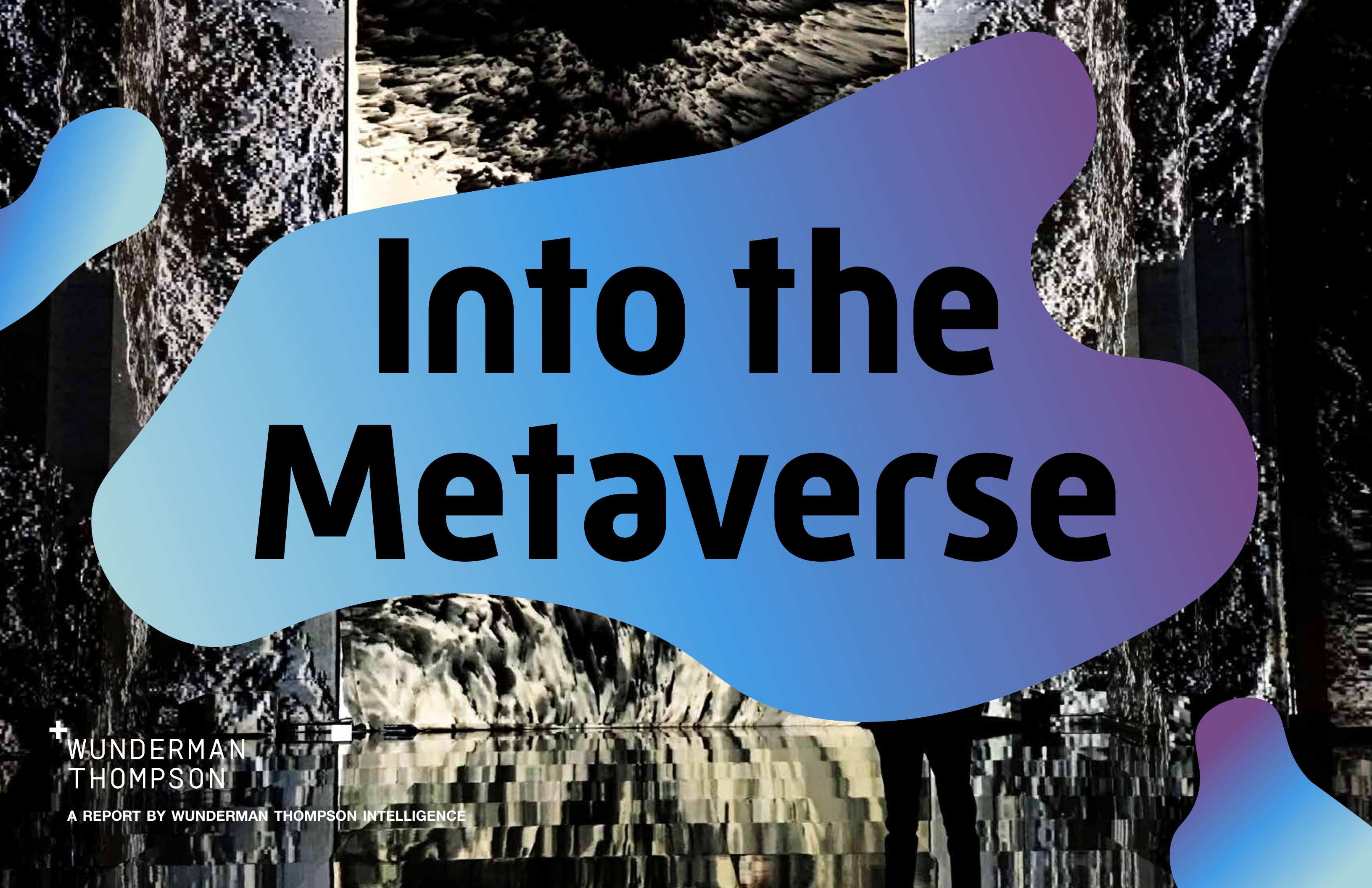




Into the Metaverse

+ WUNDERMAN
THOMPSON

A REPORT BY WUNDERMAN THOMPSON INTELLIGENCE

Foreword

Welcome to the metaverse. A place where our digital and physical lives converge; creativity is limitless; and location-defying worlds bring people together.

Interest in the metaverse has peaked this year—the number of searches for the word increased more than tenfold from 2020 to 2021, according to Google Analytics. Media outlets including the *New York Times*, *Washington Post* and the *Guardian* have all published extensive articles probing its implications. Companies from Epic Games to Microsoft to Facebook and SK Telecom have publicly announced plans to build metaverse worlds. Burberry, Coca-Cola, and Visa are just a few of many brands racing to be part of it.

Why the sudden attention? “In 2020, one thing became very obvious, very quickly, as COVID-19 began to spread around the world: we leapfrogged five to seven years in the digital revolution,” Hans Vestberg, CEO of Verizon, said during his keynote at CES 2021 in January. As COVID-19 restrictions ease, the acceleration of tech and its prominence in many lives will continue.

- 93% of global consumers agree that technology is our future
- 76% say their everyday lives and activities depend on tech
- Over half (52%) say their happiness depends on it

The virtual domain has become an all-encompassing space where commerce, education, entertainment, community-building, wellness, work and more can

be accessed. As more people spend time online, digital third spaces are becoming the new hangouts, making this a thriving environment for brands and influencers. But the potential of the metaverse goes beyond the digital domain, allowing for interactions that blur the boundaries of physical and digital.

“Into the Metaverse” explores what the metaverse is, how it’s changing people’s lives, new opportunities that are being created, and why brands need to pay attention. The report includes original consumer data by Wunderman Thompson Data from 3,011 digital participants across the United States, United Kingdom and China. In addition, 15 experts were interviewed; on page 13, they offer their take on the metaverse and unpack its potential—and Wunderman Thompson Intelligence maps out the core elements that make the metaverse on page 21.

Does the metaverse exist yet? Not quite. However, the seeds are sown—and it’s just a matter of time.



Emma Chiu
Global director, Wunderman Thompson Intelligence
wundermanthompson.com/expertise/intelligence

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About the data in this report

Unless otherwise stated, all findings in this report were collected by Wunderman Thompson Data as part of an original survey on technology, digital spaces, and the metaverse.



Introduction





As more of our lives are spent online, it's becoming harder and harder to distinguish "real" life from life lived digitally.

Virtual singers, such as Shanghai Henian's Luo Tianyi, have grown into a multibillion-dollar industry, your best friend could be an AI bot like Kuki, and non-fungible tokens (NFTs) have revolutionized digital ownership, with renowned auction houses Christie's and Sotheby's auctioning digital masterpieces for tens of millions of dollars. "The smartphone is no longer just a device that we use," says Daniel Miller, professor of anthropology at University College London. "It's become the place where we live."

We're replicating our routines, interests and obsessions in digital worlds: from picking outfits for our avatars to wear and cars for them to drive to fostering virtual relationships and intimacy; from zoning digital land and constructing virtual homes to meeting friends at the virtual mall; and from hosting holographic meetings to pursuing the allure of a more equitable and inclusive society. As our habits evolve, we're outgrowing the bounds of the internet as it was first created—precipitating a new era of digital platforms.

So, "Are we in the metaverse yet?" the *New York Times* asked in a July 2021 article. "Crypto people say they're building it. Gamers might already be living in it. The art world is cashing in on it. But what is it?"

The metaverse, a term first coined in Neal Stephenson's 1992 sci-fi novel *Snow Crash*, is a blending of digital and physical existence. Almost 30 years later, that definition is taking shape before our eyes. Some call it the new internet, others a democratized virtual society, yet others the convergence of virtual and physical realities, persistent virtual spaces, or a digital twin of our own world.



Above: Beeple artwork sold at Christie’s Right, clockwise from top left: Kuki, images courtesy of ICONIQ AI; The Fungible Collection by Pak, courtesy of Sotheby’s/Pak; Natively Digital: A Curated NFT Sale, courtesy of Sotheby’s



What’s clear is that it’s not the internet we were introduced to. It’s the next iteration—a “successor state to the mobile internet,” wrote Matthew Ball, a venture capitalist and essayist whose work includes a nine-part primer on the metaverse. There “will be no clean Before Metaverse and After Metaverse,” Ball wrote. “Instead, it will slowly emerge over time as different products, services and capabilities integrate and meld together.” Some indications that this emergence has begun have been building over the past year, including: accelerated innovation in virtual reality (VR) and augmented reality (AR) technologies; the proliferation of gaming platforms as social and cultural destinations; and the race for companies to stake a claim on their corner of the metaverse.



Tech-celeration

Consumers’ reliance on tech is growing. More than three-quarters (76%) of global consumers say their everyday lives and activities depend on technology, rising to 79% of gen Z (ages 16-26) and 80% of millennials (ages 27-41). And this dependence is informing every aspect of daily life: 64% of global consumers say their social life depends on technology, 61% say their livelihood depends on technology, 56% say their creativity depends on technology, 52% say their happiness depends on technology, and 50% say their wellbeing depends on technology.

In response, companies are racing to develop the tech that will power 360-degree digital experiences. In anticipation of immersive spaces powered by VR and AR, social media giants and big tech companies have been funneling funds and manpower into these areas. In August 2021, TikTok announced that it’s building its own AR development platform, called TikTok Effect Studio. A March 2021 report revealed that Facebook now has 10,000 people—almost a fifth of all Facebook employees—working on AR and VR under the Reality Labs division. Snap purchased Vertebrae, which helps brands create 3D virtual versions of their products, in July 2021, following the May 2021 acquisition of WaveOptics, the company responsible for the AR display in Snap’s new Spectacles glasses.

Google Pixel 6’s tensor chip would make “breakthrough” AR experiences, Google’s director of devices Rick Osterloh told *Business Insider*. Apple is rumored to be developing a VR headset, which could hit stores in 2022. The tech company’s acquisition of VR company NextVR in 2020 sparked speculation about Apple’s plans to develop AR and VR technologies in new product categories.



A primer on augmented, virtual, mixed and extended realities

Augmented reality (AR) is when you’re still within your current environment, and you’re just overlaying computer graphics on top of what you’re seeing—whereas with **virtual reality (VR)**, you’re taken to a different world. They are like the inverse of each other.

Mixed reality (MR) has virtual or digital elements mixed with physical elements, as opposed to starting with physical and then overlaying. Mixed reality is like the more advanced level of augmented reality, where the technology is actually able to recognize your environment using depth sensors. With AR, whatever it is that you project, it’s always going to be overlaid on top of what the camera sees, but with mixed reality, a digital object can appear behind the table, as opposed to in front of the table.

Extended reality (XR) encompasses everything—augmented, virtual and mixed.

Helena Dong, creative technologist and digital designer



Although China’s government is cracking down on the gaming and tech industries—in August 2021, the Chinese government announced new bans on weeknight gaming for minors, limiting online gaming to three hours per week, and forthcoming laws to regulate domestic tech companies—Chinese tech leaders have been steadily paving the way to the metaverse over the past few years. Giants including Tmall, Taobao, JD.com and WeChat have established metaverse precursors in the form of interactive digital malls, while virtual influencers such as Ling are going mainstream and partnering with top brands including Tesla. Most recently, TikTok owner ByteDance took its first step into the metaverse by acquiring VR startup Pico at the end of August 2021, and earlier in the month Alibaba launched an NFT auction site.

Gaming everything

What do *Animal Crossing*, *Sea of Thieves* and *Fortnite* have in common with a coffee shop? Increasingly, they’re all places to meet and socialize. “Part of video



games is that social aspect—meeting up with people, communicating—which is becoming of paramount importance,” Keith Stuart, games editor at the *Guardian*, tells Wunderman Thompson Intelligence. Nearly two-thirds (61%) of UK adults played games with friends and family to stay in touch during lockdown, according to a May 2021 survey from Xbox.

Nick Fajt, CEO and cofounder of social gaming startup Rec Room told *GeekWire* that he no longer distinguishes between social and gaming platforms. “Those entities, which probably used to be distinct, we’re seeing them merge together. I think in a lot of ways gaming is the new social.”

The lines between the gaming and entertainment industries are also blurring. By 2025, the gaming market could become a \$300 billion industry, according to GlobalData—three times the global film industry’s record high of \$101 billion in 2019. Striking evidence that, especially for younger generations, “gaming is

"Gaming is replacing not just old games, but also TV and Netflix"

Daniel Li, partner, Madrona Venture

replacing not just old games, but also TV and Netflix," Daniel Li, partner at venture capital firm Madrona Venture, told *TechCrunch*.

Gaming platforms and technologies are already being used to reimagine the entertainment industry. British broadcaster ITV is offering new viewing channels through *Fortnite Creative* mode, recreating its popular gameshow *The Void* in *Fortnite* in July 2021. Netflix created an interactive *Stranger Things* world in *Roblox* in June, merging the worlds of streaming and gaming.

Epic Games' *Fortnite* is attempting to create "the entertainment experience of the future," according to Donald Mustard, chief creative officer at Epic Games, bringing together concerts, gameplay and Hollywood. Describing *Fortnite*, Mustard told the *Verge*, "It's going to be a new medium, where it's this blended entertainment experience that has interactive elements."

In June, Tribeca Film Festival announced a partnership with Epic Games to bring Unreal Engine, the tech Epic Games uses to develop its games, to independent filmmakers. "The technology that has powered so many of today's most renowned video games is becoming more and more essential to the production of films and television shows," explained the festival's cofounder and CEO Jane Rosenthal.



Gaming platforms such as *Fortnite* and *Roblox* are merging social media, gameplay and entertainment—offering a first glimpse into what the metaverse could become. “It’s more than a game,” Matthew Weissinger, vice president of marketing at Epic Games, said of *Fortnite*. “We’re building this thing called the metaverse—a social place.”

The metaspaces race

Everyone is now staking their claim on the metaverse, from established players like Facebook to unexpected entrants such as law firm Reed Smith.

Big tech leaders are rushing to claim the metaverse as their own. Facebook established a new metaverse division in July 2021 after Mark Zuckerberg famously announced that Facebook’s future lies in becoming a metaverse company. Microsoft CEO Satya Nadella said in August 2021 that Microsoft is working on building the “enterprise metaverse.”

Gaming companies are carving out space for the metaverse on their platforms. In April 2021, Epic Games closed a \$1 billion round of funding to “support Epic’s long-term vision for the metaverse,” the company said. Nvidia jumpstarted its “metaverse for engineers” with the opening of Nvidia Omniverse in August. The platform, which launched in beta in December 2021, will connect “engineers, designers, and even autonomous machines to create digital twins and industrial metaverses.”

Even companies in industries that are indirectly related to the creation of the metaverse—like law and wealth management—are anticipating its growing value. In June, Roundhill Investments and Matthew Ball launched a metaverse investment fund, which has holdings in companies including Nvidia, Tencent and Roblox. In March 2021, the Metaverse Group announced plans to launch

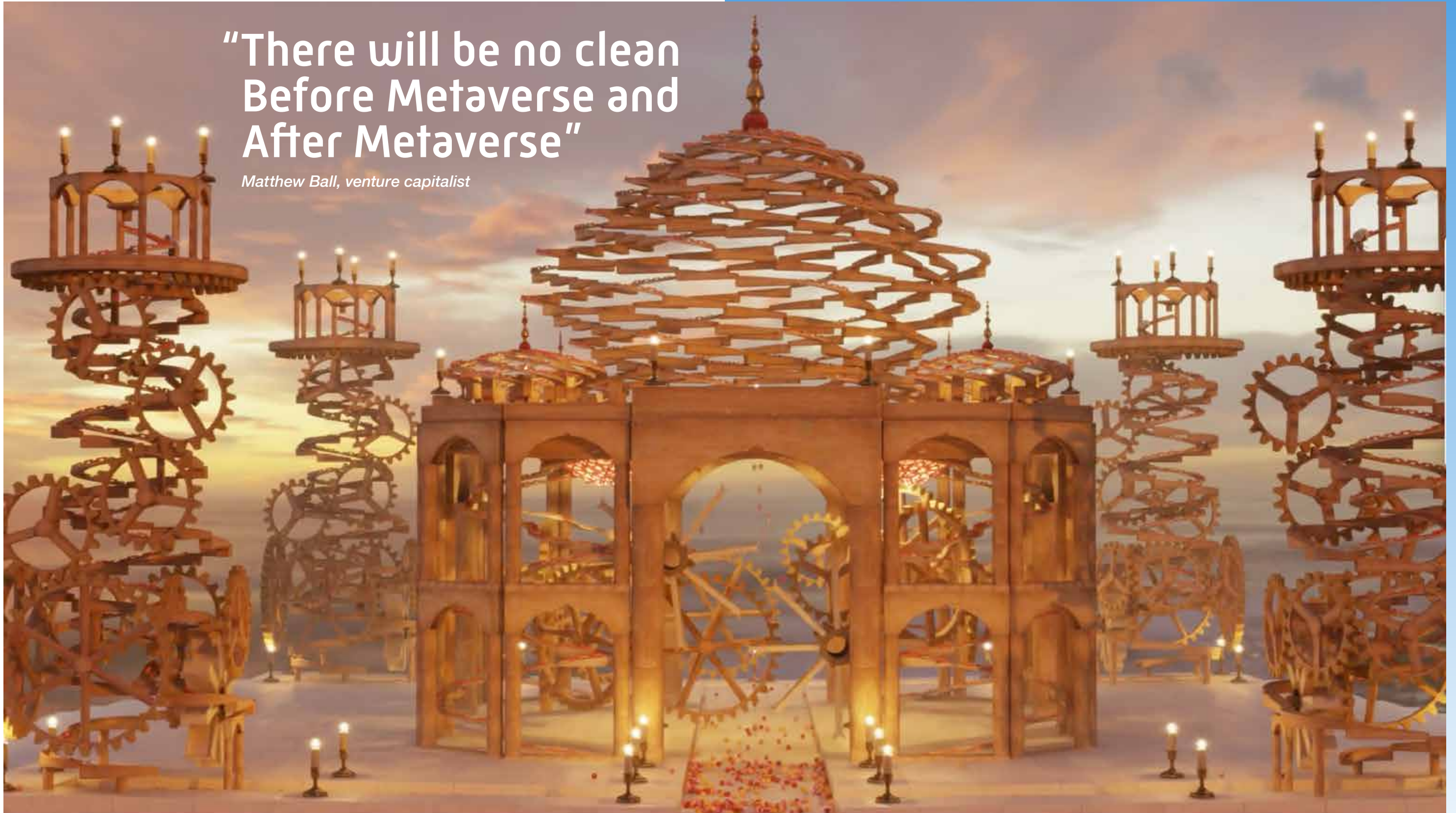


Metaverse REIT, a first-of-its-kind real estate investment trust for virtual assets. And Reed Smith law firm released a legal guide to the metaverse in May 2021, covering legal issues ranging from intellectual property to privacy to competition in what the firm calls “the biggest-ever industrial revolution the world has ever seen.”

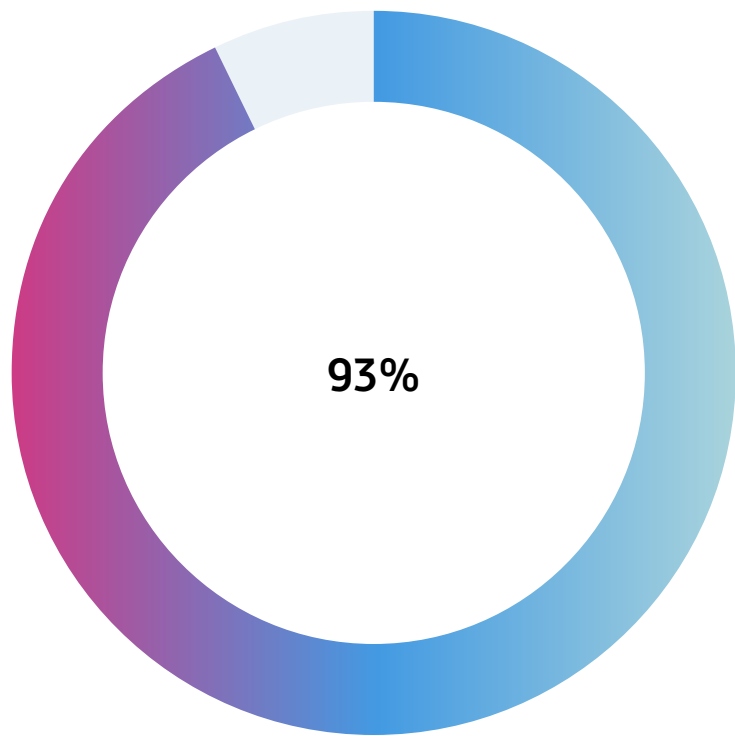
As companies compete to enter the metaverse, how will it influence consumer behaviors and lifestyles? And what are the opportunities for brands and business? While some of the foundational tools and habits that will form the emerging building blocks of the metaverse—including a fundamental reliance on technology—are already established, only 38% of global consumers have heard of the term. It’s time to truly define what the metaverse is and establish a roadmap for entry.

