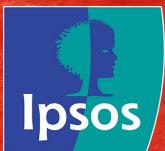


NOKIA



Gen Z and the metaverse

A multi-market study on how Gen Z currently experience the metaverse and the role they want to play in its future

September 2022

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The virtual frontier: Gen Z and the metaverse

Introducing Gen Z

1

In 1996, the original version of the popular role-playing franchise, Pokémon^{1,2}, was released. In this same year, the first members of Gen Z were born.

2

Defined as those born between 1996 and 2012, they have never known a world without social media, instant information, and far-flung horizons, all held in the palm of their hand. As the first generation to grow up in a world fully connected by technology, they are defined not just by their values or societal context, but by the role of technology in their lives - it has shaped the ways they connect, communicate, and view the world unlike any generation which came before, making them the first true **digital natives**.

3

Our contextual landscape review of Gen Z finds that they are a nuanced, complex group of individuals. They are the first 'global generation', but are defined as much by their unique cultures, identities, and countries as they are by their shared attitudes, values, and nativity.

4

Globally, they face a challenging set of circumstances: they tend to be concerned about both the current and future state of the world, with the COVID-19 pandemic hitting them particularly hard, and political engagement – especially around issues of sustainability and representation – becoming increasingly important both online and offline.

5

At the same time, they tend to take a dogmatic approach to regulating behavior or actions that appear to fall short of their values. And while they seek to stand out - favoring authenticity, transparency, and openness - mental health is a key concern as Gen Z struggle with the repercussions of lockdowns and a pressure to be constantly 'switched on'. Bombarded with aspirational lifestyles and non-stop news through social media 24/7, Gen Z are more likely than any other generation at the same age to feel stressed out or suffer from social

anxiety, alongside practical concerns such as a rising cost of living, environmental threats, and socio-political unrest.

It is no surprise that, amidst this context, the Gen Z we spoke to tend to seek stability and escape. Throughout this report, we will refer to Gen Z in broad terms, but all of our insight comes from the Gen Z in our sample – 'Our Gen Z', the 116 unique individuals we got to know across five continents and who shared with us their interests, identities, and struggles.



1 [Pokémon \(game series\) | Smosh Wiki | Fandom](#)

2 [Pokemon | Description, History, & Facts | Britannica](#)

Introducing the metaverse

The oldest members of Gen Z are now 26. As a generation they are coming of age, joining the workforce, and living through their most formative years, leaving them ready to start shaping institutions and countries as the leaders of tomorrow. This, as well as their status as digital natives, primes them for a new technological leap forward: **the metaverse**, which has the potential to be as disruptive to the ways we interact with people (and the world) as the internet was before it.

hottest buzzwords of 2021, with internet searches for the term increasing by 7,200%, while 200 million monthly users spend an average of 2.5 hours a day on Fortnite and Roblox⁶. The metaverse currently inspires both excitement and skepticism, and as the first digitally native generation comes of age, all eyes are on Gen Z to see how they will engage with this new virtual reality⁷:

- How do they currently work, play, and socialize in the metaverse?
- How do they see it developing in the future?
- What role do they want to play?

The global public has become increasingly aware of the metaverse as about half (52%) of adults across 29 countries, especially younger generations, say they are familiar with the metaverse and widely expect that new experiences there will profoundly impact our entertainment, learning, and work lives over the next decade³.

The metaverse is interlinked with **EMERGENT TECHNOLOGIES** - those whose development or practical applications are largely unrealized - such as **XR, WEB3, CRYPTOCURRENCIES, NFTS, OPEN-STANDARDS** and **PLAY-TO-EARN** (see appendix for definitions)⁴.

While there is not yet a standard definition of the metaverse, it can be identified by three key features:

1. A persistent, immersive simulated world;
2. It is experienced in the first-person or third-person by large groups of simultaneous users;
3. These users must share a strong sense of mutual presence - users are aware of each other, interact, and react to other users' actions.

Louis Rosenberg
CEO and Chief Scientist at Unanimous AI⁵

Emerging technologies are regarded as being capable of changing the status quo, and the metaverse is no exception: it has been one of the



3 [How the World sees the metaverse and Extended Reality \(Ipos x World Economic Forum, 2022\)](#)

4 [A Detailed History of the metaverse - and What's In Store Next \(AAX Academy 2022\)](#)

5 [Metaverse 101: Defining the Key Components \(February 2022\)](#)

6 [Signals of the metaverse](#)

7 [Forbes 2022 'Gen Z Set to Lead Retailers Into the metaverse'](#)

Our research

To answer these questions, Nokia has partnered with Ipsos to undertake a robust three-stage research project (with an additional fourth stage in the UK and US) to understand the metaverse from the inside, completing all interviewer administered fieldwork in a virtual environment and engaging with Gen Z in the metaverse for depth of understanding while putting into action a comprehensive methodology (see appendix for details of method and sample).

- Stage 1:** Substantive desk research producing two reports to contextualize the research in current quantitative data on Gen Z and semiotic analysis of the cultural origins of the metaverse, '**Understanding Gen Z'** and '**Gen Z in the metaverse**'.
- Stage 2:** A five-day digital immersion to capture Gen Z's daily engagement with the metaverse in real time.

- Stage 3:** Follow-up one-hour in-depth play-a-long sessions with individual participants to understand actual behaviors within the metaverse.
- Stage 4:** Immersive workshops in English-speaking markets through a virtual platform, Spatial.io, to deep dive into perceptions of the metaverse and explore how Gen Z envisage future developments (**UK and US only**).



Key findings

Our key findings suggest that the Gen Z we spoke to are drawn to the metaverse for a range of reasons - virtual experiences, social connection, status and glory, or the chance to invest in future technologies, but are ultimately united by a desire for stability and escape.

- 1. Awareness of the metaverse is low but engagement is high:** Many Gen Z don't see themselves as 'in' the metaverse and don't always know what the metaverse entails, yet are engaging with online platforms with metaverse elements - the lines between their virtual and physical worlds are increasingly blurred, and better understood as a spectrum of activity than separate spheres, as Gen Z look to the virtual to offer them experiences they can't have elsewhere.
 - 2. Social experience is a key draw to the metaverse:** Gen Z search for connection with those who share unique interests, defying the boundaries of geography, taking part in virtual experiences with those whose company they value, and valuing the convenience of virtual interaction.
 - 3. Identity in the metaverse is a new opportunity for experimentation:** Representation, experimentation, and aspiration are key as Gen Z create avatars that reflect aspects of their identity which feel underrepresented in the real world, experiment with their identity through role-play, and feel more free to be 'themselves' without the limitations of the physical world.
 - 4. Virtual assets are a draw for some:** Our Gen Z have a high awareness of virtual assets, with many having used their money to purchase in-game items or level-up boosts, though they are often wary of attempts to commercialize the metaverse.
 - 5. Technology is central to their conception of the metaverse:** Heavily influenced by the prevalence of futuristic virtual worlds in popular culture, with high awareness of technology like VR, many hope it will bring greater levels of immersion and experience to the metaverse but accessibility remains a concern.
 - 6. Gen Z want to build the metaverse so it reflects their values:** They are enthusiastic about the future of the metaverse, especially the ability to socialize and play through uniquely virtual experiences, but are concerned about its future impact on society and the role of social inequalities in the metaverse limiting accessibility for all - to avoid this, they want to play a role in how the metaverse is shaped to ensure it remains open, free, and flexible.
- The metaverse presents a new frontier for our Gen Z.** The rapidly changing world of the past five years has prepared our Gen Z to adapt to sudden onset changes and disruptions - from social and political unrest, global pandemic, and the threat of war - and poised them for entry to the metaverse as they seek stability and an escape from the realities of the physical world. It presents them with the opportunity to navigate, cultivate, and innovate a virtual space that defies physical world limitations, shaping it to reflect their values. It represents the chance to build something which lasts, and live the experiences of youth on their own terms. **When it comes to the metaverse, our Gen Z are not just digital natives - they're technological pioneers.**

Meet our Gen Z

Gen Z are drawn to the metaverse for a range of reasons - for virtual experience, social connection, status and infamy, the chance to invest - but are ultimately united by a desire for stability and escape.

1

Ipsos has spoken to Gen Z across five markets:



2

UK, US, Korea, Brazil, and UAE, reaching an audience from around the world, and recruiting 30 participants in both the UK and US and 28 in each of Brazil, South Korea, and UAE from a range of ages from 16 to 25.

3

Our Gen Z is not a monolith. Those we spoke to are individuals from different backgrounds and hold diverse interests, views, and values that shape why and how they are drawn to the metaverse. Traditionally, they would be classified as tech adopters and non-tech adopters, but from our sample, this study identifies **four key profiles**, categorizing **what drives our Gen Z to the metaverse** by their different needs, interests, and potential for opportunity (see appendix for more detail):

4

Solidarity-Searchers: In the physical world, this profile are introverts - they either struggle with face-to-face social activity due to neurodiversity, or prefer their own company, finding physical socialization exhausting. Instead, they look to the metaverse as an alternative social outlet, seeking stability in solidarity online, sharing knowledge, interests, and building communities characterized by rich personal relationships with other users and are focused on collaboration rather than competition.

