual storefronts.

Among every type of shopping experience, there is an appetite for items that translate into both the virtual and physical realms. Over half of consumers (56%) are interested in digital-to-physical products such as purchasing a shirt for your avatar that you can receive a physical equivalent of in the mail. On the other hand, almost half (46%) are looking forward to physical-to-digital products such as purchasing lipstick in a store that can also be redeemed for a virtual equivalent for your avatar.



Metaverse and healthcare

Americans spend over \$750 billion each year on unnecessary medical treatments, many of which stem from misdiagnosis or redundant treatment due to poor data management. The metaverse has the potential to bypass these errors and streamline treatment, making for a more accurate and efficient healthcare experience for patients.

Becoming a healthcare option almost overnight due to the COVID pandemic, telehealth has been progressively used over the past two years, as doctors have limited the amount of in-person patients due to the pandemic. Seven in ten North Americans have either visited a doctor virtually (31%) or would like to (39%).

The relationship between the metaverse and healthcare isn't only limited to physical treatment. Over half of consumers (56%) want to explore virtual options for meditation/mindfulness and nature exploration, in hopes of positive effects for mental and emotional health. In one example, a VR game called EndeavorRX by Akili Interactive became the first ever prescription-strength video game approved by the FDA to treat ADHD in children. Studies from Oxford University found that patients who used automated VR therapy experienced a 38% decrease in anxiety and avoidant symptoms over a six-week period.⁴ Overall, healthcare is one of the most important industries that could be transformed by the metaverse, as it can directly impact patients' quality of life.

4. [Akili announces FDA clearance of EndeavorRx™ for children with ADHD, the first prescription treatment delivered through a video game](#)

Cultivating transactions and trust in the metaverse

Despite rising interest in engaging with the metaverse, consumers are especially concerned about their finances and personal information. Privacy, price and security are the main factors slowing participation in the metaverse.

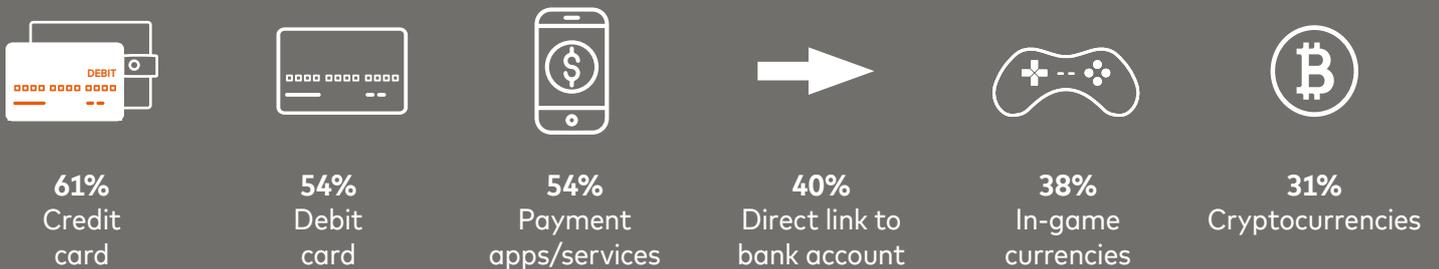
76% of consumers agree

“Established financial brands should lead the way when it comes to payments in the metaverse.”

Consumers are most comfortable using traditional payment methods like credit (61%) and debit cards (54%) rather than in-game currencies (38%) and cryptocurrencies (31%) that are specifically built for virtual use. What consumers need is a guarantee from financial institutions they know and trust: over two-thirds would be more interested in using cryptocurrency if it was backed by a trusted financial institution (68%).

In addition to building transactional trust in the metaverse, there is an opportunity for financial services brands to build – or help build – experiences that cultivate broader relationships. Consumers are looking for brands they rely on in their daily lives to shape this new and exciting frontier.

Comfort using payment method for digital payments in metaverse



Consumers want brands to shape their metaverse journey



“Brands should experiment in the metaverse today to stay relevant in the future.”



“I am looking for brands to help understand the metaverse and give me room to explore.”



“I don’t expect perfection from brands, but still want to see them participate.”



Part 4:
Exploring the
metaverse with
brands

Seven opportunities for brands to win in the metaverse

- 1 Ease barriers to access with partnerships and platforms that make the journey more seamless:** such as digital wallets that have infrastructure in place to bring consumers into the fold.
- 2 Help consumers explore this new world with a focus on innovation over perfection:** meeting consumer desires to be guided by established brands.
- 3 Lead the path to an equitable future in the metaverse:** by advocating and collaborating with Web3 groups dedicated to educating and designing for equity as the metaverse unfolds.
- 4 Design metaverse environments that resonate with all ages by leaning into generational preferences:** from tools that facilitate virtual identity-building for Gen Z to entertainment-forward options for Millennials to gaming worlds for Gen Xers and Boomers.
- 5 Bring a seal of security to the metaverse so consumers know their products and purchases are protected:** to alleviate today's largest barriers to entry
- 6 Engage with users in new and creative ways:** to that evolve your brand and increase affinity, especially with younger generations.
- 7 Build an ecosystem of touchpoints in the metaverse:** that can both improve transactions and functionality and cultivate relationships with consumers.

Opportunities to collaborate: Mastercard in the metaverse

Mastercard is committed to helping unlock the potential of the Metaverse, with strategy, build and advisory services. Here are some of the ways we have activated in the Metaverse.



Priceless Grammy experiences in Roblox

The 64th Grammy Awards were presented in Roblox, appearing in the metaverse for the first time in the music award show's history. Grammy Week was created in partnership by The Recording Academy and Roblox and sponsored by Mastercard.

The experience consisted of virtual meet and greets with singers, live performances by Camilo Cabello, challenges to win digital merchandise, and even a red-carpet area for photos. **Learn more:** [The Recording Academy and Mastercard are bringing Grammy week into Roblox](#)



True Self world in Oculus Horizon Worlds

A safe space where visitors can connect, explore, and embrace their True Selves in virtual reality. Mastercard collaborated with Facebook/Meta to launch one of the first branded experiences within Horizon Worlds.

True Self World will continue to expand over time. Join the party today with a Meta Quest 2 headset. **Learn more:** [Mastercard celebrates Pride month with Your True Self is Priceless campaign | Mastercard Newsroom](#)



Mastercard Pride Parade in Decentraland

As the category exclusive sponsor of Decentraland's annual Metaverse Pride Parade, Mastercard created a virtual rendition of the March NYC Pride float, enabling visitors to ride on a Pride parade float from anywhere in the world.

Along with the parade float, Mastercard designed two limited edition branded NFT avatar wearables given away during Metaverse Pride and was spotlighted in Decentraland's web3 channels. **Learn more:** [Mastercard to celebrate LGBTQIA+ Pride Month in the Metaverse | Mastercard Newsroom](#)



The Mastercard sonic Latino America Festival in Decentraland

Mastercard kicked off the Latin music season with the launch of Sonic Latin America. This was the first Latin American music festival in the metaverse presented by Mastercard. The festival was hosted on Decentraland, as part of their Metaverse Music Festival event. Sonic Latino America featured artist performances from Henry the Poet, Sofia Campos, Agostini and more.

Forging the path ahead

The potential for the metaverse is immense, with billions of people visiting millions of always-on virtual environments to play, socialize, shop, work and learn. At Mastercard, we continue to explore the nascent metaverse to ensure we create inclusive, trusted virtual ecosystems so people can participate securely and seamlessly in the opportunities it may offer. Discover global trends, future-focused perspectives and technologies shaping the future. **Learn more:** [Mastercard Signals: The metaverse | Mastercard Newsroom](#)