"There will be no clean Before Metaverse and After Metaverse"

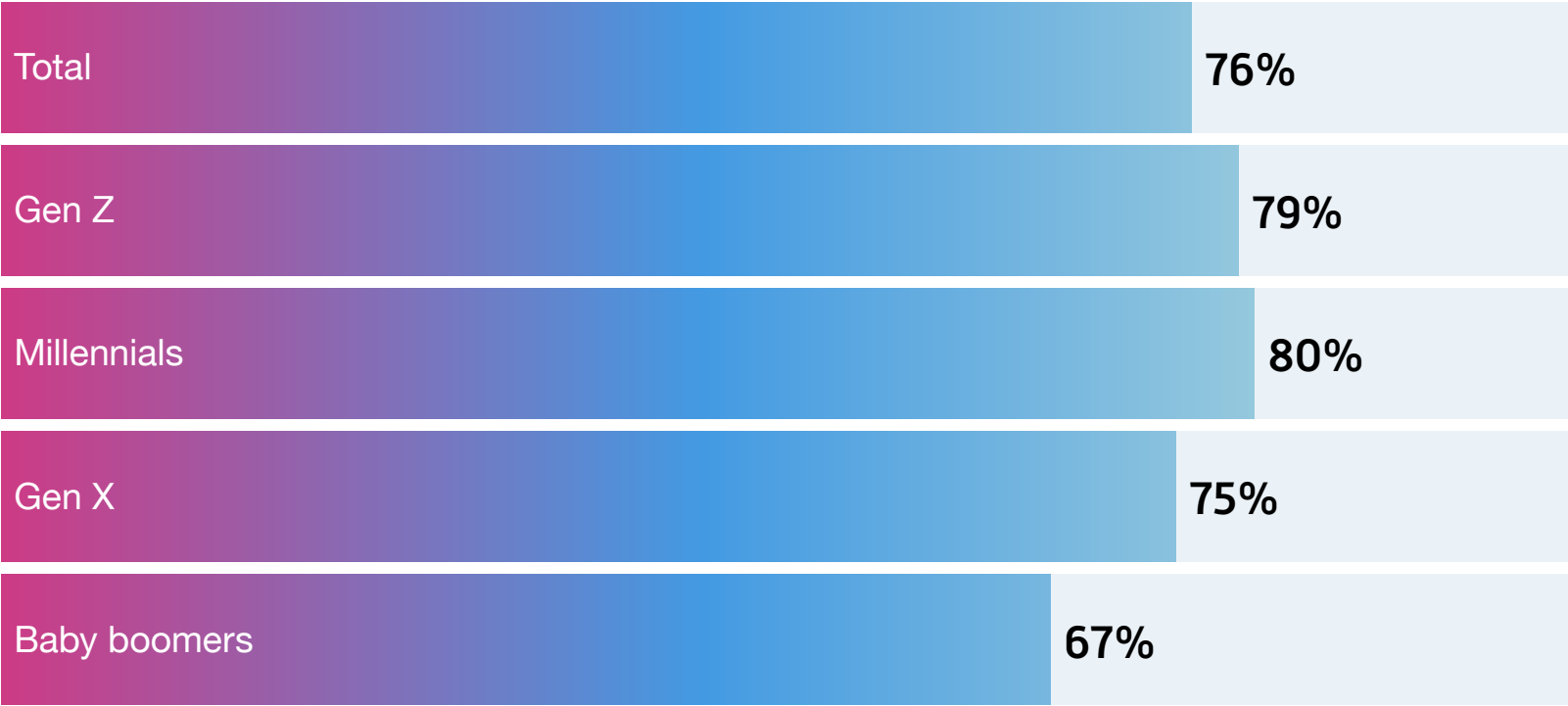
Matthew Ball, venture capitalist



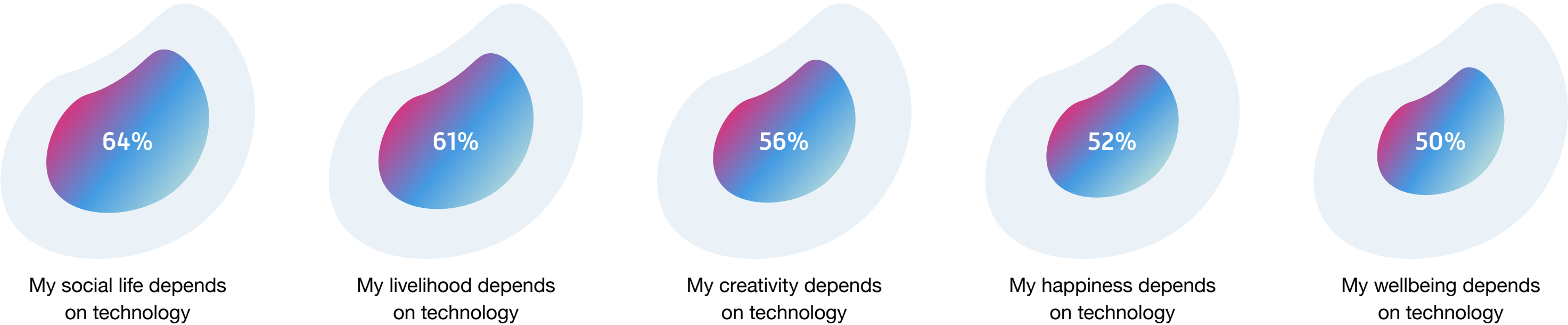
Technology is our future



My everyday life and activities depend on technology



People depend on technology in every aspect of their lives





15 experts define the metaverse

A persistent and user-defined virtual space

Daren Tsui, CEO, Together Labs

"It is a computer-generated simulation of a 3D space where users can interact. The metaverse will have three key attributes: it needs to have presence (social presence), it needs to be persistent (when users come back there's some sort of continuity and not a reboot), and, last and most important, it needs to be shared (multiple people will need to be able to interact in the metaverse)."

Keith Stuart, games editor, the *Guardian*

"A platform-agnostic digital space. The metaverse is a persistent hub that is user-definable. Persistence and user-generated content will be a big part of it. The future is about reacting quickly to social situations in a metaverse world."

A digital layer of everyday life

Kerry Murphy, founder and CEO, The Fabricant

"The metaverse is just a digital layer of our lives. The metaverse will exist once everything that we do digitally is completely, seamlessly connected. So, if I buy a yellow T-shirt in *Fortnite*, I get to wear it on Instagram, I get to wear it on Facebook, I get to have an AR wearing experience, and they're all completely interconnected. The metaverse is just an extension of our physical lives into the digital realm."

Jon Morris, CEO, Nowhere

"We'll be living in the metaverse when 2D user-generated content, videos and chat evolve to become 3D player-generated experiences. Imagine Travis Scott, not a pre-recorded cartoon in *Fortnite* but actually present and performing live, hovering above you in Times Square. A digital overlay that augments our lives and current understanding, a global game that connects us beyond what we now know, where the vibe and serendipity of an epic festival collide with the commerce and compression of a vibrant city, and with the diversity of a *Star Wars* cantina at the edge of the galaxy. Technology can expand the feeling of collective presence beyond real life, where one can truly be with anyone, anywhere, at any time."

Neha Singh, founder and CEO, Obsess

"The way that we define the metaverse is that it's like the virtual world; it's going to be our virtual existence. Right now, we have our real lives and our social media lives—the metaverse will be one step above that, like our virtual twin, doing all kinds of activities in the virtual world. You will have a whole existence that can happen in these virtual environments."

A digital layer of everyday life

**Carolina Arguelles
Navas, group product
marketing manager,
Snap Inc**

"At Snapchat, we think about a world where computing is seamlessly overlaid on the physical world around us. The metaverse is an area where you can take and see and interact with things that are both physically in front of you and with a digital content overlay."

Ryan Mullins, founder and CEO, Aglet

"The metaverse is a new dimension—a virtual dimension that sits on top of physical reality. I look at it as the next phase of the consumer internet. We started with [making] webpages machine-readable so we could apply algorithms to them, aggregate attention, and then advertise. That was the model that Google perfected. And then there was the monitor-mouse-keyboard phase; you sat down, you went online, and then you went offline and walked around. And then we got to this next phase, which was what Facebook perfected—making people and social networks machine-readable so that you can apply algorithms to them and then advertise. That was mobile-social-cloud, and the separation between online and offline became much more blurred. Where we're going now is this 'web 3.' Now it's about a spatial web—how does the virtual come off the screen and be baked into the fabric of reality... it's really about virtual and physical sharing the same space; which is just the world."

A digital twin of the physical world

Leon Ng, founder and CEO, LNG Studios

"It's a digital twin of our world, but then you can have endless amounts of worlds. Real transactions can be made and you can buy real estate, kind of like *Second Life*."

**Kai Bond, partner,
Courtside Ventures**

"It's a digital representation of the physical world and a continuum of time and space. What does that mean? It's where you're socializing. I always point to the Travis Scott concert in *Fortnite* as one of the best examples of what the metaverse describes."

An interconnected and limitless virtual world

Don Stein, founder, Roomkey

"The metaverse is a parallel universe made up of virtual worlds, rooms, and people. There is a virtual economy which powers activity on the platform, and each person feels compelled to customize their avatar and space. Over the course of the next 100 years, humanity will slowly move to spending more of their daily life as an avatar inside of a virtual world. This will eventually manifest in VR headsets being the most common computing device."

Grant Paterson, head of gaming and esports, Wunderman Thompson

"It's the creation of a persistent virtual world, in which consumers are able to hop between different virtual experiences. It will be powered by a virtual economy in which there are jobs and the same sort of financial mechanics that we see in typical economies. The idea, as venture capitalist Packy McCormick originally described, is that the metaverse would eventually be the sort of place where, as your virtual avatar, you would be able to go into a Disney store, for example, and buy an outfit for your avatar to wear, then go to a Nike store and buy a pair of shoes to be delivered to you in the physical world, and then pop into a Spotify or *Roblox* virtual concert, and then go for a run with all your friends while listening to that concert—a run in the real world, but you're connected through the metaverse."

An interconnected and limitless virtual world

Josh Rush, CEO, Surreal

"In the simplest terms, it's a fully connected three-dimensional visualization of the Internet—a virtual world that exists beyond analog. But no single company, entity or individual owns the measure or limit for what that experience should—or will—be. There is no Oasis like the one in *Ready Player One*. We are all at the Big Bang moment where creation, consciousness and awareness of the metaverse is being born."

Philippe Brown, founder, Brown & Hudson

"The metaverse is an open-source, connected set of worlds that you can transition between in a seamless way. The vision of the metaverse is different worlds that you can move seamlessly between. So let's say you're in *Farmville*, then you can open a door and move to *Grand Theft Auto*."

Helena Dong, creative technologist

"When I look at the word metaverse, I tend to think about the multiverse. So for me, it almost feels like this digital multiverse; like we have a multitude of worlds that exist and evolve simultaneously across different realities. That pertains to your tangible reality and also realities that exist digitally. I think about the metaverse as this space that encompasses all kinds of realities."

An extension of physical identities

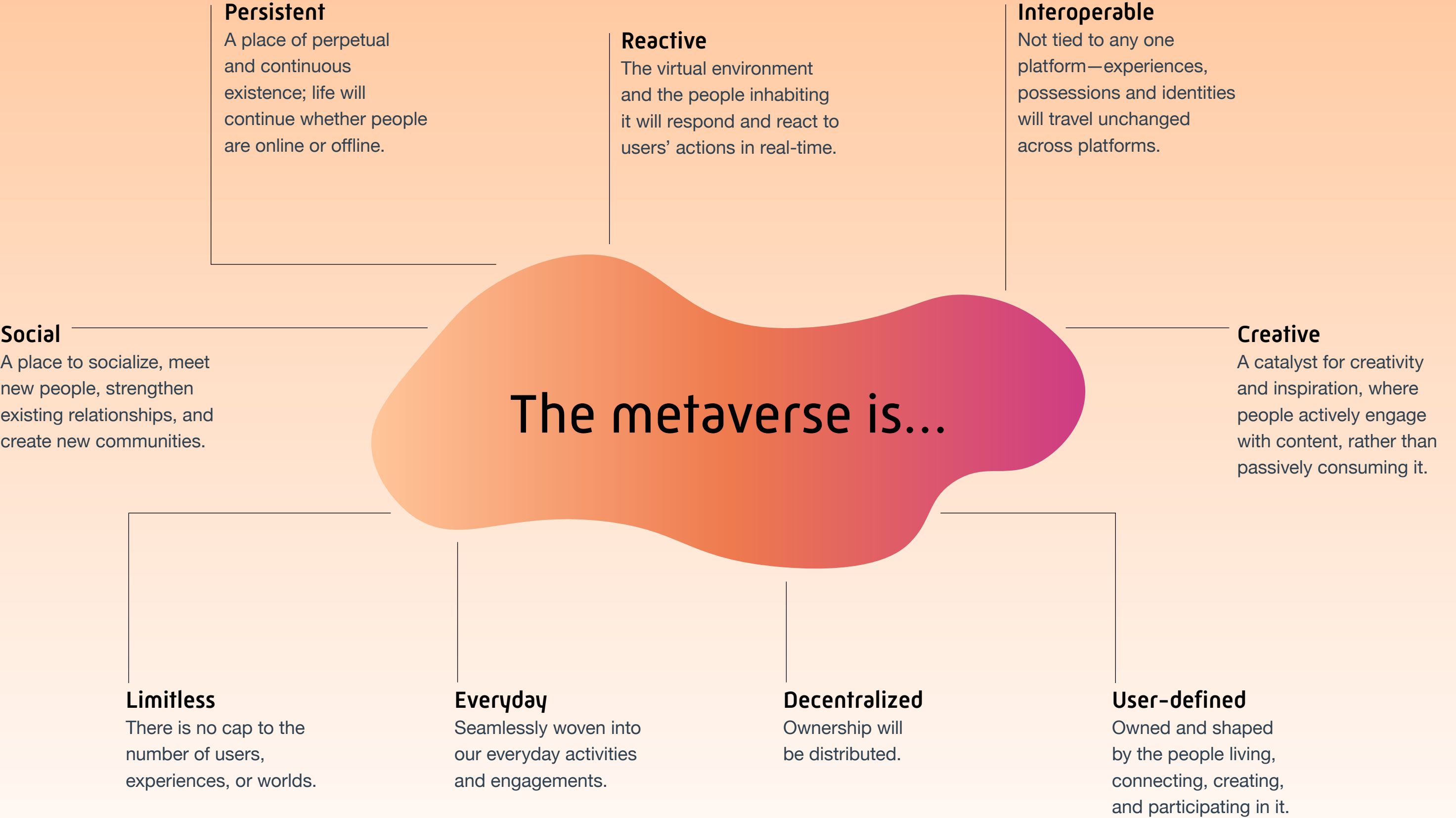
Alexander Fernandez, CEO and founder, Streamline Media Group

"The metaverse is where your physical persona and your digital persona become a unified reality. What happens in one affects the other and vice versa. It's not a movie, it's not *Ready Player One*. We will have multiple devices—AR, VR, a refrigerator—all helping us to augment our ability to move forward."

Mapping the metaverse

The key elements that will characterize the metaverse

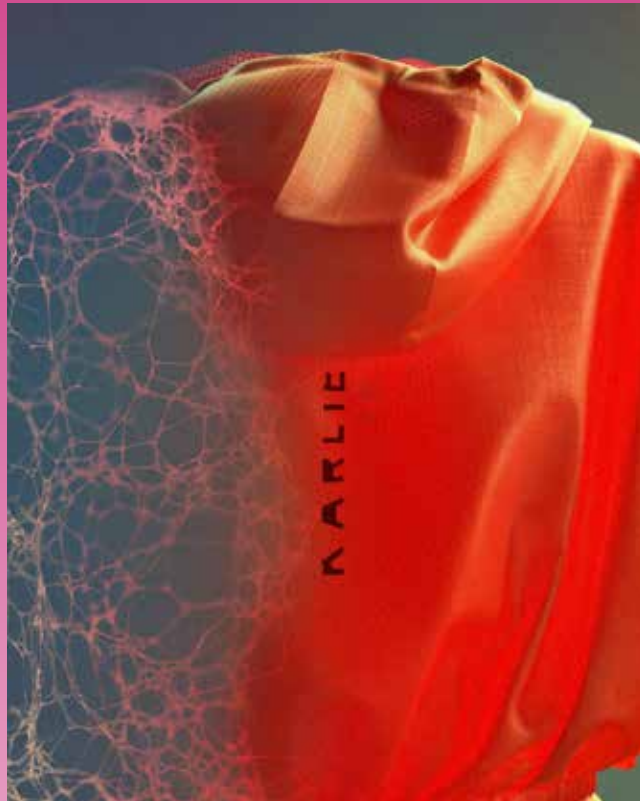




MetaLives

Daily habits, from the mindful to the mundane, are being transplanted into the digital realm, giving rise to extended selves and lifestyles.





Virtual possessions

Consumers are putting stock in digital ownership, driving a new wave of virtual products and possessions.

How soon will you be waking up every morning and picking out an outfit for your avatar before heading out in your virtual car? Sooner than you may think. According to Krista Kim, the contemporary artist behind the world's first NFT digital house, "we will be living in an augmented reality lifestyle within a very short period."

Kerry Murphy, founder and CEO of digital fashion house The Fabricant, believes the transition has already begun. Describing daily digital habits such as dressing your avatar every morning, he says: "I think in the Western world, a lot of people already do this—especially people who are avid gamers. But when is it going to go outside of the gaming realm? Once we start to see interactive experiences that have daily functional value outside of gaming, beyond just entertainment." Murphy defines that "functional value" in areas including work and socializing, and points to video calls, LinkedIn profile images, and social media avatars as the kinds of experiences that are starting to push virtualized daily habits—including picking out a digital outfit—into the mainstream.

The Fabricant, a digital-only couture house focused on "showing the world that clothing does not need to be physical to exist," has been seeing a spike in interest—from both consumers and brands. Alongside its own designs, including a digital dress that sold for \$9,500 in 2019, The Fabricant has worked with mass-market brands including Adidas, Puma and Tommy Hilfiger.

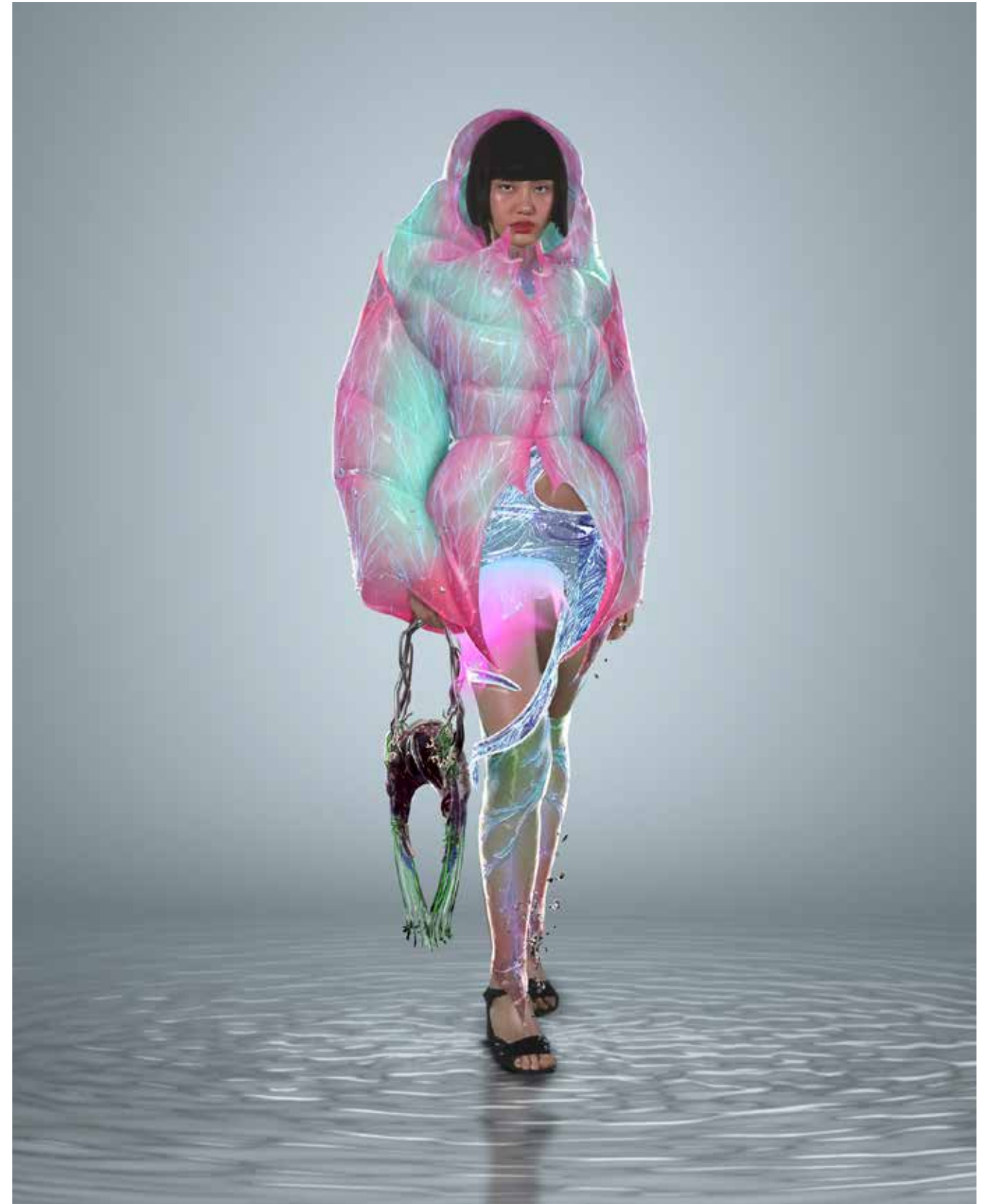


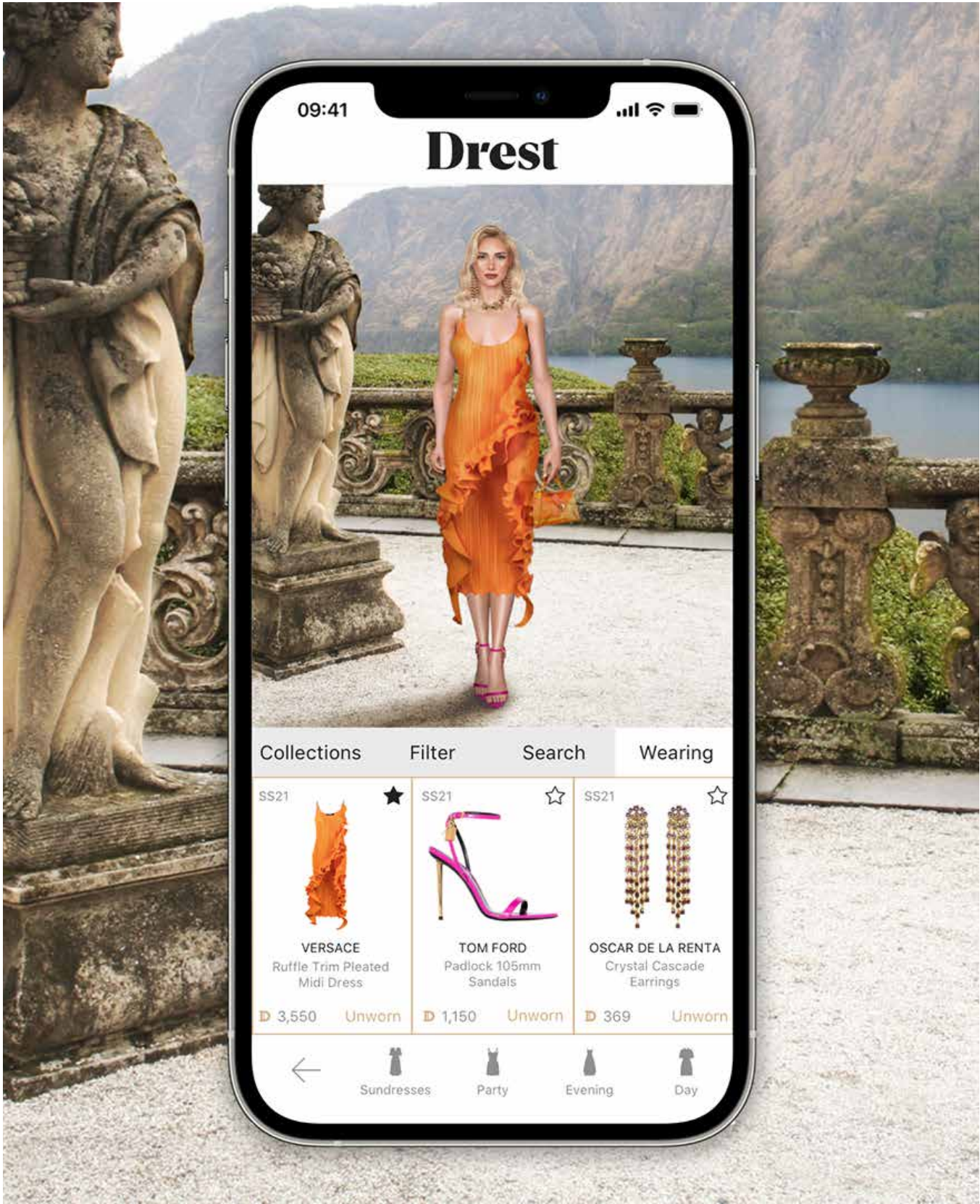


A price tag of \$9,500 may seem exorbitant for a dress that doesn't exist in the physical world, but consumers are assigning high value to digital possessions. Global consumers say that, on average, a digital house is worth over \$76,000, an original digital piece of art is worth \$9,000, and a digital designer handbag is worth over \$2,900.