5

Citizens: These users are the most common profile in all five markets. They are less tech-forward than the other profiles, preferring physical world friends and socialization, but driven to the metaverse by the prospect of a new virtual social space where they can take part in experiences with physical world friends without physical limitations.

6

7

8

9



Libertarians: These users view the metaverse as an investment opportunity and chance for financial independence - driven to the metaverse by an interest in emergent technologies like cryptocurrencies, NFTs, and the potential of VR, they are characterized by values of freedom from centralized control and the pursuit of free commerce to grow their physical world wealth.



Status-Seekers: These users step into the metaverse to join communities, build a following, and gain status, developing unique virtual identities and displaying their creativity, skill, and reputation through the virtual items they own and wear within a certain game or community, preferring the experience of competition to collaboration.

Across these profiles there are broad differences and similarities. **Status-Seekers** and **Libertarian** profiles tend to be more tech-forward overall and tend to skew towards men, perhaps reflective of women's lower level of enthusiasm for the metaverse overall.



Research shows that while nearly half of men in the US say they are interested in the metaverse, only 28% of women agree, and 70% feel their personal safety in the metaverse is a concern⁸.



Status-Seekers and **Libertarians'** profiles are characterized by their value of status, competition, and being savvy / 'in the know' when it comes to technology and the metaverse while, by contrast, **Citizens** and **Solidarity-Searchers** tend to value the collaborative, characterized by a value of social belonging, connection, and virtual experience within the metaverse.

Yet while our Gen Z are drawn to the metaverse for different reasons, they are united in adversity. Globally, Gen Z are united in reaching adulthood within an unstable political, social, and economic landscape, facing concerns from cost-of-living to the threat of climate change, social unrest, and war.

It is perhaps unsurprising that against a backdrop of uncertainty, Gen Z we spoke to tend to value, above all else, those things which provide most **stability** and **escapism**.

In the metaverse, our Gen Z describe how they find stability among like-minded individuals from around the world, sharing interests and building bridges that provide community, connection and comfort, and escape to a world of limitless possibilities: unhindered by the physicality of geography or even physics, Gen Z look to virtual spheres to create and innovate new experiences that provide an outlet from reality, a space to be whoever they want to be, and do whatever they want to do.

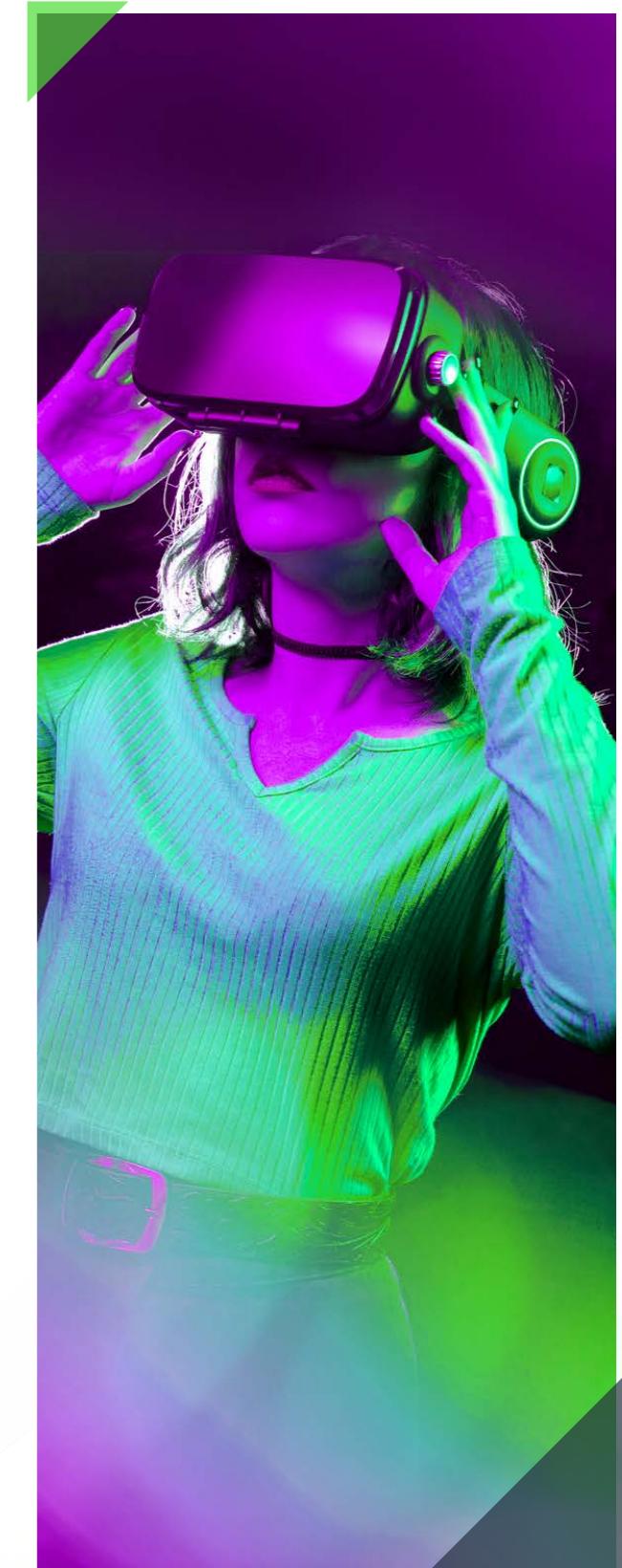
Gen Z are the first generation to grow up with access to the virtual sphere, a space of unlimited, untapped potential - and as they continue to grow, they want their values to shape it.



Just 36% of Gen Z have an optimistic outlook on the state of the world today, while less than 30% believe the economic and political state of their country will improve⁹.



9 Source: Deloitte, 2022. The Deloitte Global 2022 Gen Z & Millennial Survey



In their words: What do our Gen Z value?



Solidarity-Searchers value social connection and community but struggle to find this in the physical world, turning to the virtual.

 "I'm actually an outgoing person, and I like to make friends, but I make more friends online than offline. I'm not so outgoing in real life... online there are people who share my interests. We talk and strategize, connect, share WhatsApp and talk on different platforms. I just like people that share the same things as me - we meet online, keep talking, and that's how friendship begins. It's all about escapism and relaxation, coming out of the real world and going into a new one."

- Male, 23, UK

 "I play virtual, stimulating games. Where you create your own scene, place, characters, world etc. I play virtual worlds, virtual families, Minecraft, Avakins, Roblox, BitLife. I prefer them on a device rather than real life because you feel like you're taking a break from the real world, escaping from it. You can forget about your social confidence in case you lack some or the anxiety you have speaking with people, it's much easier online: you feel the freedom to make your own house, world, people, family and friends So much more to it."

- Female, 20, UAE



Citizens value a rich and rewarding life in the physical world and experiences in the virtual world.

 "I value happiness and freedom. Before I went to high school, I suffered from a lot of academic stress since I was in the 3rd grade (fourteen to fifteen years old) of middle school. I talked with my parents, and they told me to do something other than study to find happiness and freedom."

- Male, 18, South Korea

 "The metaverse is a second home, a getaway. It's freedom that you don't have in real life. It's freedom because sometimes people can't go outside physically, or don't feel like it, so it can be a way to cope, or to experience something new."

- Male, 17, US



Libertarians value enterprise and entrepreneurship, seeing opportunity in the emerging technology of the virtual world.

 "I'm a lover of money so I tend to spend more time with these types of games [Sandbox] than Fortnite games that I play for fun. You get more experience of the NFT world, get to meet new people and get to learn more information. [...] It's for fun and for benefit! In Sandbox, I know I'm earning something and I'm enjoying myself."

- Male, 18, US

 "The virtual world is a world full of opportunities to earn a lot of money and it's entertaining at the same time. I believe that metaverse coins are the future of gaming and earning money because the more you play the more crypto you get."

- Female, 24, South Korea



Status-Seekers value competition as the chance to prove their status, viewing the virtual world as a space to rise above their peers.

 "The competition aspect is what keeps me playing. When you beat more people or attain a higher rank you have something to show off for it. It makes me feel like a peacock - I got an exclusive thing because I played better than anyone else, or if I'm playing with friends and we're doing really good, I get to trash talk the other team. That's what keeps bringing me to online multiplayer spaces, the competition and comradeship."

- Male, 25, US



The virtual spectrum

Awareness of the metaverse is low but engagement is high: Many Gen Z don't see themselves as 'in' the metaverse and don't always know what the metaverse entails, yet are engaging with online platforms with metaverse elements. The lines between their virtual and physical worlds are increasingly blurred, and better understood as a spectrum of activity rather than separate spheres, as Gen Z look to the virtual to offer them experiences they can't have elsewhere.