Brands are already starting to see the repercussions of this. In February 2021, NFT marketplace RTFKT sold 600 pairs of digital sneakers in just seven minutes, generating \$3.1 million in sales. In June 2021, a digital-only Gucci bag sold on *Roblox* for over \$4,000—which is more than the physical bag costs. On Aglet, a mobile shopping game where users can buy rare sneakers from brands including Chanel, Nike and Balenciaga, one user has spent \$15,000 on virtual shoes, *Fast Company* reported.

“It makes sense that virtual objects would have real monetary value,” Aglet creator Ryan Mullins told *Fast Company*. “It’s no different from the way we buy clothes in the real world as a form of self-expression or status.”





New brands dedicated to designing and selling digital-only fashion are coming to the fore, reflecting the rising value of digital items. “Contactless cyber fashion” specialist Tribute Brand launched in 2020 with limited-edition digital clothing drops and custom orders. Luxury fashion house Auroboros released a digital-only couture collection in January 2021 on Drest, a styling app and fashion game. Digital fashion house DressX raised \$2 million in funding in July 2021 to expand its reach with an NFT marketplace. And Hong-Kong based BNV (Brand New Vision), an NFT platform where shoppers can trade clothing, shoes and accessories, recently closed a seed round with billion-dollar business Animoca Brands.

Established fashion and auto brands—from mass-market to high-end—are starting to catch on, opting for new direct-to-avatar (DTA) product releases. Ralph Lauren released a 50-piece digital clothing collection in August 2021, available for purchase in social networking app Zepeto. American Eagle announced a digital clothing collection for Bitmoji avatars in July 2021. Gucci and The North Face released a joint collection for avatars on *Pokémon Go* in January 2021. And in March 2021 Gucci released virtual sneakers that can only be worn with AR, using technology developed by Wanna. Luxury car makers including Maserati, Aston Martin and Tesla have launched virtual models of their vehicles in Tencent’s *Game for Peace*—the Chinese mobile version of *PlayerUnknown’s Battlegrounds*—between 2020 and 2021. And Rolls-Royce unveiled its first virtual car in 2020 for *QQ Speed*, another Tencent mobile game.

The future of consumerism lies in virtual products, Murphy predicts. “People are going to start seeing value in digital items and realize that they’d rather interact with a digital item, or have an infinite wardrobe of digital fashion items but a very limited wardrobe of physical items.”

"The biggest opportunity for physical goods is virtual goods"

Ryan Mullins, founder and CEO, Aglet



Why it's interesting:

Consumers are replicating their physical daily habits in the virtual realm—assigning a growing value to digital assets. As digital ownership rises, “real-world brands” need to realize that “the metaverse is a place of mass audiences, where there’s a true opportunity for brand integration, for brand expansion, and for brand expression,” Lindsay Anne Aamodt, senior director of marketing at IMVU—organizer of the first fashion show held in the metaverse—told *Vogue*.

Case study: Virtual products can help optimize physical goods, too, and offer a new business model for brands.

“The biggest opportunity for physical goods is virtual goods,” Aglet CEO and founder Ryan Mullins tells Wunderman Thompson Intelligence.

“A great example of this: we released our own brand in the game and our own sneaker, the Aglet 1. It is now the most popular sneaker in our game. We can quantify the demand, and we will be releasing it as a physical sneaker in December [2021].

“The amount of engagement and demand visibility that you get can help you decide: should we release this, or not? How many should we release? Where should we release these, because of the spatial data?”

“But how do virtual creators connect the dots from virtual conception to physical production? That’s where established brands come in.

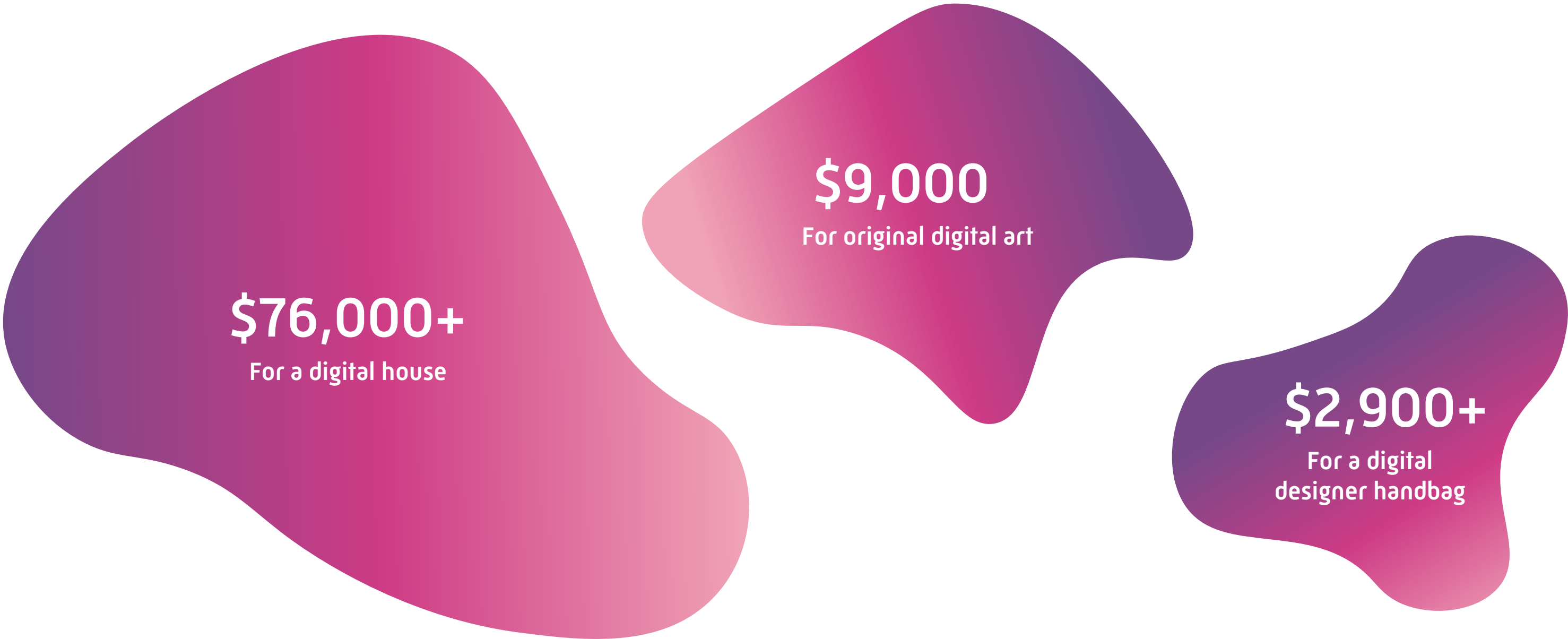
“Brands as a service, or manufacturing as a service, is a really interesting new business model, when you have these very big brands that have access to manufacturing infrastructures, and can provide that as a service to new brands.

“It’s Adidas as a service—you’re just opening up infrastructure. That’s what Yeezy is; it’s just Kanye powered by the Adidas infrastructure.”



Virtual possessions

The value of digital goods
On average, consumers would be willing to pay...



Connected wellbeing

From prescription gaming to VR pharmacies, digital therapeutics are earning medical backing—cueing up a new class of meta-medicine that brings a dimension of physicality to digital tools.

Turning to tech for recreational release is nothing new; but consumers are starting to find tangible wellbeing benefits from tech use: 81% of global consumers say they “switch on” to unwind, and over half say they are physically (55%) and mentally (56%) healthier thanks to technology.

Doctors can now prescribe video games to treat cognitive dysfunction. In June 2020, EndeavorRx by Akili Interactive was approved by the Food and Drug Administration (FDA), making it the first-ever prescription-strength video game. The game was originally created to treat ADHD in children; after following the recommended regime of 25 minutes’ play per day, five days per week for one month, one in three kids treated “no longer had a measurable attention deficit on at least one measure of objective attention,” Akili revealed. And in April 2021, the digital therapeutic company partnered with Weill Cornell Medicine, NewYork-Presbyterian Hospital, and Vanderbilt University Medical Center to evaluate the game as a treatment for COVID-19 patients experiencing brain fog.

In August 2021, Revery raised \$2 million in funding to improve mental health with mobile gaming techniques. The company, founded in March 2021, has plans to launch an app that combines cognitive behavioral therapy for insomnia





with mobile gaming concepts. The company is starting with sleep, “but the goal is to build multiple games for other wellness indications as well,” cofounder Tammie Siew told *TechCrunch*.

Scientists at UC San Francisco’s Neuroscape brain research center are using VR video games to boost seniors’ memories. The first-of-its-kind virtual reality video game, called Labryinth-VR, can improve memory in older adults, according to a January 2021 study published in *Scientific Reports*.

VR offers a wide range of proven health benefits. It can help lower blood pressure, treat eating disorders and obesity, combat anxiety, cure PTSD, and ease the pain of childbirth, according to Brennan Spiegel, director of one of the largest therapeutic VR programs in the world at the Cedars-Sinai Medical Center in Los Angeles. In the near future, Spiegel hopes to see “VR pharmacies” staffed with “virtualists” who administer targeted doses of VR to treat specific maladies, as described in his book *VRx: How Virtual Therapeutics Will Revolutionize Medicine*.



Michael Moskowitz, CEO of Moodrise, believes that digital content—when administered properly—has the power to boost emotional resilience, combat cognitive drift, and maximize human health, potential and happiness. “Content is not story,” he explains. “Content is actually chemistry, packaged through the prism of narrative, with tremendous curative potential.”

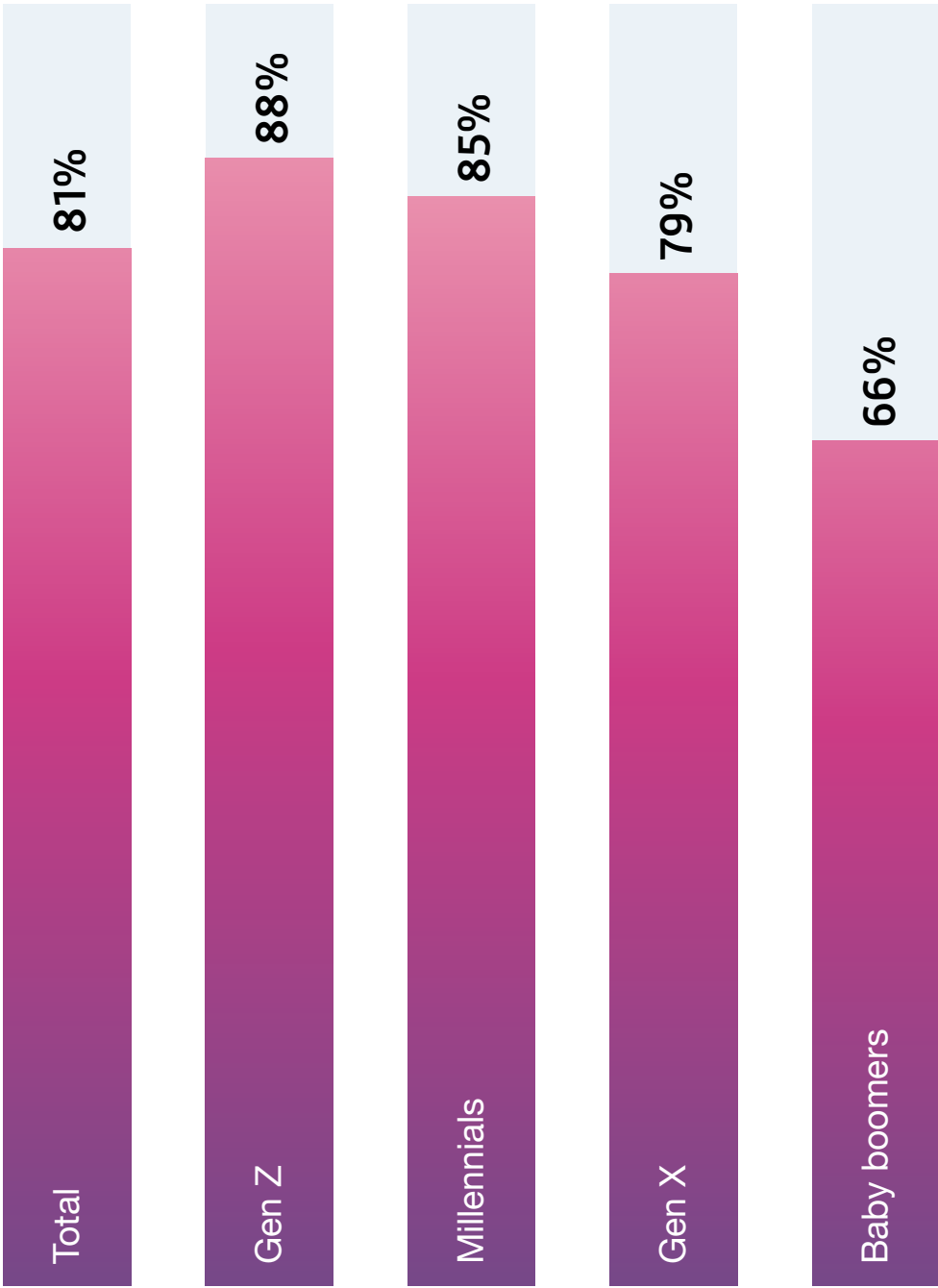
The best bet for cultivating healthy habits within the metaverse is to direct people “away from encounters that trigger norepinephrine (a stress hormone and neurotransmitter triggered by rage-based content) and point them toward experiences in this new digital world that are just as compelling, but engineered to produce sensations of calm, tranquility, connection, kindness and hope,” Moskowitz explains.

Why it’s interesting:

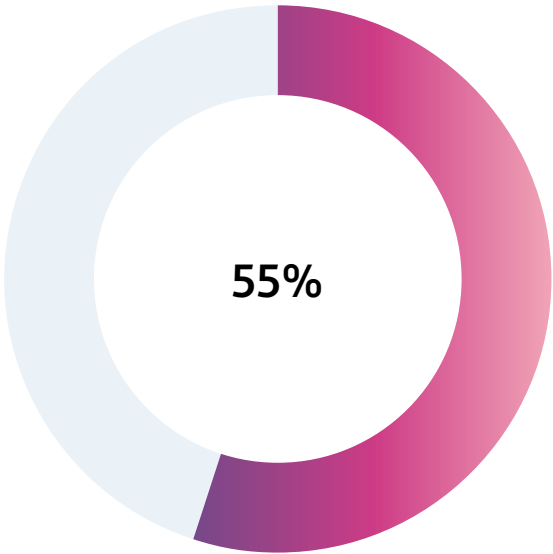
More people are switching on tech for health benefits, giving rise to a new class of “techceuticals,” fusing physical wellbeing and digital lives and encouraging proper digital hygiene in the metaverse.

Connected wellbeing

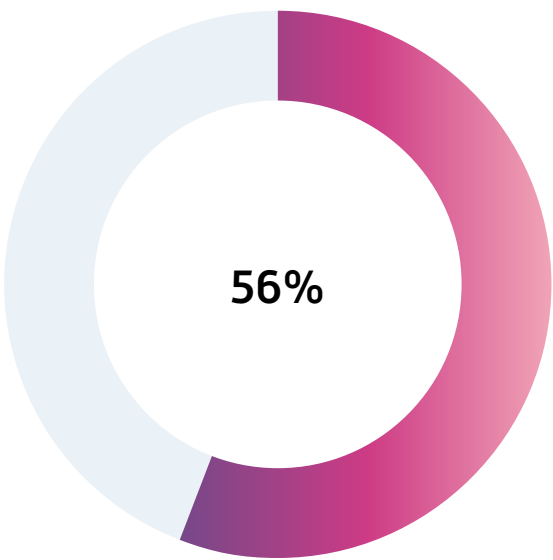
I switch on digitally to unwind



I am physically healthier thanks to technology



I am mentally healthier thanks to technology



Digital relationships

Is there a digital key to long-lasting and healthy human relationships?

“Social media has prepared us for this moment of meeting friends through technology,” Keith Stuart, games editor at the *Guardian*, tells Wunderman Thompson Intelligence. And now, as more of our daily lives move online, digital platforms are becoming places where users go to foster friendship and deepen intimacy.

83% of global consumers believe that technology brings people together and, in China, 84% say that technology has deepened their relationships with friends and family.

Games especially are becoming key places for meeting people: 76% of UK adults think online gaming is a good way to bond and make connections with people, according to a May 2021 survey from Xbox. “If you look at games like *Fortnite*, *Sea of Thieves*, *No Man’s Sky*, these have become places that people go—like a golf course, a skatepark or a theme park,” Stuart says. Over the last year in particular, games have evolved into “an accelerated and more complicated social experience.”

Games are incorporating elements to nurture connection and kindness among players. Epic Games’ *Rocket League* is designed around team play, and lets users create in-game clubs that bring up to 20 people together to bond outside of gameplay. *Sky: Children of the Light* invites users to participate in random acts of kindness, such as sending users gifts, boosting their powers, and even





"Social media has prepared us for this moment of meeting friends through technology"

Keith Stuart, games editor, the Guardian

hugging them. *Kind Words* is a nontraditional game where users write letters to strangers, asking for advice or offering support on topics ranging from relationship struggles to study habits.

IMVU, a "3D avatar-based friendship discovery and social platform," has 25,000 greeters who help new users connect by friending them and introducing them to others. "Making friends is not an exact science, but there are ingredients that we know and if we then foster like a petri dish, we can foster friendship," says Tsui. "We gamified it: conversation starters, ice breakers, the more you play, the more you're getting to know other people."

Digital platforms are even helping couples deepen their intimacy. Raspberry Dream Labs is reframing cybersex experiences to form meaningful connections. Its first project, *Sensory Seduction*, uses extended reality (XR) to allow users to feel haptic pulses on their bodies, mimicking the sensation of being touched. The experience is designed to offer an opportunity to "explore your sensuality and engage your sexual accelerators through the sensory stimulation." The company has released a beta version of *Raspberry Dream Land*, an XR social event platform offering a virtual space for "radical self-expression, progressive arts and entertainment, social interactions and virtual relationships."

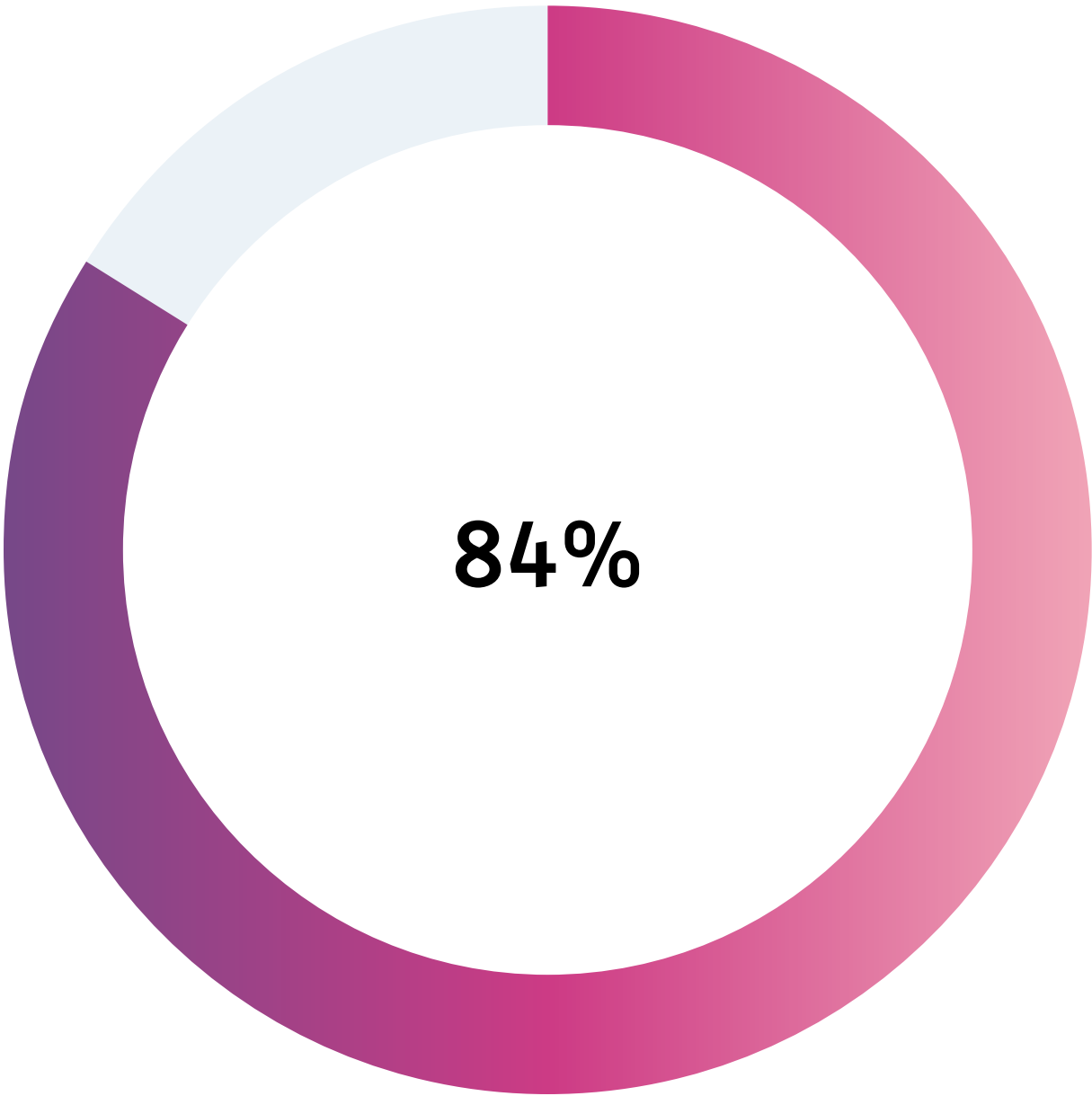


Why it's interesting:

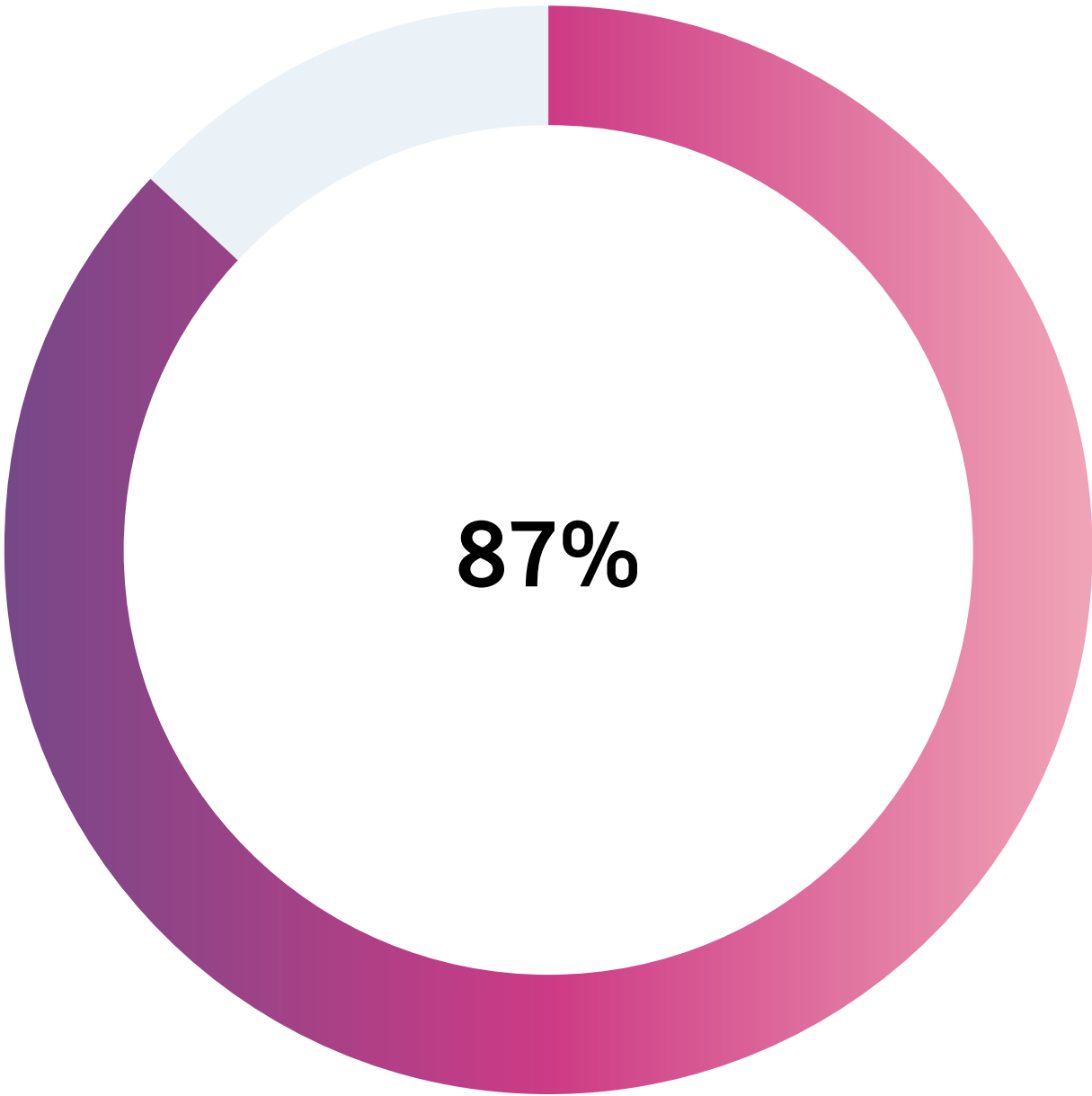
Tech is helping people connect more deeply, giving rise to close friendships and intimate relationships developed virtually. As the metaverse evolves, emotional elements will be key drivers for engagement (see *MetaSocieties*, page 79). "It's that shared experience that I think people are craving," Jessica Freeman, head of marketing at *Minecraft*, said at the Making Friends in the Metaverse panel in January 2021. "It used to be that kids would meet on the playground after school. But as that's not possible now, they're meeting up in *Minecraft* to connect socially and to catch up. It has become this kind of virtual recess that they need."

Digital relationships in China

Technology has deepened relationships
with my friends and family



Technology helps create and
promote empathy





The creativity catalyst

Digital engagement is moving from passive consumption to active creation—shifting creative power to the user.

“For generation alpha and generation Z, customization and creation is an intricate part of their gaming experience,” Keith Stuart, games editor at the *Guardian*, tells Wunderman Thompson Intelligence. “For them, customization and the play element is part of the same thing—self-expression and exploration.”

What started with gaming is now moving onto other digital platforms—and coming to define the online experience.

Snapchat believes that creativity is the driving force propelling the future of digital engagement. As a user, “you’re not creating content that people consume, you’re creating content that people then create with,” Carolina Arguelles Navas, group product marketing manager at Snap Inc, tells Wunderman Thompson Intelligence. “That’s really powerful. You’re putting out a piece of content that everyone personalizes and has a personal experience with.”

This momentum is spurred on by what she refers to as the snowball effect of digital creativity: “The biggest opportunity with AR is that it is a catalyst for



other people to now create content with that AR experience you’ve developed; then they are sharing it with their group of friends and their group of friends are unlocking that and sharing. You’ve created a catalyst where you’re scaling creation on your behalf.”

This focus on creativity is coming to define the entire ecosystem of digital life, informing everything from status to fashion (see Virtual possessions, page 24).

IMVU revolves around creativity, Daren Tsui, CEO of the social app and its parent company Together Labs, tells Wunderman Thompson Intelligence. “There are over 200,000 creators on our platform. Over the years we’ve amassed 15 million items in our catalog,” almost all of which are user-driven, Tsui says. “We create 0.001%; everything else is done by creators.”

IMVU calls creativity “the new status symbol” for the next digital era—dethroning influence and income. When users come onto the platform, “making money is not the most important thing for them. It’s about being recognized for their creations,” Tsui explains.



Arguelles Navas points to Snap creators such as Ommy Akhe as “the next version of a fashion designer—this merge of a creator and technologist coming together. One of the newer experiences that she’s been working on is powered by brand-new tech we’ve just released, which allows you to build an AR experience that is triggered based on what the camera is recognizing in real time... a digital fashion experience where your top changes based on what is around you.”

When designing virtual clothing, “we’re not bound by physical limitations like gravity and material durability,” The Fabricant’s Kerry Murphy tells Wunderman Thompson Intelligence—unlocking a new dimension for designers and creatives. “The digital world gives a space for a new wave of creativity, using materials that go beyond fabric, like water, smoke or light,” cofounder Amber Slooten says.

Digital tools have “activated an entirely new world” of creativity—one where “creations can transcend physical limitations,” Helena Dong, creative technologist and digital designer, tells Wunderman Thompson Intelligence. Consumers around the globe agree: 91% believe that technology opens up a whole new world of creation. When designing digitally, “it’s the cliché that your imagination is the only limitation,” Murphy says. “If you can think it, you can make it.”

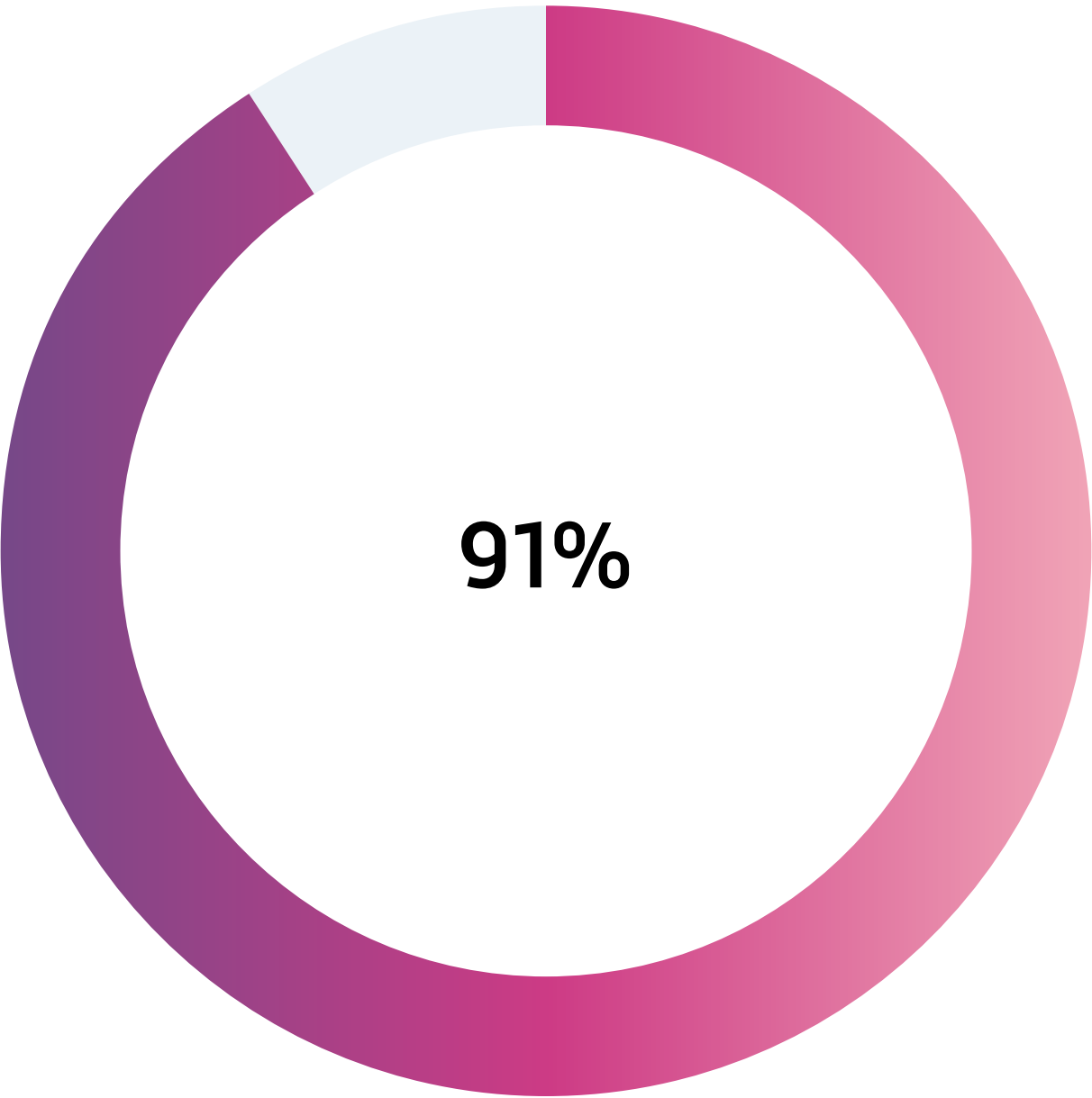
Why it’s interesting:

Online habits are evolving. As stated by The Fabricant, in the digital world “people are not passive consumers, but creative agents crafting their self-expression and curating their virtual identity.” This creative agency is laying the foundation for a next-gen virtual world full of inspiration, individuality and imagination.

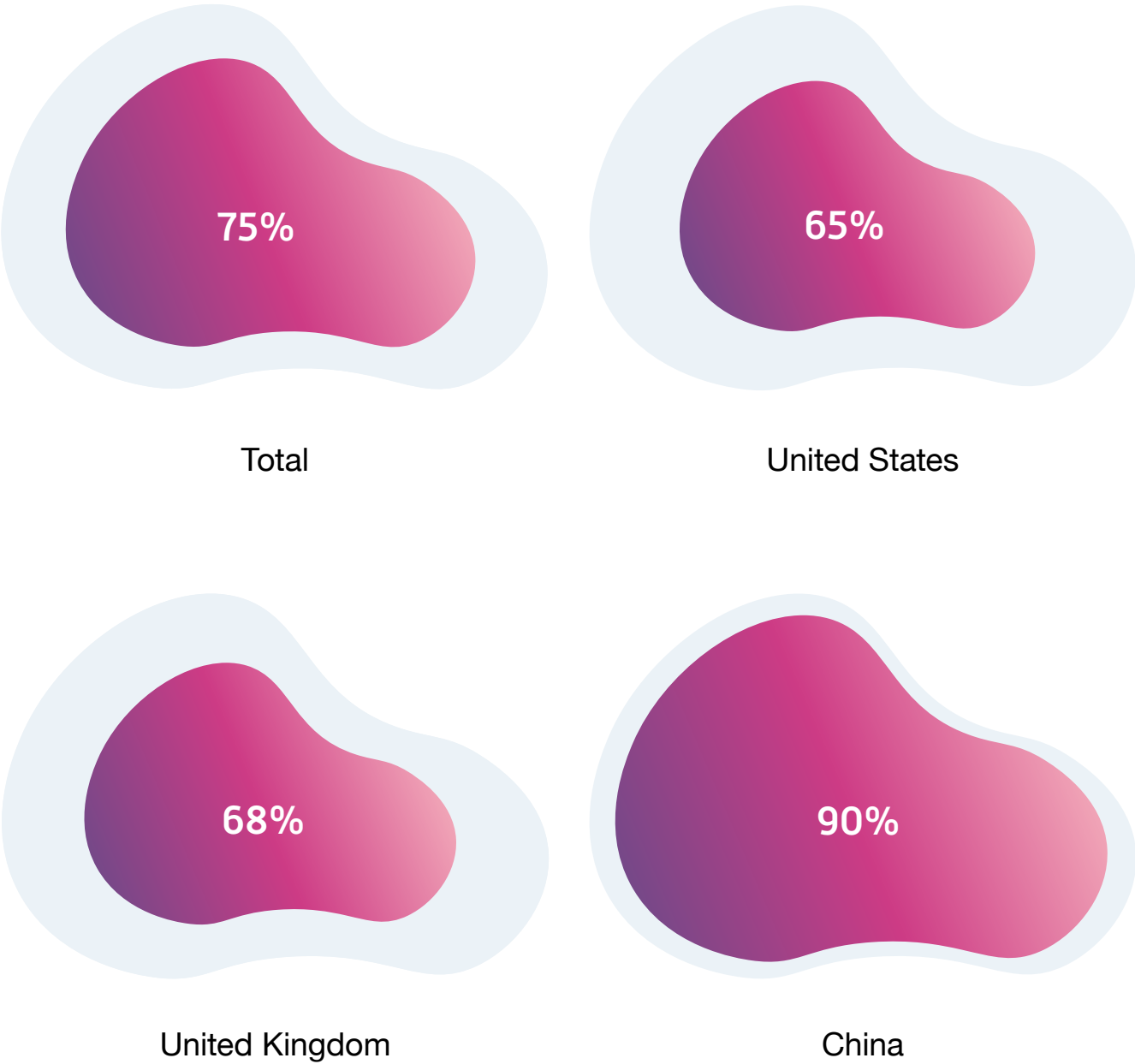


The creativity catalyst

Technology opens up a whole new world of creation



Digital craftsmanship requires the same amount of talent and expertise as physical craftsmanship





MetaSpaces

Traditional gathering spaces are evolving, redefining what a home,
an event and a vacation can be in the meta-era



New virtual venues

Virtual venues are evolving beyond video games into destinations—setting the scene for the next era of events, socializing and networking.

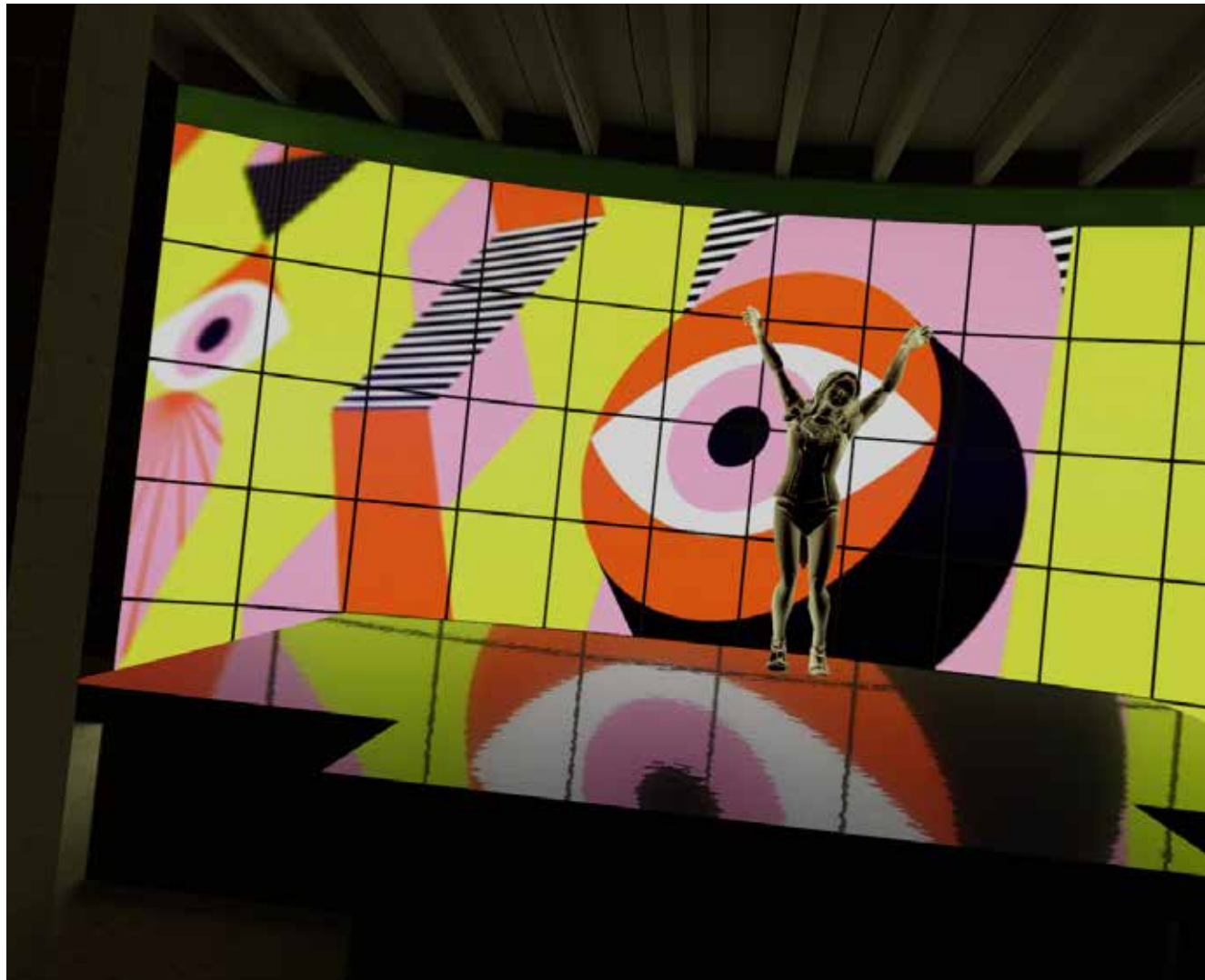
Traditional gaming platforms are morphing from singular game environments into social spaces and massive global venues. Video games have become a “highly social, highly organized, highly cooperative, collaborative and creative medium,” Keith Stuart, games editor at the *Guardian*, tells Wunderman Thompson Intelligence—transforming them into “games as a space rather than a specific game experience.”