The Gen Z we spoke to engage with online platforms that tap into elements of the metaverse in the games they play and communities they join, yet familiarity with the metaverse is low - they do not consider themselves to be 'in' the metaverse.

Instead, they view it as a place of yet-untapped potential, and for many of Gen Z, the metaverse is a thing of the future rather than their current reality. Yet just because they struggle to define the metaverse does not mean they do not already engage with it. Popular culture has led them to expect a new world, while the metaverse they inhabit is an extension of their current one.

The exception here is **Brazil** where connectivity remains slow, forming a barrier to entry for many, and meaning Gen Z are more likely to see a distinction between the physical and the virtual.

While the **UK, US, South Korea and UAE** are characterized by most having access to technology and stable high-speed internet, the culture of all markets emphasizes the value of collective, real-life experiences as milestones of you, with social expectations, meaning there is still some stigma about being perceived to spend too much time online.

Some stigma around the concept of the metaverse comes from its characterization in popular culture, especially with themes of dystopia, alienation, and corrupt technology. The term 'metaverse' was coined by Neil Stephenson in his 1992 science-fiction novel Snow Crash, envisioning a world of hyperinflation caused by increasing use of unregulated, electronic, encrypted currency where people explore the virtual world as a way of escaping their dystopian reality¹⁰.

More recent interpretations in popular culture highlight the concerns around the **CENTRALIZATION** of the metaverse - in the 2011 novel (and subsequent 2018 film) *Ready Player One*, users find escapism from their dystopian reality in a virtual environment called OASIS, with the main villain of the story the big businesses who seek to control the future of the metaverse.

This may explain why many of our Gen Z associate the metaverse with themes that contradict their key values, while others express a wariness around attempts to commercialize the virtual frontier in a way which may limit freedom of expression. Yet much of this stems from a lack of awareness around what the metaverse entails. There is no 'official', agreed definition of the metaverse, and different profiles are drawn to the virtual sphere for different reasons.

The exception [to high engagement] is Brazil where connectivity remains slow, forming a barrier to entry for many, and meaning Gen Z are more likely to see a distinction between the physical and virtual.

As such, for Gen Z across most markets, the line between the virtual and physical spheres is increasingly blurred and better thought of as a spectrum: daily activities, such as socialization or shopping, might take place in 'real life' and then be moved online, seamlessly. Other activities, such as gaming and social media, are exclusively digital and

allow for unique experiences beyond the boundaries of physical possibility. We find that relationships, identities, and inequalities from the physical world carry over into the virtual as our Gen Z bring their pre-existing values into the metaverse, shaping it in their image.

In their words: How do our Gen Z define the metaverse?

A new world:



"I think it just means a virtual world. I think all the virtual worlds and games on the internet can be the metaverse. Everything that we can communicate through on the internet is the metaverse."

- Male, 23, South Korea

A revolution of socialization:



"I think that the metaverse itself is a revolution in digital communication and how we perceive digital relationships. Like I said, it is very hard to humanize this. Online there's always this possibility of you blocking the person, we won't be able to remove that."

- Male, 21, Brazil

A place to do the impossible:



"The metaverse is a way of experiencing something you can't do physically, like survival games - it simulates something no human wants to do anymore. Or you could be walking around next to a character dressed as Darth Vader and Bambi all at once. It crosses and intersects different experiences that people enjoy - the metaverse is a way of doing something that you would like to do physically, everywhere, all at once."

- Male, 23, UK

A personalized space:



"For me, the metaverse is a space or a play place all about virtual reality because you're not actually there, but you're communicating with people in real time, and you get to see yourselves as either what you want or something you can create. So it's all about a space for you. For me, that's what I think it is."

- Female, 20, US

A gimmick:



"There is, frankly, little difference between the virtual world and the real world. I like to play games and I play games with my friends at school. If there's a game that I like, I recommend it to my friends, so all in all, the virtual world and the real world are similar to me."

- Male, 18, South Korea



10 The Sci-fi Guru Who Predicted Google Earth Explains Silicon Valley's Latest Obsession

Socialization in the metaverse

Social experience is a key draw to the metaverse: Gen Z search for connection with those who share unique interests, defying the boundaries of geography, taking part in virtual experiences with those whose company they value, and valuing the convenience of virtual interaction.

Socialization is core to their experience of the metaverse, as without social experience, or mutual awareness of other user's presence, the metaverse as a concept ceases to exist - the Gen Z we spoke to are well aware of this, seeing socialization with others as the most fundamental driver to the metaverse. This trend is reflected in data that shows that digital entertainment (64%), gaming (60%), and socializing (59%) are the three areas that most people think will be impacted by the metaverse in the future¹.

Community-building:

 *"What I like most about playing video games is the social aspect. [...] It makes the community feel connected. It's not just some guy in a suit in a boardroom dictating what we should play, it's a game driven by users."*

- Male, 25, US

Yet Gen Z do not necessarily view this socialization as open or flexible. Other research shows that Gen Z prefers to limit those they share with online to a trusted **inner circle** and this is reflected in our Gen Z: In a world where digital footprints last forever, Gen Z are increasingly concerned about their public image online, and so tend to reject the open sharing favored by Millennials in the early days of social media¹¹.

Public versus private:

 *"I present myself well on Instagram because everyone can see it. I pretend to be the happiest person, and don't post negative things. But on Discord, I'd be more joke-y - I'd be more confident, and more myself. I like*

using Roblox and Discord because I can talk about my interests with my friends and I'm more confident than face-to-face, so I can express myself more."

- Female, 17, UK

Instead, our Gen Z seems to favor the careful curation of close, trusted friends with whom they feel free to be more authentically themselves, favoring social media apps that allow private sharing amongst friends. Many find that socialization with inner circles in the metaverse can be as rewarding as physical world relationships, with the same richness and depth.

There are even opportunities to build greater connections, due to the ability to form bonds with like-minded people around the globe. This is particularly true of tech-forward profiles like **Status-Seekers** and **Solidarity-Searchers** who are driven to the metaverse on the promise of living social lives that are as fulfilling - if not more so - than those in the physical world.

Connection and bonding:

 *"Seeing them in real life is not a prerequisite to feeling close. You can tell what kind of person they are by just exchanging a few words. I have these friends on Discord who I met on a different platform, and I can say that I was able to screen them - I feel very close to them. Unlike real friends, I think I can be more comfortable with them even though I haven't seen their faces."*

- Male, 23, South Korea

Inner circles in the metaverse are created both online and in the physical world. Some are formed of physical world friends who play the same games or share the same interests - particularly so for **Citizens**, who view the metaverse as an opportunity to solidify and extend their current friendships. Among more tech-forward members of Gen Z it is common to meet like-minded individuals in an online game or community (e.g. Twitter, Reddit, Twitch). And while some bring their physical world friends into the metaverse, others take them out of it, meeting online friends in real life, although it still carries some stigma.

From virtual world to physical world:

 *"Once I met a friend online and then I discovered she lives close, so we decided to meet up. [...] It didn't feel like meeting a stranger, I felt like I knew her well already."*

- Female, 20, UAE

While some have different friends for different platforms, many will bring their inner circle with them from platform to platform depending on mood, current interest, and activity. For instance, some platforms - such as **Discord** - are better suited for chatting and communication, while a virtual game may be selected at purposeful moments to heighten the experience of socialization. Many will even combine both, using external channels for communication like **WhatsApp** while they engage in virtual worlds such as Roblox, Fortnite, Minecraft, or Overwatch, heightening immersion as Gen Z circumvent the sometimes-limited in-game communication capabilities of these games.

Socialization in the metaverse is defined by being able to do what is not possible in the physical world, playing through a campaign on an online game that places you in a battle-field, historical city, or fantasy land, or even the more mundane: during COVID-19 lockdowns, our Gen Z turned to lifestyle simulators like 'Animal Crossing: New Horizons' to recreate the experience of just 'hanging out' and completing once-everyday activities they could no longer do.

Some of Gen Z express concerns around the future of socialization in the metaverse. They fear virtual experiences may replace the physical, or remove the crucial features of in-person interaction like tone or facial expression.

The need for physical interaction:



"Even if we're able to create a realistic virtual reality, an extended reality, human contact is still necessary. And when you meet up with the person, in person, talk to them, face to face, touch them, you have a different contact. You create a different bond."

- Male, 21, Brazil

Yet, Gen Z are flexible - they overcome the limitations of virtual communication, using 'tone indicators' (e.g. /j for 'joking', /srs for 'serious', or /gen for 'genuine') to ensure true meaning is not lost while remaining inclusive of those with neurodiversity, or to bridge linguistic and cultural differences in communication. For many, the convenience of socialization in virtual spaces is a key driver, as it allows them to live authentic social lives without leaving their homes.

As such, while Gen Z may be driven to socialize in the metaverse for different reasons, they are united by a desire to connect around unique interests, values, and identities, rather than be limited by geography and luck. Across all profiles and markets, socialization in the metaverse is seen as the natural continuation of social life in the physical world, presenting an opportunity to find stability in like-minded individuals and deepen the connection with those you already know by heightening the experience of online interaction.

Case studies

A Status-Seeker from South Korea

 He socializes in the metaverse to find others who enjoy the same games as him, finding friendship, and communicating across platforms.

Why: “While I recommend various games to my real-life friends, they all have different preferences to me. Even though we’re close in real life, we all play different games, which is why it’s good to meet people online.”

Who: “I meet different friends in different games. I have some friends who play Minecraft, and friends who play other games. I’ve met some of them in the metaverse - there are those that you immediately click with, those you feel awkward with, and those you never really talk to.”

How: “When I’m concentrating on playing games, I can’t see the chat window, so sometimes I’ll talk on another platform that allows voice communication, like Discord or Zoom.”

- Male, 25, South Korea

“ Even though we’re close in real life, we all play different games, which is why it’s good to meet people online.



A Citizen from the UK

 She socializes in the metaverse as an escape from everyday life alongside her boyfriend but is wary of the extent to which the metaverse can replace physical world socialization.

Why: “The metaverse is about relaxing and forgetting about the world.”

Who: “I’m not one of those people who constantly message people in the lobby, I’m more of a listener. I like being able to compete with the friends I already have there, and I play with my boyfriend, especially when I’m in that competitive mood. I play for the experience of the game, not the social aspect.”

How: “I do try to restrict myself as much as possible to be honest, so just an hour or two. Because I’m on the laptop all day at work and going to another laptop, it’s quite a lot. I don’t want to be stuck in my room all day, I want to try and get out and about whether that’s seeing a friend or my family, I don’t want to be alone too much.”

- Female, 22, UK

“ The metaverse is about relaxing and forgetting about the world.



Identity in the metaverse

Identity in the metaverse is a new opportunity for experimentation: Representation, experimentation, and aspiration are key as Gen Z create avatars that reflect key aspects of their identity which feel underrepresented in the real world, experiment with their identity to role-play, and feel freer to be ‘themselves’ without the limitations of the physical world.

Our Gen Z strives to establish their identity in the metaverse just like in the physical world as expressions of identity allows individuals to find their tribe: those they identify with, trust, and whose company they enjoy.

Gen Z have grown up with a wider acceptance and awareness of diverse lifestyles and, as such, are marked by their desire to categorize and understand this difference. In some communities on social media, like Twitter, Gen Z label themselves with their national identity, gender identity, sexuality, and even **MBTI PERSONALITY TYPE**. The metaverse presents them with new opportunities to represent, experiment, or aspire, a place where they can, in unique ways, reflect their values.

Seeking representation and personalization:



[...] It's something that upsets me a little bit in games, that there isn't a curly hair option. [...] I wish I was able to personalize it just like I wanted."

- Female, 24, Brazil

The most common expression of identity in the metaverse are **AVATARS** and **SKINS** which are the first thing other users ‘see’ in the metaverse and so are crucial for first impressions. If a user sees another player in-game wearing the same skin, outfit, or interest-based virtual asset, it signals that they have something in common - this is especially important when connecting with those outside a user’s inner circle.

More tech-forward members of our Gen Z – particularly those in **South Korea** – are more likely to view their avatars as an entirely separate

identity, complete with unique usernames, reflective of the things which drive them there. **Status-Seekers** in particular use their virtual alter-egos to engage in behaviors they would not necessarily feel comfortable doing in the physical world. Concerningly, some describe how anonymity online means their alter-egos are more antagonistic, engaging in **‘SMACK TALK’** against competitors due to the lack of physical world consequences. Others abuse anonymity to engage in manipulative or deceitful behavior as some men describe playing as women in order to befriend women, typically with ‘romantic’ intention, or describe engaging in behavior that would be considered online harassment. These examples represent the fear that women and other minorities express: that social inequalities and discrimination from the physical world will carry into the metaverse, limiting their freedom of expression.

Yet anonymity equally has benefits for our Gen Z. In particular, those in **UAE** view virtual avatars as liberating, a chance to communicate freely and without fear of judgment or repercussions for their physical world self. This is seen in Solidarity-Searchers across markets who welcome the opportunity to distance themselves from the physical world and design avatars that reflect those things they feel best represents them, from hobbies to political identity, to sexuality and gender, so they can bond with other users over shared attributes.

Others may seek to shed their physical world identities altogether, role-playing as a character for an escapist experience, donning skins or designing avatars that recreate a favorite character or imagining a new, fantastical version of themselves.

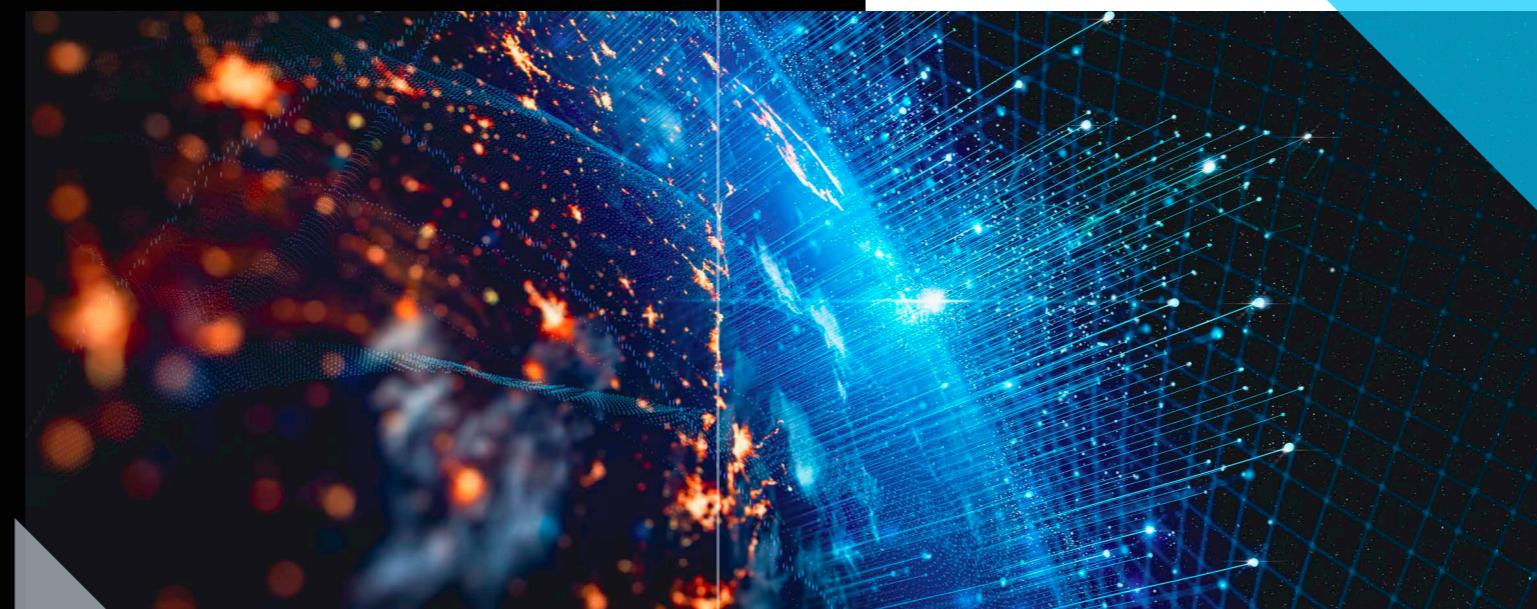
Freedom to be true to yourself:



"I can communicate freely and openly about anything; I can be myself and feel comfortable to address any topic."

- Male, 21, UAE

Citizens, for example, see the metaverse as an opportunity to experiment with different versions



of themselves in a more transient and flexible way (with lack of physical world consequence) - their avatars might style a new hairstyle, tattoo, or bodily modification. This reflects **Citizen’s** tendency to use the metaverse as a space to enhance the social experience with their pre-existing, physical world friends.

Status-Seekers, by comparison, may wear items that serve as a demonstration of their metaverse-self’s status and reflect skill or exclusivity (e.g. items ‘won’ in-game or an old skin that is no longer available which signifies how many years they have been playing a game).

In contrast, **Libertarians** break the mold: They carry their virtual identities into the physical world and are characterized by some as **‘CRYPTO-BROS’** (synonymous in online forums with **BORED APE** profile pictures). In the metaverse, they display NFTs / virtual assets which showcase their knowledge and savviness around emergent technologies and the investment opportunity it presents.

Defy the limitations of the physical world:



"The metaverse is good for people who want to be who they are, but can't in real life, like trans people."

- Male, 18, US

Gen Z experiments with their identity with ease in the metaverse, presenting themselves differently depending on the situation and platform (e.g. work versus social events) or different groups of friends (e.g. inner or outer circle). Our Gen Z foresee creating different avatars / wardrobes for different events, favoring ‘human’ avatars for work and education, and creating more ‘fantastical’ avatars to socialize and play.

Unlike the physical world, the metaverse is flexible and ever-changing, meaning Gen Z have the potential to reinvent themselves whenever they want with limitless possibilities. As such, in the metaverse, Gen Z will change their avatars to suit their needs - to represent, experiment, and aspire in a space of near limitless possibility.