The majority of global respondents are already open to digital events: 62% say attending a digital concert sounds appealing, and 63% say attending a digital stage performance, including plays and musicals, also sounds appealing.

Over the past year, video games have emerged as popular concert venues for huge global audiences. Travis Scott’s ground-breaking April 2020 Astronomical concert, set in *Fortnite*, attracted 12.3 million viewers at the peak of the live event, according to developer Epic Games. In the days following the event, another 27.7 million unique viewers watched the performance through the platform. In November 2020, Lil Nas X held a concert on *Roblox* with 33 million viewers, while in August 2021, Ariana Grande headlined the Rift Tour concert in *Fortnite*, which attracted over one million viewers at the peak of its first concert.



Whether host to five or five million, virtual venues offer a new destination for gatherings and hangouts—reimagining the future of events and experiences.



The latest virtual events are moving beyond existing gaming locations. For its 2021 conference, South by South West (SXSW) created a meticulous virtual rendering of downtown Austin with augmented game-like elements. The virtual destination, accessed via a computer screen or VR headset and attended as a virtual avatar, allowed over 100,000 attendees to navigate between film screenings, rooftop happy hours, theatrical performances and keynote sessions. Organizers aimed to recreate the spontaneity of traditional in-person festivals, and this was boosted by interactive elements including costume contests, axe throwing, a selfie stand, go-kart rides, and drone tours providing a bird's-eye view of the entire festival and virtual downtown.

Virtual venues are also playing host to smaller, more intimate gatherings. Roomkey's Social Entrepreneurship Festival in May 2021, hosted by Twitter cofounder Biz Stone, invited 40 people to network and mingle between



sessions. Attendees were able to gesture and speak with their avatars and navigate between tables as though they were meeting others in person.

Dezeen, the architecture and design publication, opened its own virtual social club in April 2021, when it hosted a metaverse- and design-themed panel discussion at a virtual rooftop bar. At Eschaton’s virtual nightclub, attendees can maneuver through immersive theatre performances, cabaret bars and even interactive games. The event’s producer Tessa Whitehead, from Chorus Productions, and coproducer Brittany Blum want to create virtual events that incorporate the best of the virtual and physical worlds. “We can find this more interesting, complex and nuanced balance between virtual life and in-person life,” Whitehead told *Dezeen*.

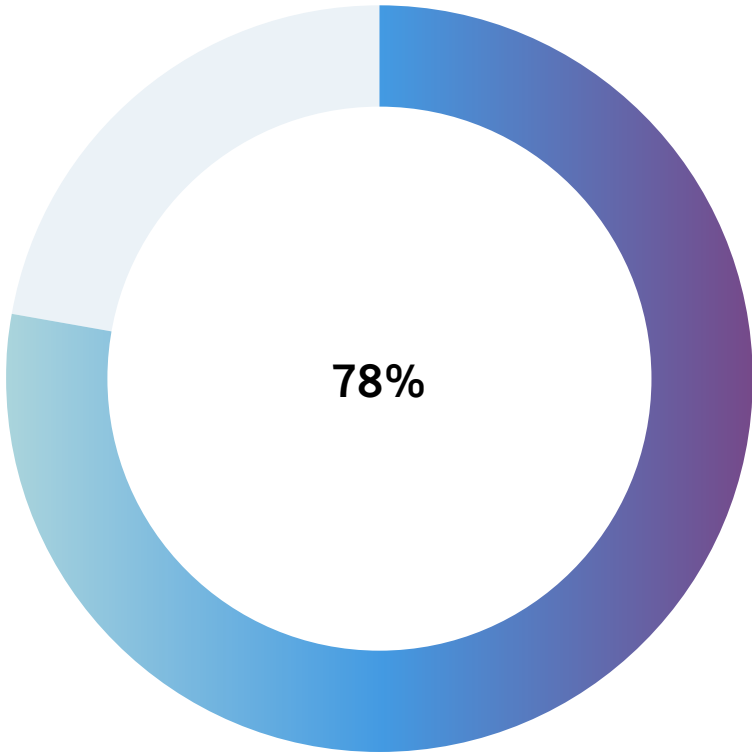
Why it’s interesting:

Whether host to five or five million, virtual venues offer a new destination for gatherings and hangouts—reimagining the future of events and experiences.

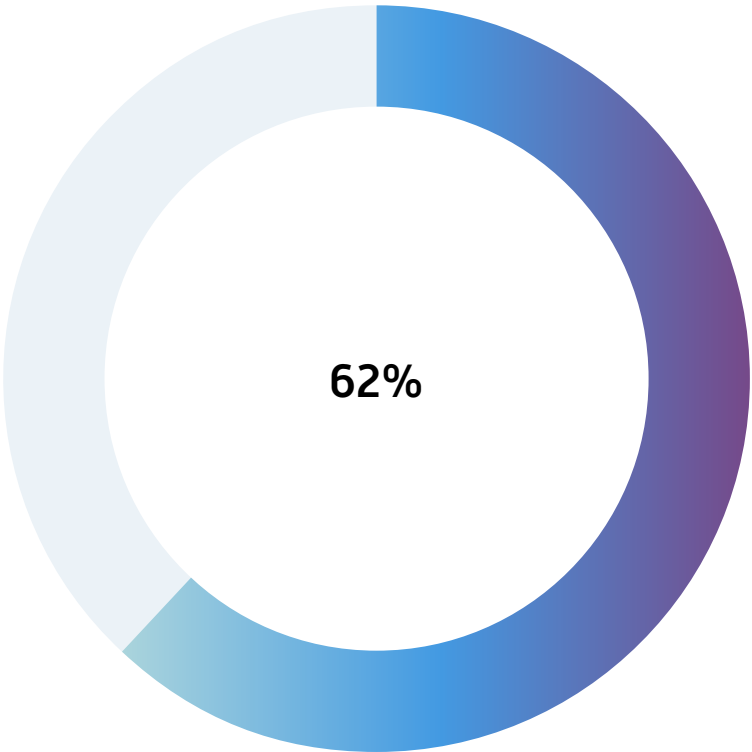


New virtual venues

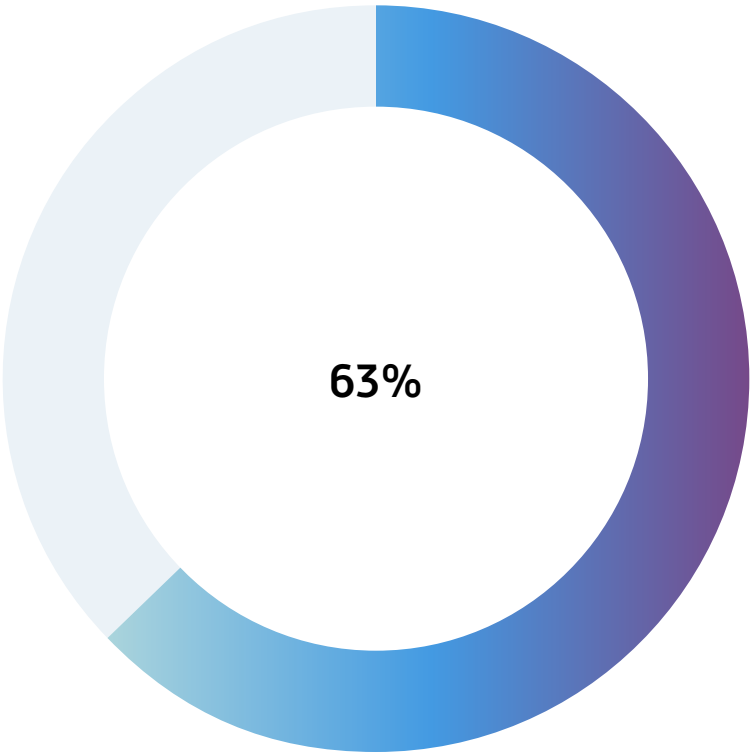
Digital movie viewing
sounds appealing to me



Attending a digital play or
musical sounds appealing to me

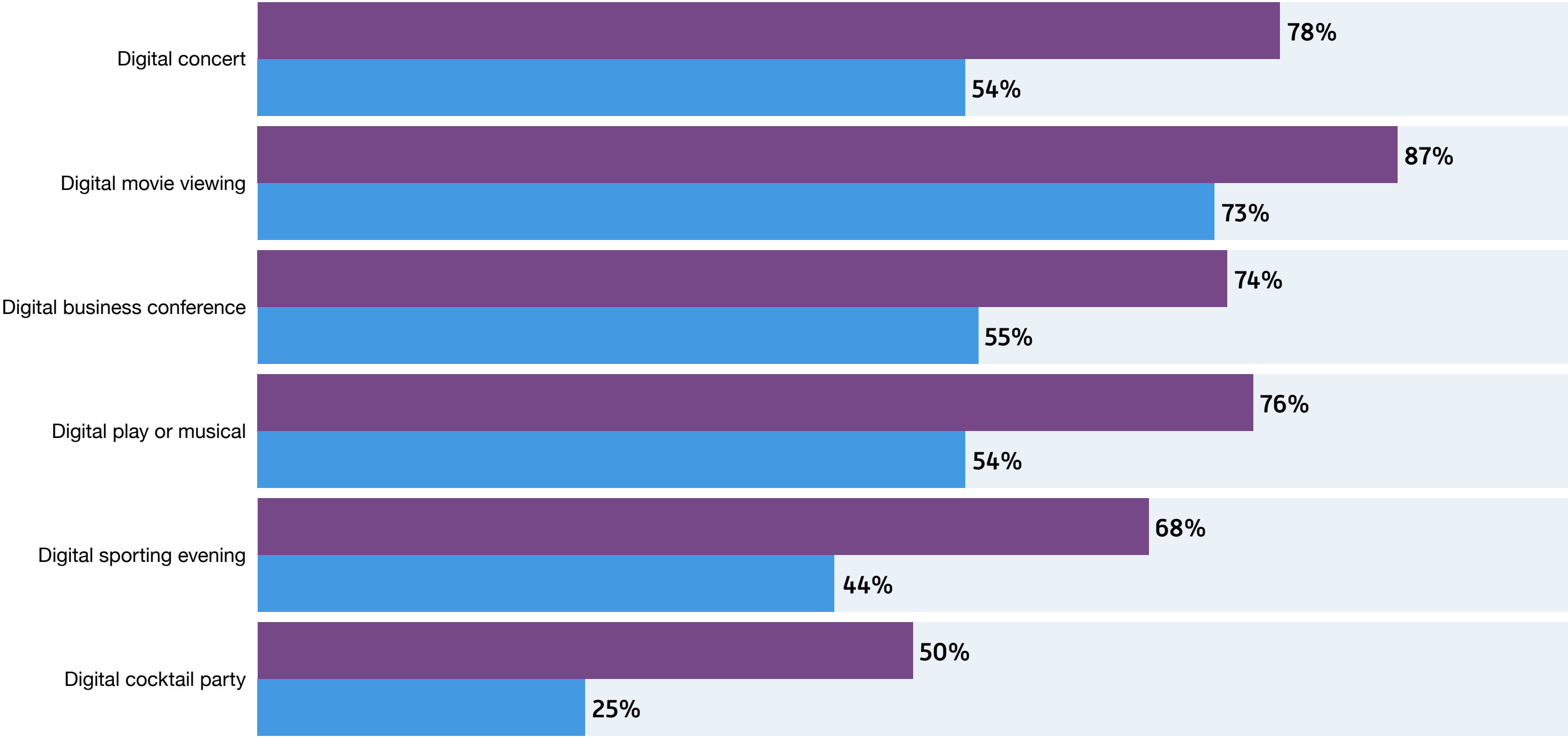


Attending a digital concert
sounds appealing to me



New virtual venues

The appeal of attending virtual events rises significantly for those who are familiar with the metaverse





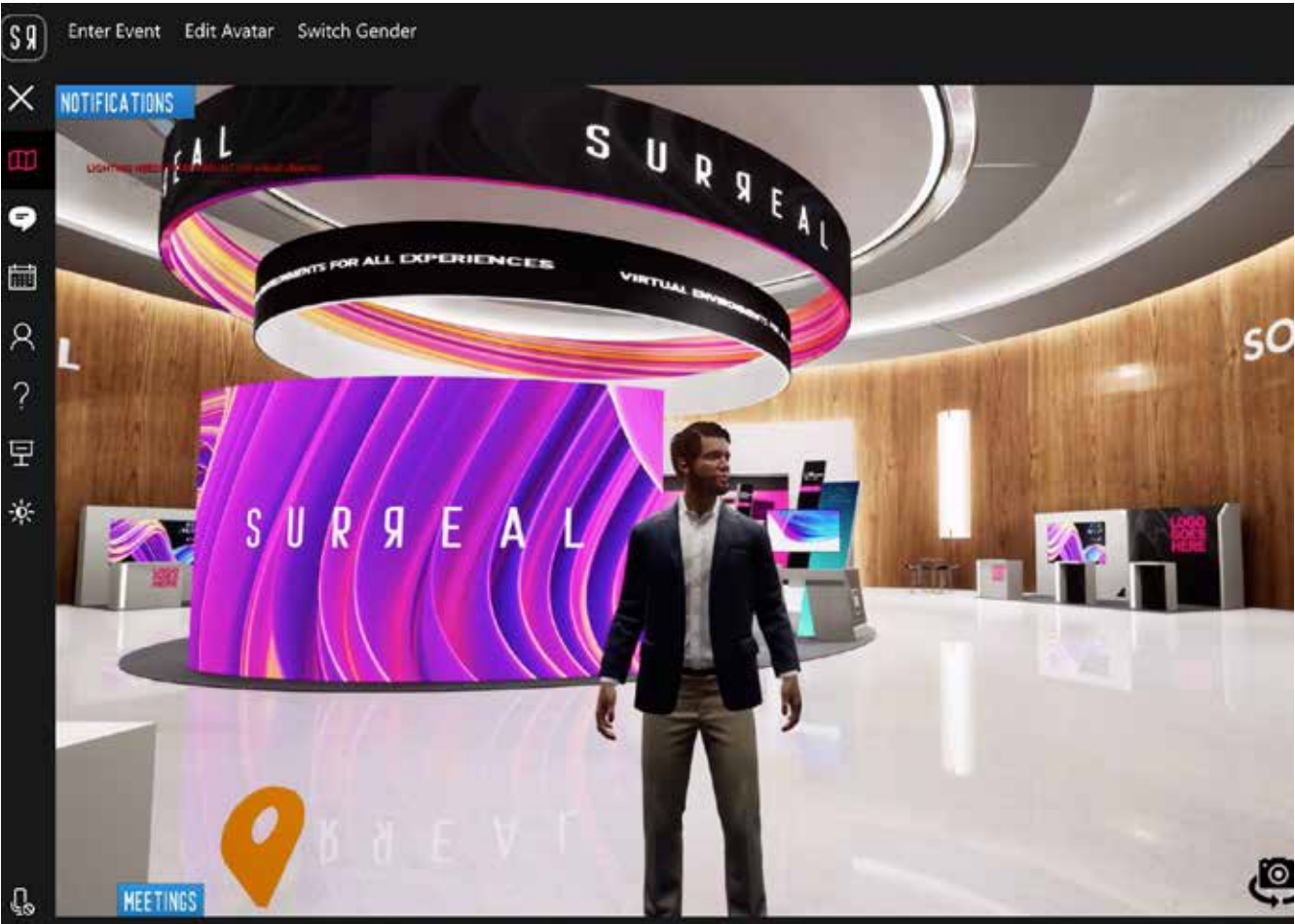
Liminal spaces

Alongside the rise of fully virtual venues and spaces, extended reality (XR) is transforming physical spaces for a new category of blended events, built equally around digital and physical elements.

Surreal, a platform for hybrid events that combine virtual experiences and physical spaces, launched in March 2021. To make its experiences feel even more lifelike, the brand partnered with DNABlock to create bespoke, hyper-realistic 3D avatars and give up to 50,000 participants a personalized social and interactive experience. Built with Unreal Engine, Surreal “enables realistic, real-time 3D rendering” for events that can be “configured into any environment—real or imagined.”

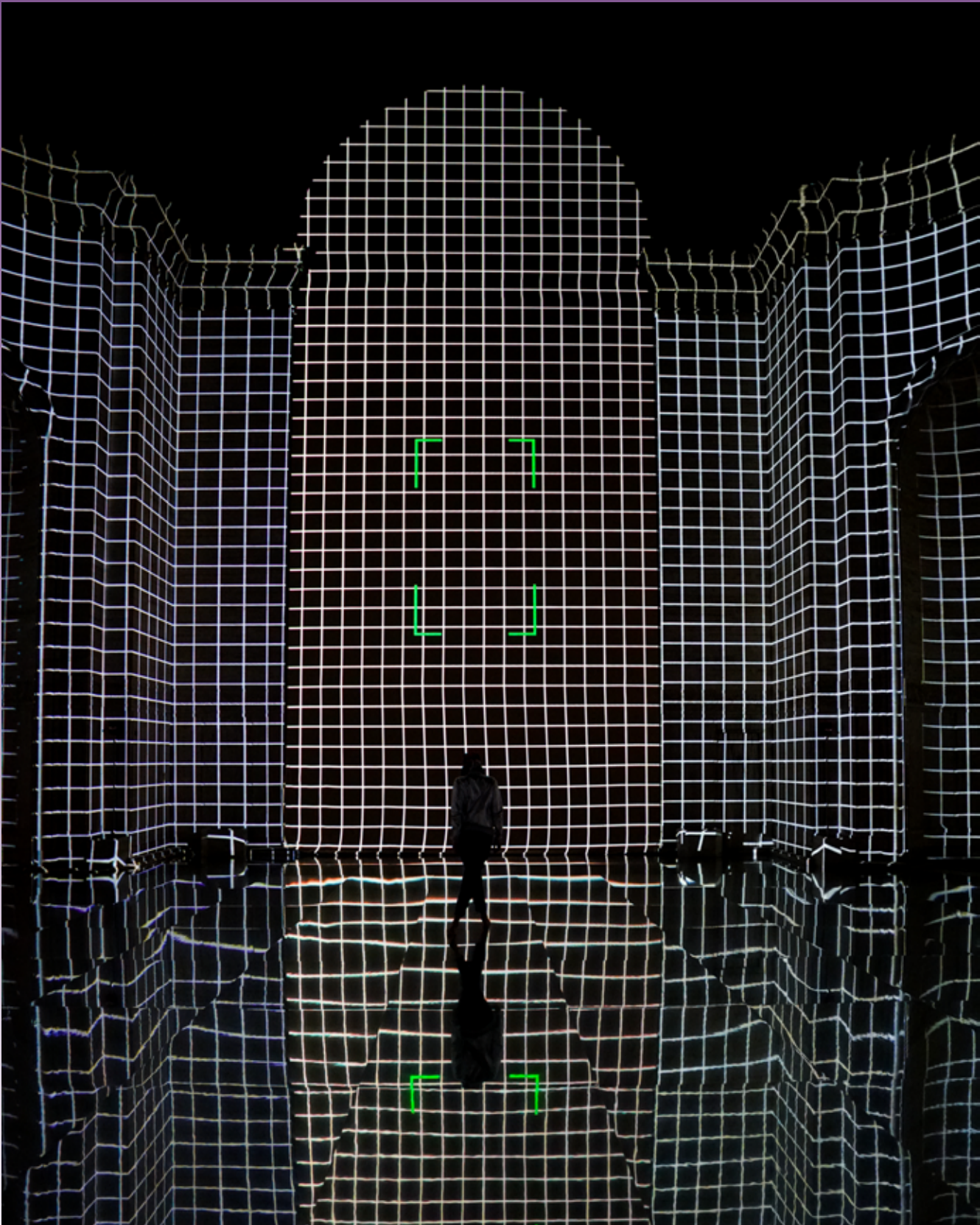
In New York City, AR art is breaking through screens. High Line Art and cultural institution The Shed collaborated to create The Looking Glass, an AR exhibition of virtual sculptures located along the High Line. In July and August 2021, onlookers could use the Acute Art app to view artwork projected onto the world around them, ranging from static, traditional sculptures to pieces that incorporated sound and movement. Artist Olafur Eliasson, whose work was included in the installation, told the *New York Times* that he viewed the pieces as an “extension of reality.”

Tokyo-based TeamLab renders interactive digital art installations that move and transform in response to visitors’ movements. “There are no boundaries



between visitors and the artwork,” Takashi Kudo, communications director at TeamLab, tells Wunderman Thompson Intelligence. “We invite people to be part of the artwork. More will happen with more interaction from people.” At the most recent installations, located in Tokyo and San Francisco, the reactive art is reminiscent of a digital kaleidoscope. In July 2021, TeamLab’s Borderless digital art museum in Tokyo earned a spot in the Guinness World Records as the most visited museum dedicated to a single group or artist in the world.

New York City’s historical locale Cipriani hosted a SuperReal light-projection production from June to September 2021. The original interactive art was paired with surround sound for a 360-degree experience that simultaneously engages the senses.





"The metaverse is going to become part of our physical lives"

Kerry Murphy, founder and CEO, The Fabricant



In March 2021, the Royal Shakespeare Company staged a production unlike any other. *Dream*, inspired by *A Midsummer Night’s Dream*, is a digital interactive performance featuring live actors. The immersive show incorporates light and technology to transform the actors on stage and bring the audience into the production for an almost game-like experience. Audience members could participate as fireflies, as the actors colluded in a nonlinear storyline production, offering a new formula for blended performances.

Why it’s interesting:

Liminal spaces—blended virtual and physical experiences—are already successfully revolutionizing the culture and art scenes. In future, expect to see similar blurred reality activations in retail spaces, brand hubs and business centers. “The metaverse is going to become part of our physical lives,” says Kerry Murphy, founder and CEO of digital fashion house The Fabricant.



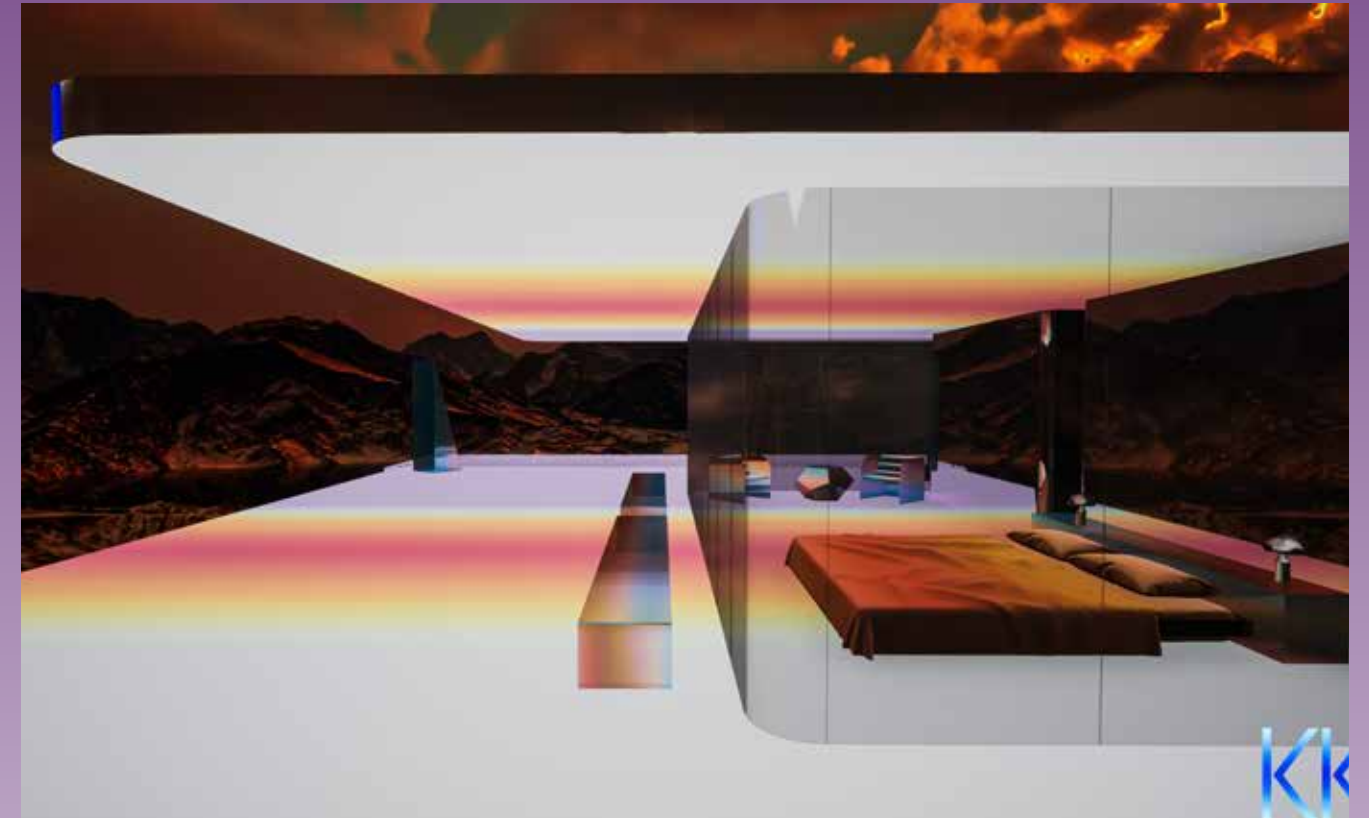
Digital real estate

Land in the digital world is being zoned, sold and developed as people settle into their virtual lives.

A virtual real-estate surge began in March 2021 with the sale of Mars House, the world's first digital home, for \$500,000. Krista Kim, the digital artist who designed it, told CNN that "sweeping changes and ideas of how we will live with digital assets are becoming a reality, and will create a global paradigm shift."

Upland—a block-chain-based game offering virtual land which is mapped to the physical world—had sold one million virtual properties as of June 2021, and Decentraland sold a plot for \$913,000 in the same month, which marked a high for the platform. The Sandbox allows users to buy pieces of land, and to develop and monetize virtual property as they would physical real estate. The platform's sales records were broken in February 2021 when 2,352 plots were sold for a combined cost of \$2.8 million, raising its total land value to \$37 million.

Looking for guidance, crypto-investors are turning to emerging virtual real-estate brokers and specialists. In March 2021, the Metaverse Group announced plans to launch Metaverse REIT, a first-of-its-kind real-estate investment trust for virtual assets. Jason Cassidy, cofounder of Metaverse Group, spoke of the firm's desire to lower the barrier of entry for larger developers who want exposure to the metaverse but "don't know where to start."



“Sweeping changes and ideas of how we will live with digital assets are becoming a reality, and will create a global paradigm shift”

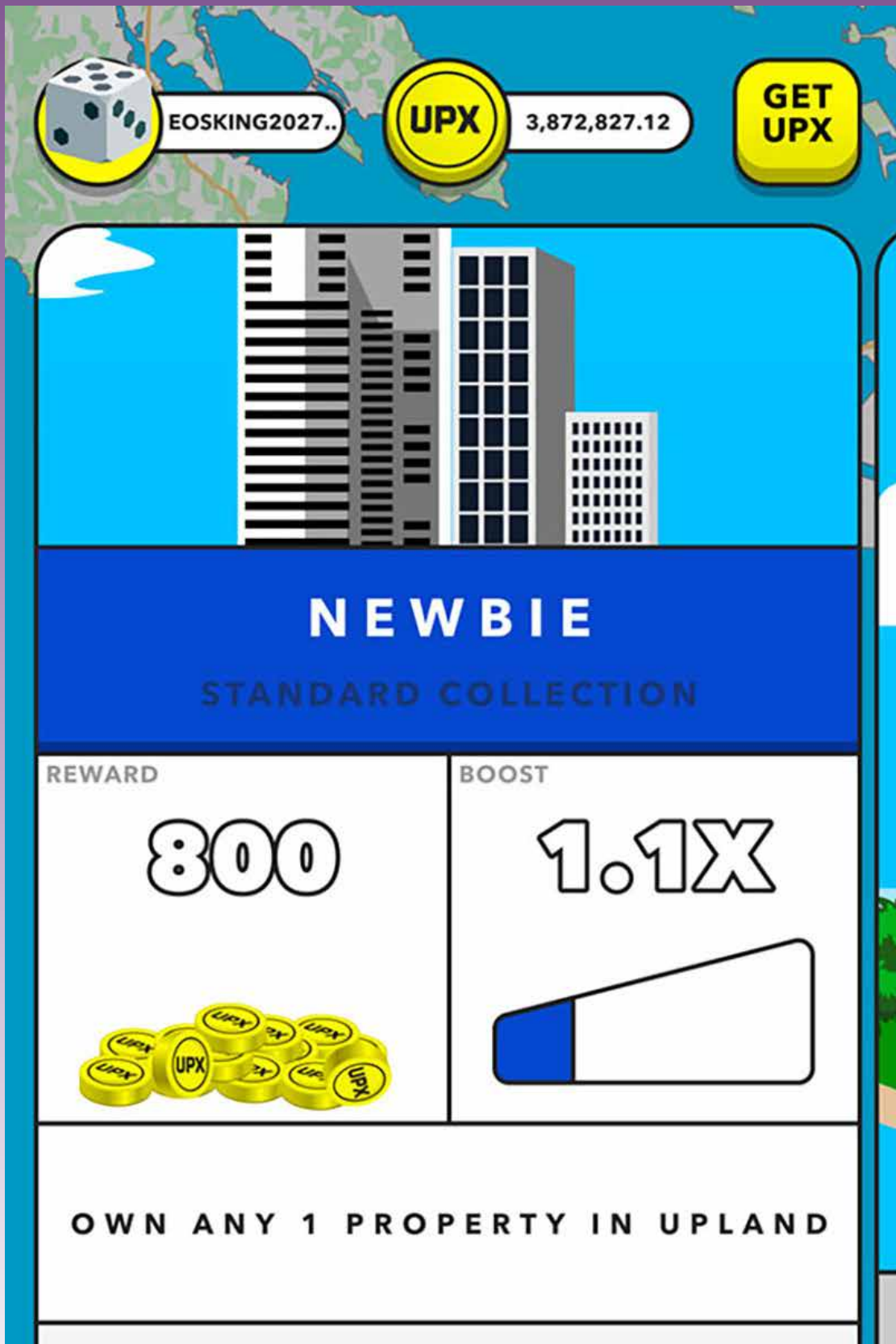
Krista Kim, digital artist

Cassidy believes these types of offerings are helping to bring the metaverse into mainstream consciousness. “Metaverses truly do give the user the freedom to create, explore, have fun, and engage in various types of business, all in one virtual space,” he said.

As more virtual land is bought and built on, prices are rising and availability is shrinking, similar to real estate trends in the physical world. Questions are now being raised about whether a virtual zoning board would benefit the metahome industry. As more people enter the metaverse and purchase virtual real estate, a zoning board could standardize procedures and settle disputes.

Why it’s interesting:

The virtual real-estate market is heating up, signaling rising interest among users to own and develop their own slice of the metaverse—and potentially teeing up a whole new market for the purchase, development and management of virtual properties.



Travelportation

Technology is enabling teleportation—not a sci-fi fantasy, but an immersive sensory experience that brings travelers as close as possible to a physical destination without actually being there.

In Microsoft Flight Simulator's latest update, passengers have views of the entire world. What started as an educational tool for new pilots is now being repurposed for tourism, illustrating the growing demand for virtual travel. Using AI and data from OpenStreetMap, artists portray regional architecture and popular tourist attractions just as they would appear in the physical world, making for an undeniably realistic experience.

Travel guides are merging tech with traditional travel for enhanced experiences. Launched in June 2021, JourneeBox offers a subscription-based travel experience that combines physical souvenirs and activities with virtual lessons, workshops and cultural interactions. Technology is making faraway destinations more accessible. Swedish travel company Lights over Lapland has introduced virtual tours, inviting anyone with a headset to experience the northern lights, an ice hotel and sledding trails. In the Faroe Islands, locals lead live tours for travelers tuning in through a screen, and luxury South African company &Beyond offers safari livestreams and Zoom sessions with local rangers.





55% of Chinese respondents say a virtual vacation sounds appealing



How will this look in the future? Philippe Brown, founder of luxury travel company Brown & Hudson, has high hopes for the possibilities that virtual travel brings. “There could be a situation where a future virtual-travel professional asks the customer when they want to travel,” Brown says. However, they won’t be asking for the departure and return dates, but for the era they would like to visit, such as London in the 1970s or Ancient Egypt. “The idea of time travel is part of virtual travel.”

Brown also envisions bite-sized travel as something to be enjoyed after dinner instead of watching a show, or during a lunch break. “Microdosing” travel experiences could be beneficial to an employee’s wellbeing in an office setting, for example. “A company might buy a cubicle that immerses all of the traveler’s senses: sea smells, sand under your feet, the sun’s heat on your head. Staff



could use the experience to disconnect,” Brown imagines. “You could create a universe that allows people to go in and exercise their minds in a gamified setting.”

Brown & Hudson will be one step closer to turning these ideas into a reality when it adds a virtual travel offering to its website in 2021, with the help of software company Immersiv, Brown reveals.

Why it’s interesting:

“The convergence of different technologies into the virtual realm could create a serious and exciting alternative to the reality of travel,” Brown explains—opening the door to travel experiences that are less cost-prohibitive, more accessible and more imaginative.

MetaBusiness

Business in the metaverse is already booming—opening up an abundance of opportunities for brands, advertisers, retailers and employers.





Gamevertising

Bigger than the movie and music industries combined, gaming has become a playground for brands and marketers to connect with an engaged audience.

When Nintendo's *Animal Crossing: New Horizons* took over screens in spring 2020, companies across a variety of sectors saw it as an opportunity to create in-game branded presences, with Net-a-Porter, Netflix, Hellmann's and Ally Financial hiring gamers to design branded islands for them. Other thriving games including *Fortnite* and *Roblox*, which attract millions of active players, are dialing up brand partnerships as companies seek to enter the gamesphere. Ferrari dropped its latest model, the 296 GTB, into *Fortnite* in July 2021, and Roblox are teaming up with a number of brands including Vans for a Vans World skatepark experience in September 2021 and Hyundai Motor to launch a metaspace Hyundai Mobility Adventure in October 2021. Minigames on WeChat have been gaining brands' attention in China, with Burberry, Dior and Valentino all having a presence.

Digital natives are driving the move to digital marketing channels. "Gen Z is a generation that is nightmarishly difficult to reach through traditional platforms and pipelines," Keith Stuart, games editor at the *Guardian*, tells Wunderman Thompson Intelligence. "They're not watching terrestrial television, they're not listening to radio, they're not reading magazines—so a lot of the traditional ways



“Gaming takes you to another world, brings a sense of wonder and requires a suspension of disbelief.”

Alexander Fernandez, CEO and cofounder, Streamline Media Group

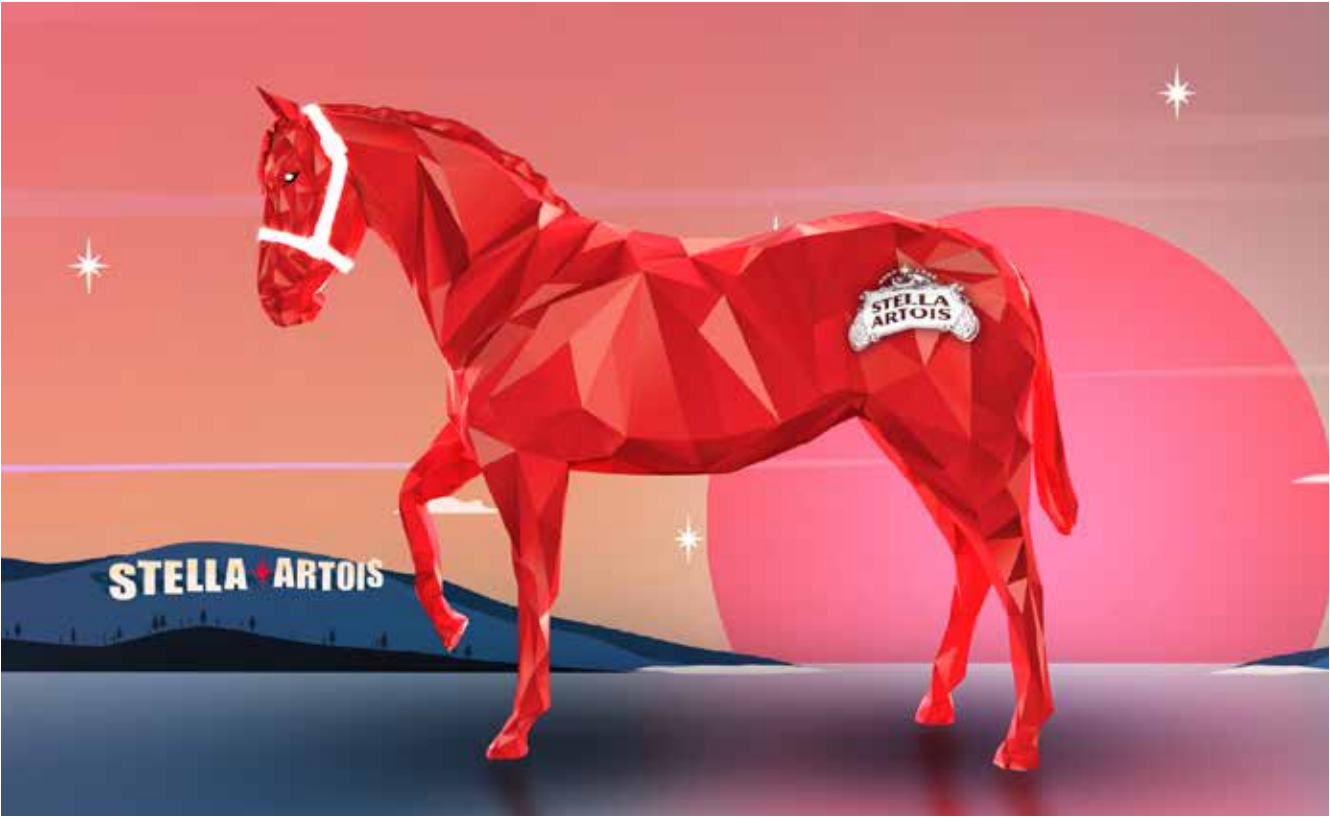


of marketing to young people are gone forever. Gaming is where they are.” The in-game advertising market size is expected to grow by \$10.97 billion between 2020 and 2024 according to a 2021 report by research company Technavio. “There’s something very unique about the growth of gaming as a marketing platform,” Grant Paterson, head of gaming and esports at Wunderman Thompson, explains. “We talk about gaming as being the nexus of a new consumer paradigm.”

Now brands are showing off their gaming know-how by creating their own offerings and wrapping gaming capabilities into their entertainment and advertising strategies. Balenciaga released its fall 2021 collection with its video game debut *Afterworld: The Age of Tomorrow*, created by Streamline Media Group. Players navigate a futuristic world, passing other characters who are wearing the luxury brand’s latest designs.

Alexander Fernandez, CEO and cofounder of Streamline Media Group, tells Wunderman Thompson Intelligence that the Balenciaga game is a “model for product discovery.” He also believes that it’s not a big leap to include the ability to purchase items, offer customer service or add other elements, all in one place. “It’s the future of commerce. None of this is rocket science. This is just happening around us.”

Beyond gaming, non-fungible tokens (NFTs) have put a new lens on digital ownership, and brands are seizing the opportunities. Burberry partnered with Mythical Games in August 2021 for a NFT collection in their flagship multiplayer game, Blankos Block Party. Items include Burberry branded jetpack and pool shoes. In June 2021, Stella Artois teamed up with Zed Run for a horse-racing experience where users could buy, sell and breed digital racehorses using NFTs. Coca-Cola auctioned its first NFT collectables in summer 2021 fetching





over half a million dollars. The wearables were available on Decentraland, and proceeds from the auction went to the Special Olympics organization.

The metaverse is an increasingly popular place for brands to build or be part of (see the Metaspace race, page 10). SK Telecom in South Korea unveiled Ifland, a metaverse for social VR, virtual meetups and events. The mobile carrier believes Ifland will be a rich virtual space for businesses to market themselves and a place to meet with consumers.

Gaming has evolved dramatically, progressively moving towards spaces where people meet and hang out rather than simply providing a singular game experience. Stuart explains that “we’re getting games which are more virtual persistent spaces, so worlds people can add to continuously.” He believes these virtual worlds are

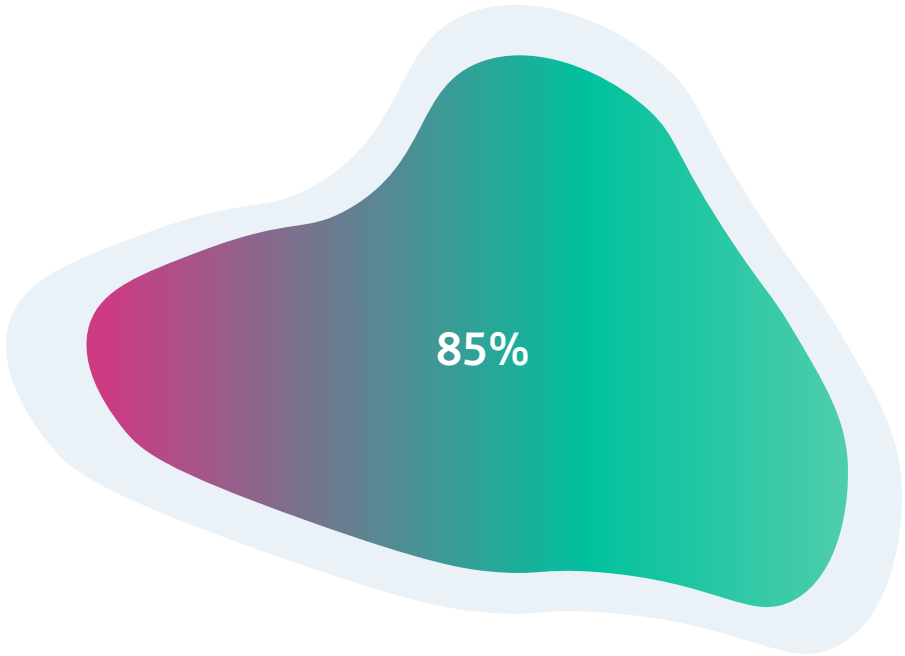


going to be a “marketing battle ground for companies,” naming Facebook Horizon as an example. “In the future, we are going to see online persistent, massively multiplayer game worlds where advertisers and marketers are going to have to claim space, but how they do that is going to be very complex.”