Case studies

A Libertarian playing Sandbox

 This Libertarian wants the ability to create an avatar that allows him to reflect his interest in emergent technologies, engage in aspirational role-play, and benefit from his virtual assets. He does this in *Sandbox*, a decentralized virtual world running on Ethereum, where players can build, own, and monetize their gaming experiences and assets as NFTs.

What: “You have to purchase some things to make it look better. I created something for me that fits this particular world. I had to buy some assets for the avatar to make the avatar look better and good, I used my money to fund this. I used my assets to fund this.”

How: “To [be involved in NFTs] you must love art and you must be creative. I’m a lover of games but NFT art I created with inspiration from things like *Pokémon Go*. I invest a lot of my time and it pays off.”



Why: “I like cool shiny avatars, I’d like to create stuff that lets me be like a gangster walking around the city. I’d use it in the NFT world and put it on the market - I get joy from that, from getting to own things which are cool, glowing, and shining!”

- Male, 18, UK

 I created something for me that fits this particular world.



A Status-Seeker with an alter-ego

 This Status-Seeker has established an alter-ego within the gaming communities he frequents, enjoying the association with this name and forming close relationships with others under this identity.

What: “In person, I’m me. Online, some know me by my username, [Username], and that’s how I’m viewed by people online. It’s like Batman - I’m Bruce Wayne, [Username] is like Batman. My alter ego is less serious than in real life, more hyperactive. It’s like me in the real world, but more.”

Why: “One of the people I’ve known for a long time online gets excited when I come into the chat, he always goes, ‘hey, [Username]!’. It makes me happy that he knows me by my username - that he gets hyped because my name is funny, or because he thinks I’m a good person.”

- Male, 17, US



A Solidarity-Searcher who wants to live an aspirational identity and express themselves freely

 For this Solidarity-Searcher, aspiration and representation are closely linked as, in the metaverse, she seeks to both display her physical world identity and dress in ways she does not feel able to in the physical world.

What: “I have a very specific avatar I make every time I have to, it’s a certain look she must always have, a routine. I will always be black skinned, because I’m black, and I give her short hair because I want to look as tough and ready-for-combat as possible. That’s my preference, but in real life I don’t always get to dress that way.”

How: “Sometimes I might want to wear combat suits. I might just decide to wear a vest or jacket. It really depends on what’s trending - I want to look in-style. For my medical school avatar, I’d want her to always look smart and sharp, always dressing for the occasion.”

Why: “I feel like I’m more able to express myself in a better way when I’m online compared to in real life. I like the combat look because it shows people I’m a fighter. It gives me a sense of feminism, or equality. It shows people that I’m strong. It’s one representation of me I always go to.”

- Female, 18, US

 I’m more able to express myself in a better way when I’m online compared to in real life.



A Citizen who experiments with identity

 This Citizen enjoys experimenting with different looks and aspiring to an ideal version of themselves in the metaverse because it is flexible, affordable, and more experiential than the physical world.

What: “You can buy clothes in the metaverse for much cheaper than in real life, and they’re more colorful, and you get a satisfaction from being able to wear clothes you don’t usually wear. I don’t want to stand out in reality so it’s fun to try it with my avatar.”

Why: “There are parts of this avatar that are reflecting the real me and some that are not. I think I get vicarious enjoyment through decorating avatars. In real life, I gain weight easily, so I need to keep myself in shape. But in the metaverse, you don’t need to do that since you can choose your body.”

- Female, 18, South Korea

 I think I get vicarious enjoyment through decorating avatars.



Money in the metaverse

Virtual assets are a draw for some: Our Gen Z have a high awareness of virtual assets, with many having used their money to purchase in-game items or level-up boosts, but are wary of attempts to commercialize the metaverse.

As in the physical world, money spent on virtual assets is often strongly correlated with identity and self-expression. However, while it is possible to 'earn' in-game currency, those who are less tech-forward often find they cannot 'justify' spending money in the virtual world when they face a high cost of living in the physical one. Digital items are still seen to lack the same value as those in the physical world for many, meaning new financial technology and concepts such as **PLAY-TO-EARN**, **CRYPTOCURRENCIES**, and **NFTS** are often poorly received, and seen as inaccessible, risky, and confusing.

Efficient investments:

"I only invest in a game when I view the investment to be efficient. If it helps me level up faster and if it's something that I would regret not buying, I make the decision to purchase it."

- Male, 25, South Korea

While some of Gen Z are skeptical about the role of virtual assets in the metaverse, viewing them as volatile, risky investments, and bad for the environment, this does not mean they reject all forms of virtual assets. **Citizens** and **Solidarity-Searchers**, who are driven to the metaverse by a desire to collaborate and socialize, tend to purchase or earn virtual assets that are highly relevant to their interests or online trends. They will make a strong trade-off between cost and practicality (e.g. may purchase items on a favorite platform but nowhere else). Similarly, **Status-Seekers** are likely to purchase items with **ARTIFICIAL SCARCITY** or that demonstrate a high level of in-game currency (which can be synonymous with skill). Others express dissatisfaction at the prospect of **PAY-TO-WIN** gaming as they feel it undermines the sense of achievement which accompanies a high level of skill in a game.

Unfair advantage:

 *"I always thought about not spending money on games, but you get to a point that it's impossible not to. I don't like games that are pay-to-win, in which you have to invest a certain amount of money for you to reach the same level as others."*

- Male, 25, Brazil

Some of this is reflective of age and life-stage. Gen Z typically lacks the purchasing power of many older Millennials which can dissuade interest. However, it highlights the relative strength of **Libertarians'** keen interest in emergent technologies in comparison. This profile is most dominant in the more tech-forward markets in our study (UAE, South Korea, US, UK) and tends to skew towards men (except in UAE). Driven to the metaverse by their interest in virtual investment, they are the profile that most expresses a high awareness of cryptocurrencies and NFTs, viewing them positively, and seeing the metaverse as a space to invest in their vast

potential. They are more likely to have knowledge of the intricacies of these technologies, how they function and their application online, while some have even invested in them.

Crypto expertise:

 *"When Bitcoin came out I read all about Ross Ulbricht - he was a pioneer of cryptocurrencies and the dark web, which is basically a market that allows anything to be sold. He told everyone about the control the monetary system has over us and how bitcoin and other crypto could be a way to take control of that. If you don't make more than 9% a year on every investment, then the government is basically stealing money off you because they've allowed inflation. Crypto is a currency the government can't ruin."*

- Male, 23, UK

Among less-interested members of Gen Z, there is a similar level of broad awareness of the existence of cryptocurrencies and NFTs, but far less confidence in their practical application. Some are critical of emergent technologies, arguing that they serve to undermine the metaverse itself. Gen Z wants the metaverse to be a free, open space of flexible self-expression unrestricted by physical



12 Source: Minecraft

world limitation. However, money and commercialization are perceived to taint the metaverse, entrenching the inequality and struggles many of Gen Z experience. They worry it will cause hierarchy, block experience, and undermine creative freedom.

This is reflected in large backlash against cryptocurrencies and NFTs in recent months, as influential creators lead online protests against these technologies. Experts express caution around their volatility, and major gaming companies reflect this mood by pledging to keep them out of their games. Most recently, Microsoft and Mojang, owners of popular **Minecraft** which functions as a metaverse for millions of global players, released the following statement¹²:

"Each of these uses of NFTs and other blockchain technologies creates digital ownership based on scarcity and exclusion, which does not align with Minecraft values of creative inclusion and playing together. NFTs are not inclusive of all our community and create a scenario of the haves and the have-nots. The speculative pricing and investment mentality around NFTs takes the focus away from playing the game and encourages profiteering, which we think is inconsistent with the long-term joy and success of our players."

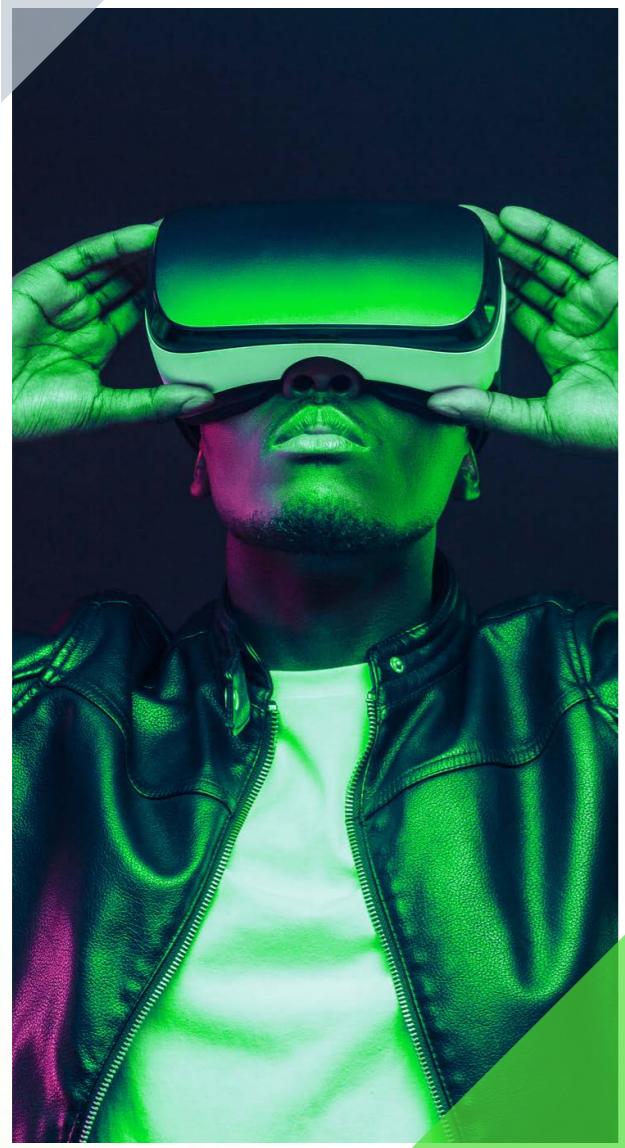
As such, while money in the metaverse is lauded as holding potential by some of Gen Z, others are cautious of its influence. The potential commercialization of the metaverse plays into key fears about dystopia, lack of transparency, and centralized control, as it reinforces perceptions that it is corporations - which Gen Z tend to see as inauthentic and unsustainable - who 'control' the metaverse.

Ultimately there are concerns that the establishment of money in the metaverse has the potential to contradict Gen Z's key values - and drivers - to the virtual world. A hierarchy of wealth undermines escapism, commercializes creativity, and the free expression of identity, while Gen Z dreams of a metaverse that is free, fair, and flexible for all.

Case studies

A Citizen in the US ...

 This Citizen recounts his experience of inequality in the metaverse and questions the future of cryptocurrencies.



What they buy: "When I was younger, I was really into Roblox, so I would buy Robux [in-game currency], but I don't really play video games that require me to purchase currency anymore. I mostly spend my money on material, physical things. I prefer the tactile experience."

Why they buy: "When we were younger, the internet was more open. When I played Roblox as a kid, I used to beg my parents to buy whatever the currency was so I could look cooler, but we just couldn't afford it. Especially when I was younger... I felt so bad about it. I didn't have any cool clothes in Roblox, I 'felt' basic. So now, like when I started playing Fortnite, I've never felt compelled to buy the skins."

View of crypto: "I come from a relatively low-income family. A lot of this stuff [cryptocurrencies, virtual assets] is inaccessible for me. It took me a year to save up for my MacBook, so I can't afford to drop \$1000 a month on Fortnite skins, I have other stuff to pay for."

- Male, 18, US

“ A lot of this stuff [cryptocurrencies, virtual assets] is inaccessible for me.

”



... Versus a Status-Seeker in the US

 This Status-Seeker is comfortable with paying for virtual assets with physical world currency in order to display his status, but is increasingly wary of emergent technologies.

What they buy: "In the virtual world? Sure, I've spent a little bit... I've purchased games. Minecraft, Fortnite, Call of Duty. And actually, I'll admit I have spent a lot of Call of Duty and Fortnite, around \$500 a month at one point."

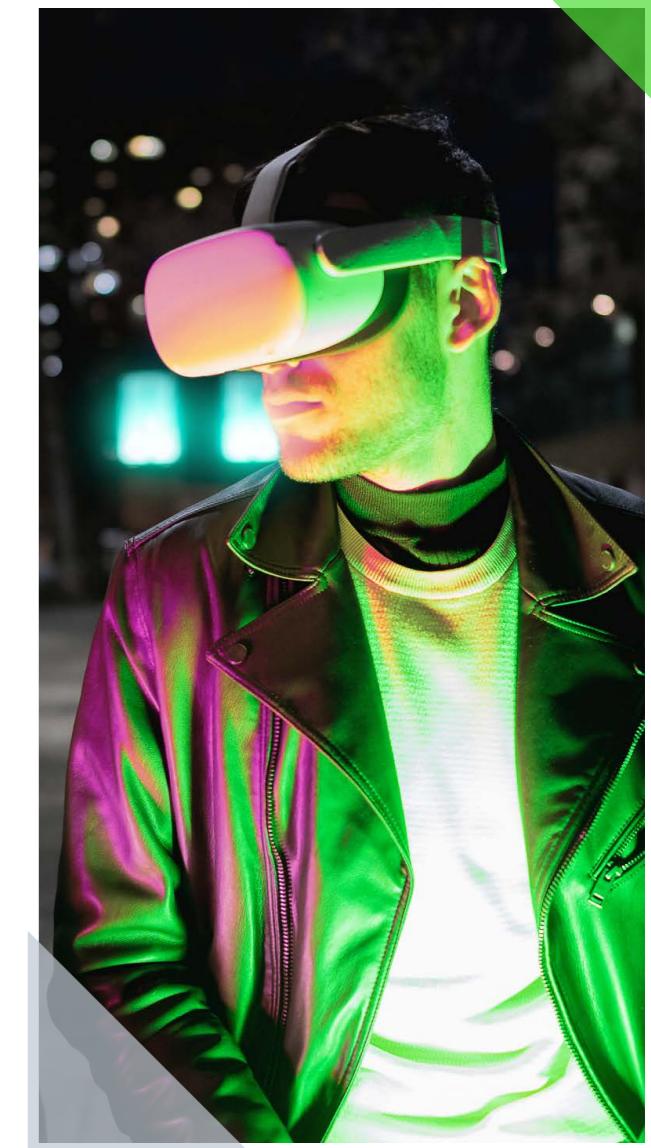
Why they buy: "I was purchasing stuff every month, like skins, or a new battle pack would come out and I'd max out whatever I could. I'm buying it just to have it, to be honest, because if you don't have it, you'll never have it. I don't want to miss out. In Fortnite, skins go away and don't come back. I'm super bad at a lot of games, but if I manage to get some of the skins, at least I know I'm better than other people, you know?"

View of crypto: "I saw stuff about crypto for the first time when this guy on YouTube was telling us all to 'buy now, buy now', and it was crazy, I was so hyped. But I've also seen the NFTs - those Bored Apes - and to me it's just another way to spend money if you have too much of it. It seems like a big hoax now because the whole market's crashing."

- Male, 17, US

“ I'm buying it just to have it, to be honest, because if you don't have it, you'll never have it.

”



Technology in the metaverse

Technology is central to their conception of the metaverse: Heavily influenced by the prevalence of futuristic virtual worlds in popular culture, with high awareness of technology like VR, many hope it will bring greater levels of immersion and experience to the metaverse but accessibility remains a concern.

The high association between technology and the metaverse amongst our Gen Z means that accessibility is a key concern as VR is seen as both integral to unlocking the full potential of the metaverse but currently unaffordable for most, especially the less tech-forward. Gen Z's expectations for the metaverse are reliant on access for all: Socialization, community, and connection is what distinguishes the metaverse from other online spaces, meaning if it is not accessible to all, it loses value to our Gen Z.

“Experience the impossible:

 “Virtual reality is an experience that can be simulated to be similar, or completely different, to real life - it’s flexible. I have a VR headset. I use it for entertainment as it can be used to play games and watch movies, in a completely different experience compared to real life.”

- Male, 16, UAE

Currently, the technology and networks used by Gen Z to support the metaverse are functional for most, but not robust, with variation across markets. Even individuals with high levels of connectivity experience barriers to entry due to the amount of bandwidth required for more immersive experiences, while others find their devices are not powerful enough to access virtual spaces. While some of those who took part in this study own their own VR headsets, usage varies. In **Brazil**, poor connectivity limits the amount of online activity, a trend replicated to a lesser extent across all markets. In **South Korea**, while the women in this study often live in households with VR, they are not the primary users, with men across all markets more likely to actively purchase and use VR technology. And across all markets, cost is a key concern as many struggle to justify the initial outlay with a key trade-off to experience.

“Cost-benefit trade-off:

 “[About new tech] If I buy it, I'll be the only one to have it, so why would I buy it? Even if it's an interesting investment, I only play with my friends. It doesn't make sense for me to have it to play by myself.”

- Male, 21, Brazil

Low VR uptake overall means those who own the headsets do not always have reason to use them due to a lack of others to play with, while **AR** usage is similarly low due to lack of awareness of practical use cases, suggesting Gen Z requires clear use-cases to justify return on investment before engaging with new technology.

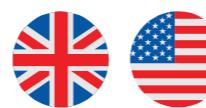
“Lack of virtual content:

 “I would like to purchase a VR device, but there isn't much VR content yet [...] If there was more, higher-quality virtual content in the future, I would consider a VR device.”