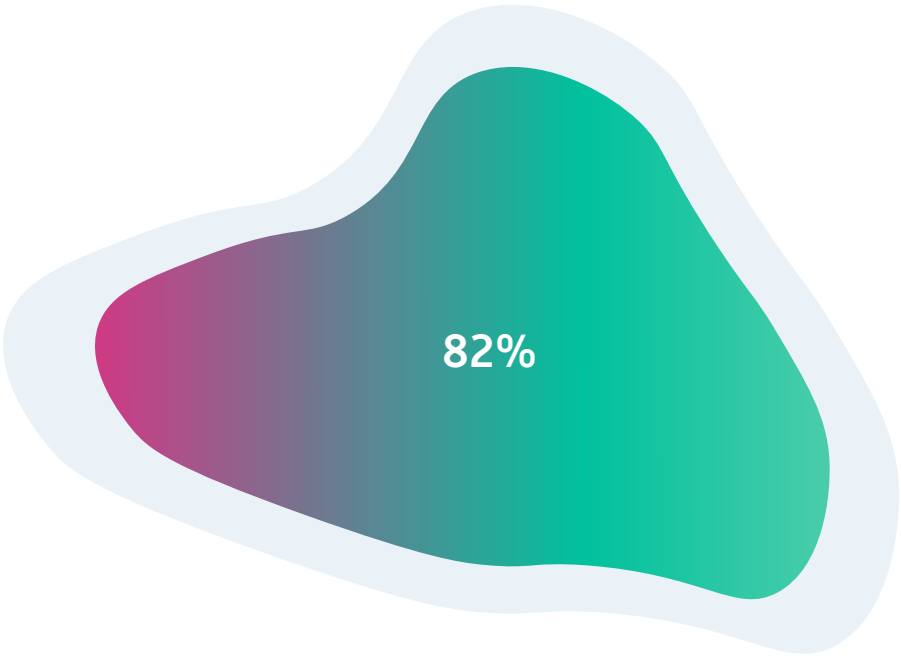
Why it's interesting:

Gaming is not simply another media. “The nature of that deep relationship is different from passive consumption of media,” says Fernandez. “It takes you to another world, brings a sense of wonder and requires a suspension of disbelief. It’s psychologically more engaging.” These gaming traits of engagement and interactivity are already being tapped by brands, not just to market and entertain but also to educate consumers and even to design products, where players’ choices influence a product’s form.

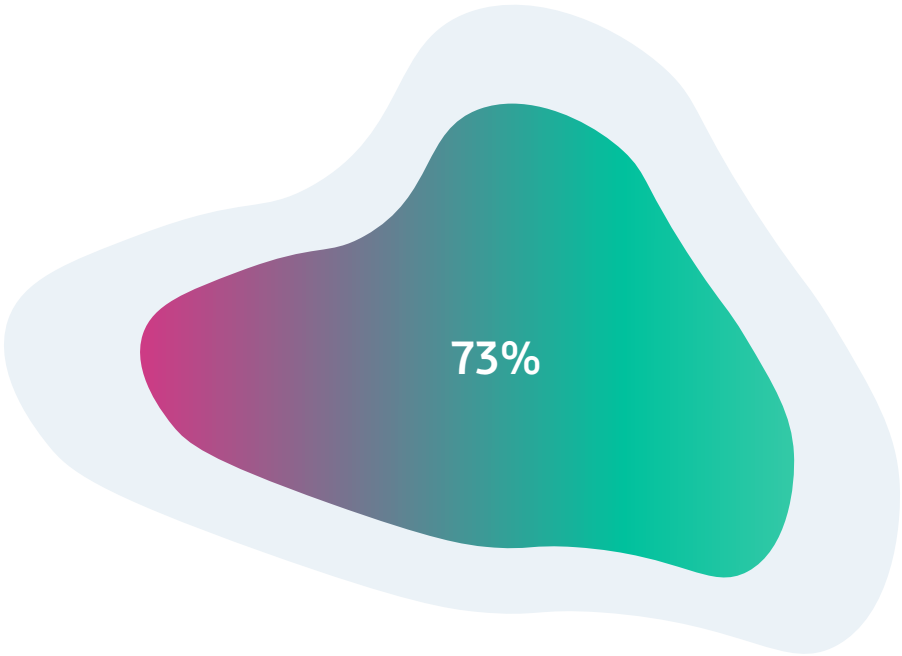
Gamevertising



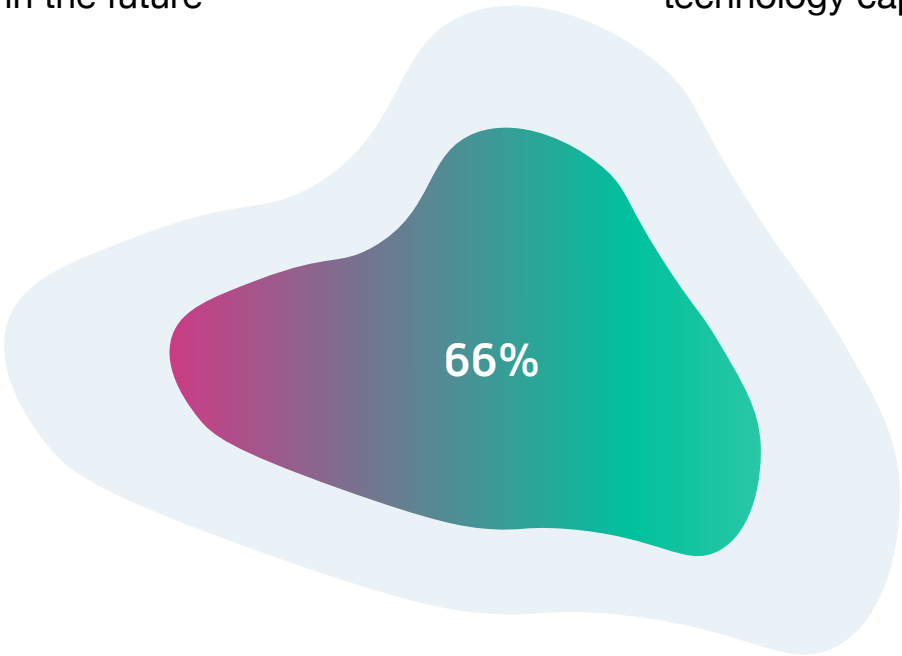
Brands will need to have a digital presence to be successful in the future



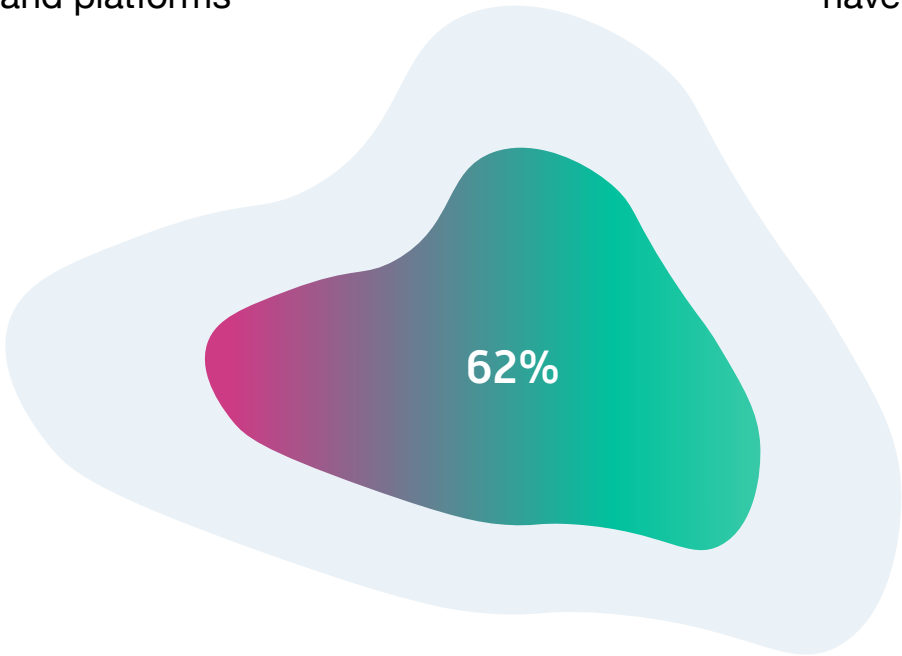
I expect most brands to have seamless technology capabilities and platforms



It's easier to relate to brands that have a digital presence



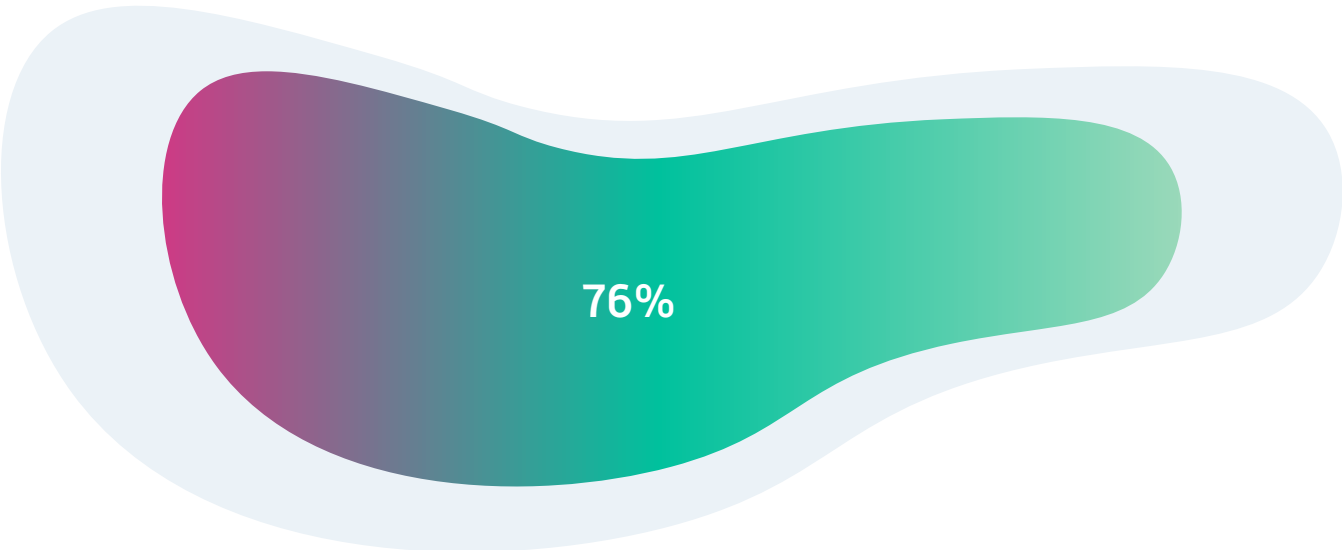
I prefer to engage with brands digitally



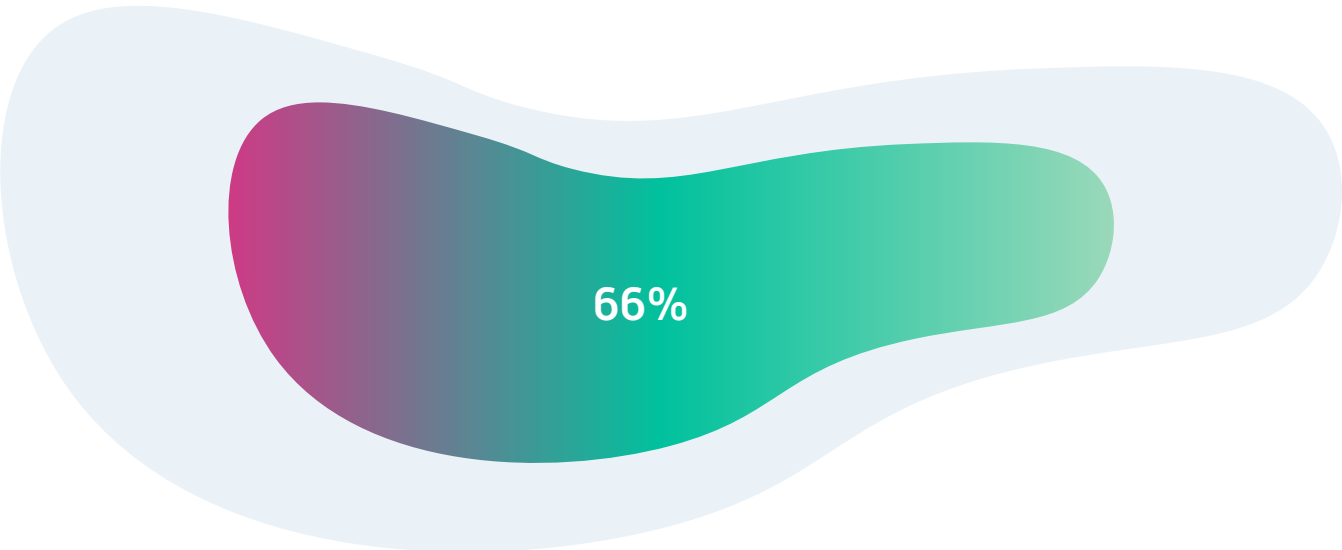
I feel that I have a closer relationship with brands that have a strong digital presence

Gamevertising

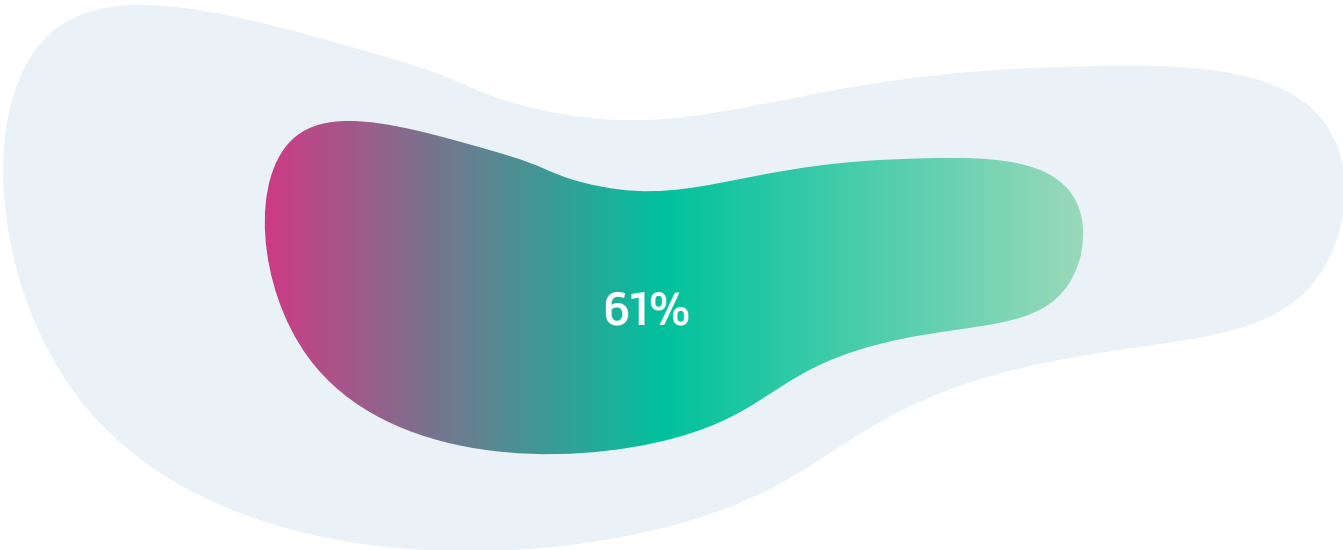
Gen Z



It's easier to relate to brands that have a digital presence



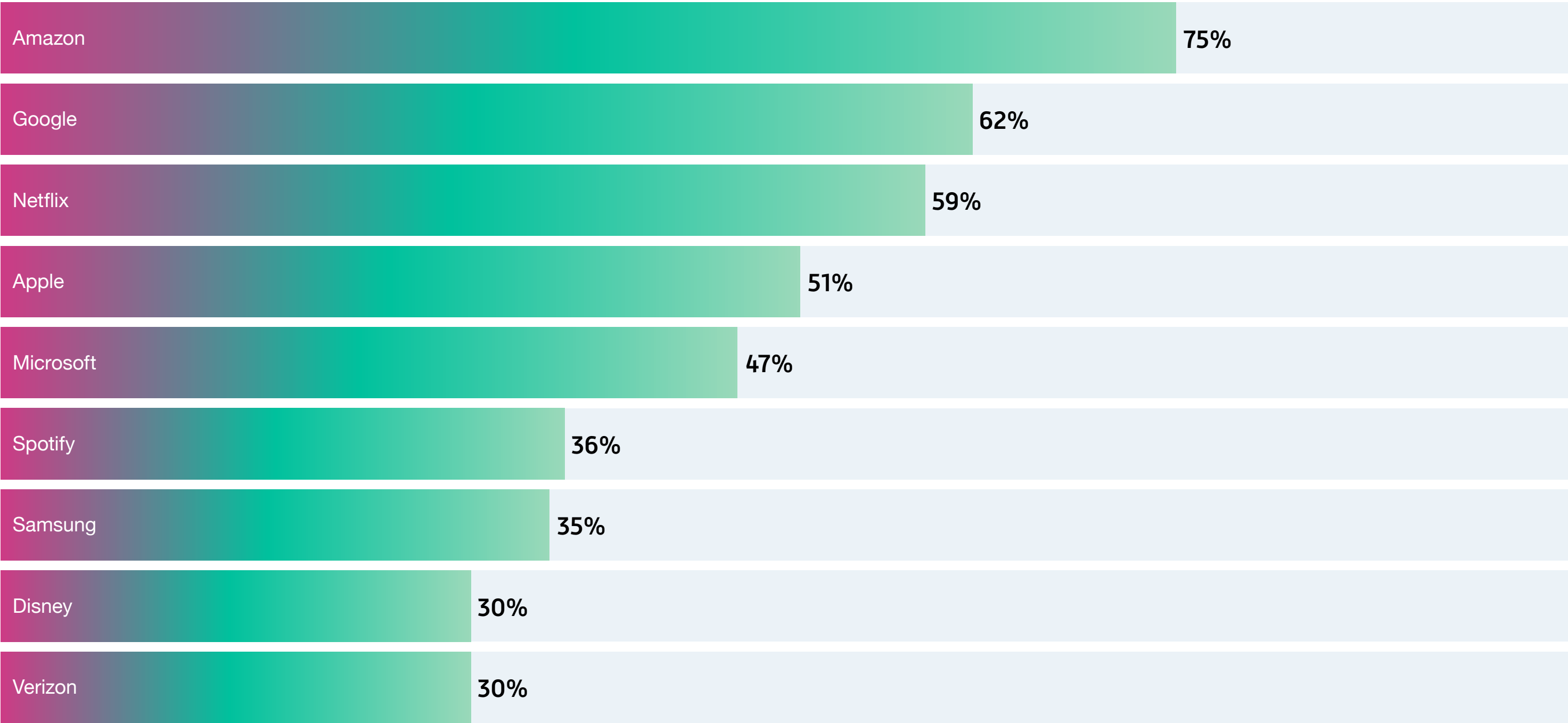
I feel I have a closer relationship with brands that have a strong digital presence



If a brand doesn't have a digital presence
I would probably forget about it

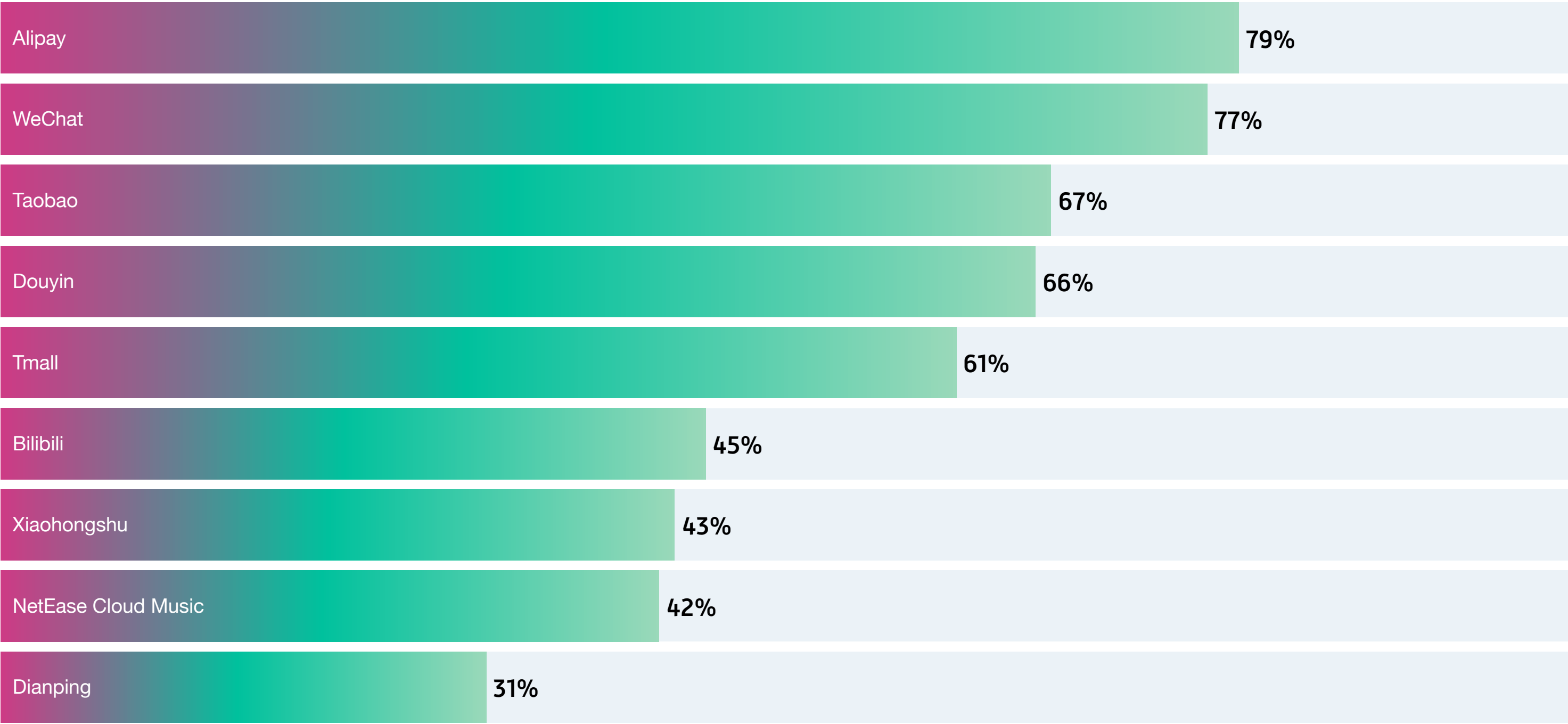
Gamevertising

Most digitally advanced brands, ranked (United States + United Kingdom)



Gamevertising

Most digitally advanced brands, ranked (China)



A case study: exploring how three companies are stepping into the metaverse.