- Male, 23, South Korea

As such, Gen Z views technology as integral to the experience of the metaverse, but it is not yet seen to be capable of delivering the full metaverse experience, with investment in this area key to driving future usage. As digital natives, their expectations of technology rise at a high pace, and technology needs to keep up with Gen Z's desire for environments that reflect their values. Immersive enough to create the experiences they value so highly, accessible to respect diverse financial and geographical limitations, and highly connective to encourage rapid communication and community-building across the globe. Delivering this will help to create a metaverse that is communal, flexible, and open to all.

Case study



Into the metaverse for online workshops (UK & US)

As part of this study, Ipsos utilized Spatial.io, an online virtual platform to host workshops with participants in the metaverse. While pioneering, and a novel experience for all involved, these workshops were not without technical challenges on the part of our participants.

Our participant's experience with getting to grips with a virtual space presented a unique opportunity to understand their views on technology in the metaverse in-the-moment, getting their immediate responses, and allowing us to probe around lived experiences they may not have otherwise realized.

Our Gen Z enjoyed the novelty of the workshops as the platform allows for spatial rooms and sound which recreate the experience of a physical building.

This came with some confusion at first - many were unfamiliar with a virtual space that tries to recreate



the experience of physical life rather than circumvent it, but once settled most found it intuitive to walk to their required room and take part in the session. Many expressed enjoying the ability to design their own avatars - some created fantastical or wacky versions of themselves, while others kept it subdued and formal due to the setting, and some chose the first available skin out of convenience.

Yet our Gen Z also experienced technical difficulties stemming mostly from their own poor connection, lack of equipment, or poor knowledge of the platform. They identified some key areas of concern when it comes to the efficiency of technology in the metaverse:

- **Connectivity:** Even if many participants have a strong internet connection, some will not, and in collaborative spaces this undermines the immersiveness of the session and limits contribution as individuals lag or miss what others have said.
- **Power:** Many of our Gen Z's laptops were insufficient to host a large workshop in a virtual space, and although some managed to turn down their settings, many were unable to visualize themselves in the space due to the inability of their computer to process the platform.
- **Knowledge:** While most of our Gen Z were tech savvy, some struggled with the controls, meaning they were unable to move autonomously within the space and limiting their experience with a simulated environment.

Overall, our Gen Z identified **inequality** as the root of technical issues on the platform and anticipate difficulties for the future of the metaverse: those with poor connection will be less able to contribute, those with bad tech will see the metaverse in low quality, and those without the necessary skills and knowledge to navigate the metaverse(s) will be unable to participate.

Future of the metaverse

Poised to enter the metaverse: The rapidly changing world of the past five years has prepared our Gen Z to adapt to sudden onset changes and disruptions - from social and political unrest, global pandemic, and the threat of war - and poised them for entry to the metaverse as they seek stability and an escape from the realities of the physical world as the pioneers of the metaverse.

The Gen Z we spoke to are future-facing and embrace evolving technologies by default. While they are not necessarily aware that they are in the metaverse currently, they have a clear vision for its future predicated on a belief that technological development is not a matter of 'if' but 'when'.

Technology, integral to the future of the metaverse, is expected to become even more integrated into our bodies and society. There is an expectation that virtual activities - from making new friends to workplace meetings - will become normalized. While there are concerns over whether technical infrastructure will develop fast enough to support the growing metaverse, many believe that it will provide a far more communal, immersive, and realistic experience.

Across profiles, Gen Z envisions a range of use-cases for the metaverse: while **Solidarity-Searchers** see it as heightening convenience and allowing them to complete mundane 'social chores' (e.g. clothes shopping) from home, **Citizens** see its application in heightening the immersiveness and enjoyment of socialization and entertainment. And as technology improves, the depth and range of virtual activities are imagined to grow - while some have already attended virtual concerts, others imagine virtual museums, films, and spectator sports, with the ultimate aim of replicating the senses of the physical world, virtually.

“More immersion:

 "I like to use VR because it allows me to experience things that are not easily accessible, like paragliding."

- Male, 16, South Korea

“More realistic:

 "The VR glasses are my favorite piece of technology because they allow me to engage in activities like flying planes and driving cars - the technology is so amazing, I've heard that in the future it can even make you feel pain when doing a virtual activity as a way of making the experience more realistic."

- Female, 24, UAE

Gen Z in this study (by virtue of their life-stage) are most excited about the prospect of socializing and playing within the metaverse, perceiving it as their playground. As they grow older, Gen Z anticipates key daily activities will become a part of the metaverse over time. Those we talked to are vocal supporters of hybrid work and they see the metaverse playing a key role in enabling and enhancing this (helping to better foster remote relationships with colleagues). The metaverse is expected to heighten virtual connection and recreate the 'human' element of work, play, and social interaction in the virtual sphere.

However, there are concerns about the future of the metaverse. Our Gen Z are wary about how the metaverse will impact and be impacted by the real world. They anticipate an even blurrier line between virtual and physical reality, voicing concern about how it may limit essential in-person socialization, leaving us constantly 'switched on' with no division between physical and virtual life, and permanently altering the way in which we relate with each other. From political movements to environmental concerns, our Gen Z is reluctant to forget those things which will ultimately shape how the metaverse is formed and are conscious of

the impact technology can have on the world we live in. For example, they identify the high levels of processing power required to host virtual spaces and emergent technologies as damaging to the environment, and are particularly wary of the power the commercialization of the metaverse may give individual companies. Others voice concern around entrenching social inequalities within the metaverse, concerned that this limits accessibility and undermines the equal and open space of free expression they desire.

Since Gen Z seeks to stand out, some anticipate a rejection of the metaverse in the pursuit of physical experiences if it is perceived to become too 'mainstream' or harmful. And, in contrast, for many the reverse is true: they fear some will begin to reject life in the physical world for the experience of virtual reality, meaning those companies which will host the metaverse must demonstrate it is an extension of people's lives, not a replacement.

“The physical world can't be ignored:

 "When you're low income, it's not about cool clothes, it's about having clothes. If I ever have to choose between having something in real life or in Roblox, it will be real life every time."

- Male, 18, US

Across all markets, Gen Z wonders what living life on the virtual frontier means and how the metaverse might reflect their values. Gen Z questions whether the metaverse can truly give them the stability and escapism they seek; as with everything else, when Gen Z looks to the future of the metaverse, they do so with caution and concern, wary of anything that may destabilize their already shaky foundations. Yet they want to overcome these concerns.

While many of Gen Z, especially those who are not tech-forward, do not see themselves engineering the technology or writing the code that will form the metaverse, they do believe they will build what matters - the very thing which sets the metaverse apart from any other online space: its people.

“Pioneers of the virtual frontier:

 "I hope it will be our generation that creates the metaverse. [...] It would make it more fun to participate in it. I don't know what Elon Musk thinks is fun and is necessary for the metaverse, and it might not necessarily be what I think. So hopefully, we're the ones who get to create it."

- Male, 21, US

Whether a **Citizen, Status-Seeker, Libertarian, or Solidarity-Searcher**, Gen Z across all profiles and markets are united in wanting to **build** in the metaverse, whether to grow connections and communities or amass status and wealth. They are a diverse group of individuals with complex and rich inner lives, relationships, and values they want to see reflected on the virtual frontier. There is no one-size-fits-all, but the metaverse is defined by its flexibility, a space where Gen Z believes there is the potential to go beyond physical limitations. They view themselves not just as **architects**, overseers who will plan the structure and shape of the metaverse, but as **pioneers** who will cultivate and grow the essential networks of community and connection as they seek escape and stability amidst turbulent times.

Appendix

Profiles summary

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Citizens



- Less tech-forward
- View the metaverse as a place for virtual experience
- Uses the metaverse to expand the experience of socialization with physical world friends
- View their identity in the metaverse as an extension of their physical world selves and use the metaverse as a space for identity experimentation
- Purchasing virtual assets come with a trade-off to practicality and return on investment
- See the metaverse becoming increasingly integrated and normalized but skeptical it will be able to replace physical world experiences

Solidarity-Searchers



- Tech-forward
- Socialize through collaboration with others who share their interests in tight-knit online communities
- Identify strongly with their interests and values, creating avatars which reflect these to serve as a signal to other users
- Wary that money and commerce within the metaverse will limit freedom of expression but may purchase virtual assets when truly unique or reflective of special interests
- Excited for the potential for socialization and freedom of identity but concerned mainstream adoption may undermine tight-knit online communities

Status-Seekers



- Tech-forward
- Socialize through competition with others in video games, forming communities and networks of friends where they can display status and share skill
- Create separate, distinct identities within the metaverse, with these alter egos gaining reputation within communities and reflecting skill within a game through their avatars
- Many use digital currency to purchase cosmetic items within a favorite game or to signify status but are wary of how money may allow others to 'cheat' by purchasing level-boots
- Imagine technology enabling a more immersive gaming experience within the metaverse

Libertarians



- Tech-forward
- Socialize amongst like-minded individuals, sharing knowledge around emergent technologies, and more likely than other profiles to play 'play to earn' crypto-based online games
- While other profiles build identities within the metaverse, Libertarians take their identity into the physical world, seeing themselves as entrepreneurs and advocates for emergent technologies
- Many invest in cryptocurrencies and NFTs, with high knowledge and awareness of both, seeing the metaverse as an opportunity for decentralized commerce
- The most forward-looking of the profiles when it comes to the metaverse, viewing it as a key investment opportunity, and a 'virtual goldrush'

Definitions

AR

Augmented reality (AR) is an interactive experience of a real world environment where the objects that reside in the real world are enhanced by computer-generated perceptual information, sometimes across multiple senses, including visual, auditory, haptic, somatosensory and olfactory. Examples of popular AR include Niantic's 2016 game, Pokemon Go, or Snapchat's filters.

Avatars

An avatar is an icon or figure representing a particular person in a video game or internet platform. They are typically made to resemble human, but can be as fantastical or unique as possible depending on the platform, and can be customized from a mixture of different skin tones, body shapes, hairstyles, clothes, etc.

Bored Ape

Bored Ape Yacht Club (BAYC), or often colloquially called Bored Apes or Bored Ape, is a non-fungible token (NFT) collection built on the Ethereum blockchain. The collection features profile pictures of cartoon apes that are procedurally generated by an algorithm. As of 2022, sales of the Bored Ape Yacht Club NFTs have totaled over US\$1 billion. Various celebrities have purchased these non-fungible tokens, including singer Justin Bieber, television host Jimmy Fallon, rapper Snoop Dogg, rapper Eminem, singer Madonna, Neymar, Paris Hilton, Timbaland, and DJ Steve Aoki¹².

Centralization

A centralized market is a financial market structure that consists of having all orders routed to one central exchange with no other competing market. The quoted prices of the various securities listed on the exchange represent the only price that is available to investors seeking to buy or sell the specific asset. A centralized market is a financial market structure that consists of having all orders routed to one central exchange with no other competing market¹³.

'Crypto Bros'

An online label given to a stereotypical depiction of those who spend time in male-dominated internet spaces, characterized by a high level of interest in emergent technologies and technology in general, earning them the title of 'crypto-bros'¹⁴.

Cryptocurrencies

A cryptocurrency is a digital currency, which is an alternative form of payment created using encryption algorithms. A decentralized digital currency. It is described as a medium of exchange, such as the US dollar, but is digital and uses encryption techniques to control the creation of monetary units and to verify the transfer of funds.

The use of encryption technologies means that cryptocurrencies function both as a currency and as a virtual accounting system. To use cryptocurrencies, you need a cryptocurrency wallet.

Decentralization

In a decentralized market, technology enables investors to deal directly with each other instead of operating from within a centralized exchange. Virtual markets that use decentralized currency, or cryptocurrencies, are examples of decentralized markets. Decentralized markets have become more popular since the advent of blockchain technology, but there is less regulation and no government oversight¹⁵.

¹² Business Insider 2022

¹³ Centralization | Investopedia

¹⁴ <https://fortune.com/2022/07/21/crypto-bro-web3-gender-diversity-women-in-tech/>

¹⁵ Decentralization | Investopedia

Definitions (cont.)

Emergent Technologies	Technologies whose development, practical applications, or both, are still largely unrealized. These technologies are generally new but also include older technologies finding new applications. Emerging technologies are often perceived as capable of changing the status quo.
MBTI Personality Type	In personality typology, the Myers-Briggs Type Indicator (MBTI) is an introspective self-report questionnaire indicating differing psychological preferences in how people perceive the world and make decisions. The test attempts to assign four categories: introversion or extraversion, sensing or intuition, thinking or feeling, judging or perceiving. One letter from each category is taken to produce a four-letter test result, such as "INTJ" or "ESFP" ¹⁶ .
NFTs	NFT stands for "non-fungible token." At a basic level, an NFT is a digital asset that links ownership to unique physical or digital items, such as works of art, real estate, music, or videos. Ownership of virtual items or unique virtual assets are defined as 'non-fungible tokens' or 'digital collectables' that are stored on the blockchain linked to your title in a variety of databases. NFTs can be considered modern-day collectibles.
Open-standards	Gives users permission to copy, distribute and use technology freely or at low cost.
Pay-to-win	"Pay-to-win" describes a game where paying real money gives players a significant advantage over those who don't spend any money. Players can 'pay' for advantages through microtransactions, including extra lives, level ups, better gear, and randomized 'loot boxes' which typically have a small chance to receive high-level gear for a price.
Pay-to-earn	Otherwise known as Blockchain Gaming, it is a model which allows players to earn in-game rewards with real world value such as Decentraland, Sandbox, and Axie Infinity.
Skins	A "skin" is a kind of item that players can acquire in games. They change the appearance of the player's avatar (the character on the screen that represents the player). Skins can be as simple as a change in color scheme (often referred to as a Palette Swap), or as complex as a new avatar with different lighting effects and animations. Most companies are very careful to make sure these skins don't affect the actual gameplay though. The characters will still play the same. They will just look different doing so.
'Smack Talk'	Boastful or insulting speech, especially as intended to demoralize or humiliate an opponent.
VR	An immersive, interactive simulated environment experienced in first person, providing the user with a strong sense of presence.
Web3	The third generation of internet services which have been made possible by decentralized networks; a less static experience than Web2.0 and more dynamic, smarter, and social than ever.
XR	Extended reality (XR) is a term referring to all real-and-virtual combined environments and human-machine interactions generated by computer technology and wearables - e.g. it includes representative forms such as augmented reality, mixed reality and virtual reality and the areas interpolated among them.

Methodology

First stage: Online Community

- We recruited 30 participants for a minimum of 26 to complete in the UK and US
- We recruited 28 for 24 to complete in Brazil, South Korea, and United Arab Emirates

Second Stage: 45 minutes - 1 hour 'Play-a-long' depth interviews

- Interviews were conducted via a gaming or metaverse platform that is used by the participant
- Participants were selected based on their responses in the online community

Third Stage (UK and US only): x2 2-hour virtual workshops

- The workshops were run via a metaverse platform (Spatial.io) and lasted for 2 hours
- Participants could join from a mobile device, VR headset or web browser

Market	Time	Methodology	Target Audience
 UK	4th – 8th July	1-week online community	x15 - 16-19's x15 - 20-25's
	11th – 12th July	x6 online interviews (in the metaverse)	x3 - 16-19's x3 - 20-25's
	13th – 14th July	x2 online workshops (in the metaverse)	x12 - 16-19's x12 - 20-25's
 US	18th – 22nd July	1-week online community	x15 - 16-19's x15 - 20-25's
	25th – 26th July	x6 online interviews (in the metaverse)	x3 - 16-19's x3 - 20-25's
	27th – 28th July	x2 online workshops (in the metaverse)	x12 - 16-19's x12 - 20-25's
 Brazil, South Korea, UAE	18th – 22nd July	1-week online community	x14 - 16-19's x14 - 20-25's
	25th – 29th July	x6 online interviews (in the metaverse)	x3 - 16-19's x3 - 20-25's

16 <https://www.themyersbriggs.com/en-US/Products-and-Services/Myers-Briggs>

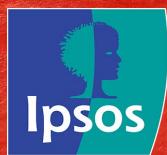
Sample specification

	Market & Participant Numbers	UK & US (N = 30 For 26)		Brazil, South Korea & UAE (N = 24 For 18)	
					
	Age Groups	16-19's	20-25's	16-19's	20-25's
Age Bands	16-17		≥ 7		≥ 6
	18-19		≥ 7		≥ 6
	20-21			≥ 5	≥ 4
	22-23			≥ 5	≥ 4
	24-25		≥ 5		≥ 4
Tech Adopters	Defined as those who are metaverse aware and have some experience with metaverse in different ways e.g.	<ul style="list-style-type: none"> • Cryptocurrency – Such as Bitcoin or Ethereum • Smart devices – such as smart watches or smart home devices • PC/console • AI • May have experience with AR/VR • NFTs or non-fungible tokens 			
Gender	Male / Female	50:50 split amongst those who identify as male/female			

References

1. Nokia August 1996: Nokia Starts Sales of the Nokia 9000 Communicator – First GSM-based communicator product hits the market (PDF)
2. Nokia's smartphone: 25 years since it changed the world
3. How the World sees the metaverse and Extended Reality (Ipos x World Economic Forum, 2022)
4. A Detailed History of the metaverse - and What's In Store Next (AAX Academy 2022)
5. Louis Rosenberg, CEO and Chief Scientist at Unanimous AI, Metaverse 101: Defining the Key Components (February 2022)
6. Signals of the metaverse
7. Forbes 2022 'Gen Z Set to Lead Retailers Into the metaverse'
8. Want to enter an LGBTQ+ metaverse? Well it's happening anyway
9. The Deloitte Global 2022 Gen Z & Millennial Survey
10. The Sci-fi Guru Who Predicted Google Earth Explains Silicon Valley's Latest Obsession
11. Ipsos - Beyond Binary
12. Minecraft 2022
13. Centralization | Investopedia
14. Decentralization | Investopedia

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For more information, visit:
www.nokia.com/networks/insights/metaverse