Facebook

Sub-companies: Instagram, WhatsApp, Oculus VR, Workplace, Novi, Portal, Messenger

Plans for the metaverse: Mark Zuckerberg announced Facebook’s plans to become a metaverse company at the end of July 2021. He defined the metaverse as “a virtual environment where you can be present with people in digital spaces.” The announcement was swiftly followed by the establishment of a new product team to bring the vision to fruition. “I believe the metaverse will be the successor to the mobile internet,” Zuckerberg said. “Creating this product group is the next step in our journey to help build it.”

Its transition: From social media to the metaverse

Our analysis: Facebook is ramping up its tech capabilities by investing in virtual reality and gaming. The company’s presence in the metaverse reinforces the belief that social interaction and connection will be at the forefront of the metaverse, and of digital communication as we know it.



Epic Games

Sub-companies: Fortnite, Unreal Engine

Plans for the metaverse: Epic Games raised \$1 billion in funding toward its own vision of the metaverse in April 2021. Its stated mission: “to advance the state of the art in technology, entertainment, and socially connected online services.” Having hosted virtual concerts with massive audiences (including the Rift Tour on *Fortnite*) and being home to widely played titles (such as *Battle Breakers*, *Shadow Complex* and *Spyjinx*), the company has already begun the transition from traditional gaming to metagaming.

Its transition: From gaming to metagaming

Our analysis: If its extensive current offering is any indication, Epic Games is surely prepared to set the foundation for a revolutionized gaming world in the metaverse. Building on the technology it already has, the company has its virtual foot in the door to digital interactions and experiences.



Tencent

Sub-companies: Sumo Group, Weixin, WeChat, Riot Games, Supercell

Plans for the metaverse: Tencent’s ownership of WeChat gives the brand direct management of virtual payments, retail, and broader digital transactions in the metaverse. The company also has full or partial ownership of gaming giants including Sumo Group, Epic Games, Bluehole and Ubisoft, an interesting addition to its broader focus on fintech, advertising, cloud computing, and self-described “technology for good.” Ultimately, Tencent’s ownership of the largest digital transaction app presents a huge economic advantage for the brand in the metaverse.

Its transition: From messaging and payments to the metaverse

Our analysis: Its stated mission to “collaborate for the sustainable development of society” may or may not play a role in its larger plans for the metaverse. Right now, the brand’s venture in WeChat’s digital transactions, advertising, and social commerce within the metaverse indicate that the company will have a well-rounded role in metacommerce development.



New retail frontiers

Digital-twin stores and augmented shopping experiences are paving the way for the next retail frontier—one that is intuitive, immersive and engaging.

The rapidly evolving digital space is radically impacting all industries and retail is at the forefront of this change. According to IBM's 2020 US Retail Index, the pandemic has accelerated the shift away from physical stores to digital shopping by approximately five years. Ecommerce is having to step up its game quickly.

“Discovery is typically happening in retail stores or on Instagram. It’s not really happening on brands’ websites,” Neha Singh, founder and CEO of virtual store developer Obsess, tells Wunderman Thompson Intelligence. Singh adds that Obsess aims to change that with a “more engaging, more visual and branded” approach to presenting products, as well as offering an “organic and natural way for customers to discover products and learn about them.”

Online shopping experiences are starting to notch up ecommerce engagement, while looking more like physical stores. Obsess collaborated with skincare brand Dermalogica in July 2021, launching an immersive VR store that visitors navigate like a physical shop. In March 2021, Burberry collaborated with *Elle Digital Japan* for a digital replica modeled after its Ginza store, and in February 2021 Tumi debuted its 360-degree virtual store, which had an AR overlay allowing shoppers to place life-sized product renderings into their homes.





“Our real world is 3D. We know how to operate in 3D. That’s how our brain works,” Singh explains. “We have had to learn all these behaviors online that are not natural or intuitive in the way we interact. But over time, as technology gets better and better, all our digital interfaces will become more natural and more intuitive.”

For Gucci’s 100th anniversary in May 2021, a celebration took place in the form of an experiential exhibition at its Gucci Garden in Florence. For those who were unable to attend the event, the luxury brand collaborated with Roblox on a virtual version of the Archetypes exhibition, which showcased 15 of the company’s most impactful advertising campaigns. Visitors assumed a genderless avatar to navigate the virtual iteration of the garden, with the option to purchase limited-edition virtual items.

“Brands can push the boundaries of creativity in the metaverse and offer experiences that are unrepeatable in real life”

Christina Wooton, vice president of brand partnerships, Roblox

While they are used to mimic physical stores, digital spaces are borderless, which opens an abundance of creative opportunities. “Brands can push the boundaries of creativity in the metaverse and offer experiences that are unrepeatable in real life,” Christina Wooton, vice president of brand partnerships at Roblox, told *Dezeen*. “For Gucci Garden, we opened up the ceiling of one room to show the sky. There are butterflies flying around and flowers growing on mannequins’ heads. You can’t do this in the real-life art exhibition.”

Today, 81% of global consumers agree that a brand’s digital presence is as important as its instore presence. This is prompting brands to enhance their ecommerce storefront prominence and making way for virtual flagship stores. In July 2021, Fendi opened a 360-degree virtual flagship based on its New York City 57th Street store, and Lancôme opened a temporary virtual flagship set in



Singapore in 2020. Lancôme’s Advanced Génifique store offered 3D shopping experiences, consultations and educational events. The skincare brand has since rolled out virtual flagship pop-ups in Australia and the United States.

What does this mean for bricks-and-mortar stores? There is demand for both, as 61% of global shoppers say they prefer online shopping to in-person shopping, and 55% prefer in-person to online.

Physical shops are increasingly blending digital overlays. Snap AR has been ramping up its offerings, with AR try-ons in collaboration with American Eagle, Farfetch, Piaget and Prada. “We see big opportunity in taking the reality around you and layering the digital world on top of it,” Carolina Arguelles Navas, group product marketing manager at Snap AR, tells Wunderman Thompson Intelligence. “From shopping experiences to travel, there’s an endless opportunity to take the power of digital content and layer this onto the physical world around you.”

AR retail is becoming the new industry norm, with brands including Sephora, Ikea and Samsung already integrating the technology into their stores. The forecast is looking profitable too, with AR in retail, commerce and marketing expected to surpass \$12 billion in 2025, according to global tech market advisory firm ABI Research.

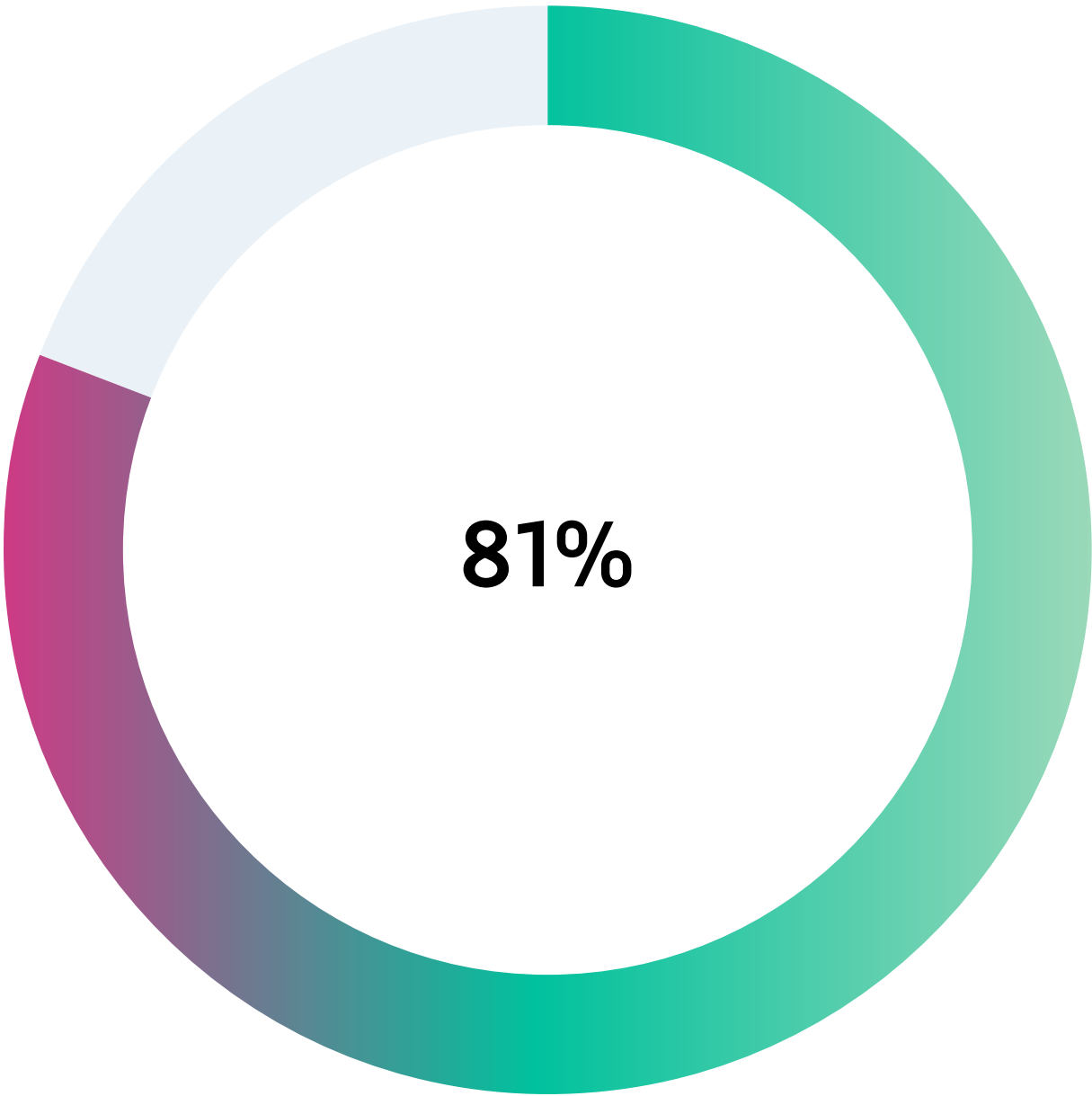
Why it’s interesting:

The digital shopping experience is becoming a rich ecosystem that blends into multiple online channels. However, shoppers are still not prepared to go fully digital, and 83% of global consumers believe the future of shopping is hybrid. “The bringing together of physical and virtual is going to accelerate significantly,” predicts Grant Paterson, head of gaming and esports at Wunderman Thompson.

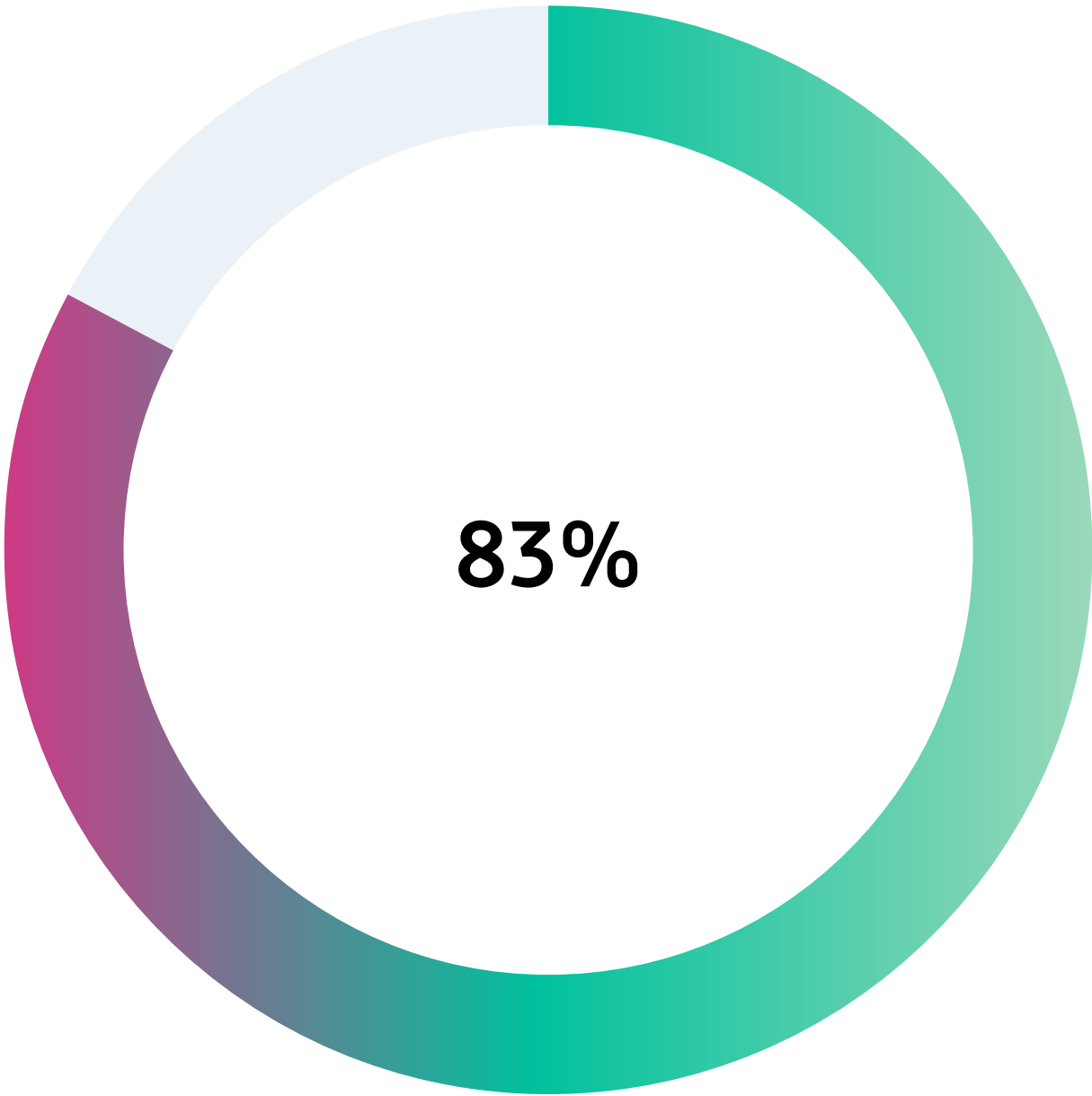


New retail frontiers

A brand’s digital presence is as important as its in-store presence



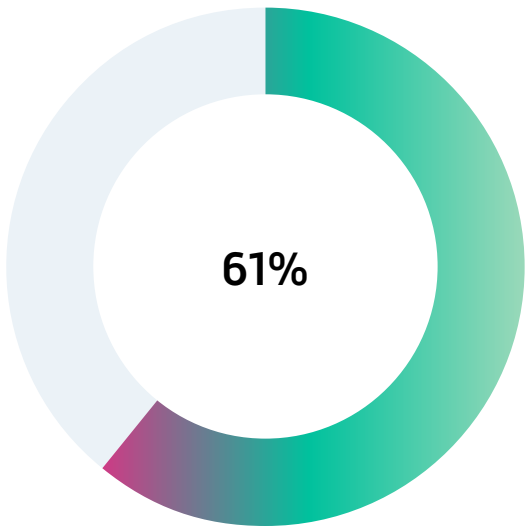
The future of shopping is hybrid



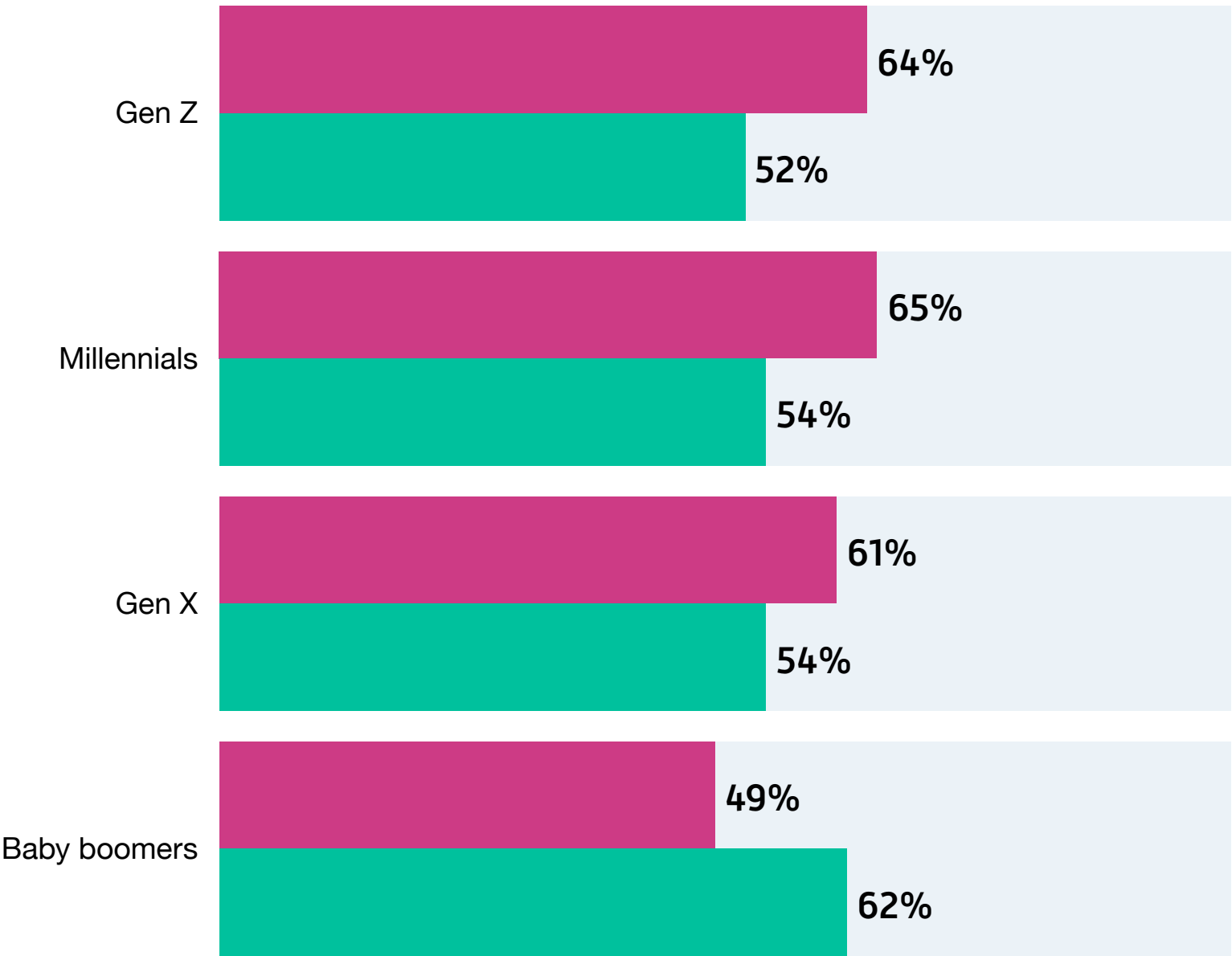
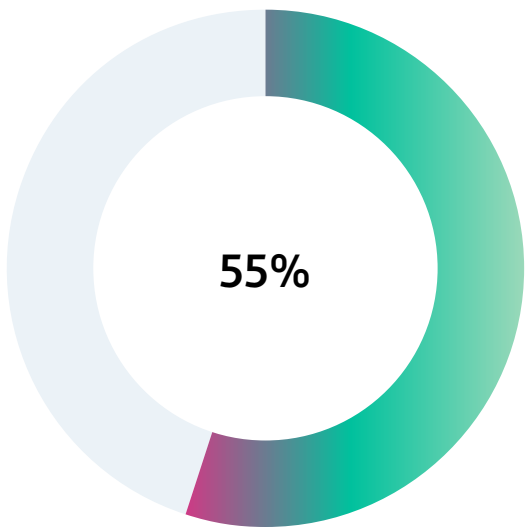
New retail frontiers

On average, digital and in-person shopping preferences are at parity. But these preferences show a direct correlation to age—younger consumers prefer online shopping and older consumers prefer to shop in person.

Prefer online shopping



Prefer in-person shopping





The metaverse workforce

Teleportation, holograms, and roaming avatars—this isn't the latest sci-fi movie, this is the future of work.

The shift to remote work is giving rise to companies prioritizing virtual environments. After all, the pandemic has shown tech's strength in keeping many jobs in action. According to a July 2021 Wunderman Thompson Data survey 61% of global respondents agree that their livelihood depends on technology. Now tech companies are rolling out new products and experiences with a view to define what the future of work looks and feels like.

Facebook is betting big on VR futures. “By 2030, the new generations of Oculus will allow users to teleport from one place to another without moving from their couch—not only for gaming and entertainment, but also for work,” Mark Zuckerberg told *The Information's* 411 podcast. On August 19, the company introduced Horizon Workrooms—a “collaboration experience” that allows co-workers to collaborate, communicate and connect through VR. The idea is for the experience to feel as close to in-person as possible, even allowing for “lifelike” conversations. This feature resonates with 76% of global users wanting video chat to allow for more natural, everyday interactions.

The desire for location-defying technology that provides true social presence appears to be a priority for many companies. Microsoft Mesh uses mixed reality (MR) to create interconnected worlds where the physical and digital come



together. The selling point with Microsoft's new platform is that people in different physical locations are able to collaborate and work in real-time on the same project via holographic experiences across different devices.

"You can actually feel like you're in the same place with someone sharing content or you can teleport from different mixed reality devices and be present with people even when you're not physically together," says Alex Kipman, Microsoft's technical fellow.

The COVID-19 pandemic is reshaping the future of work, pointing to a flexible hybrid model. "We anticipate never going back to five days a week in the office. That seems very old-fashioned now," stated Alan Jope, CEO of Unilever, at the Reuters Next conference in January 2021. This new-wave thinking is aligned with employee expectations: more than 70% want flexible and remote work to continue, according to a Microsoft 2021 survey. Many large corporations are

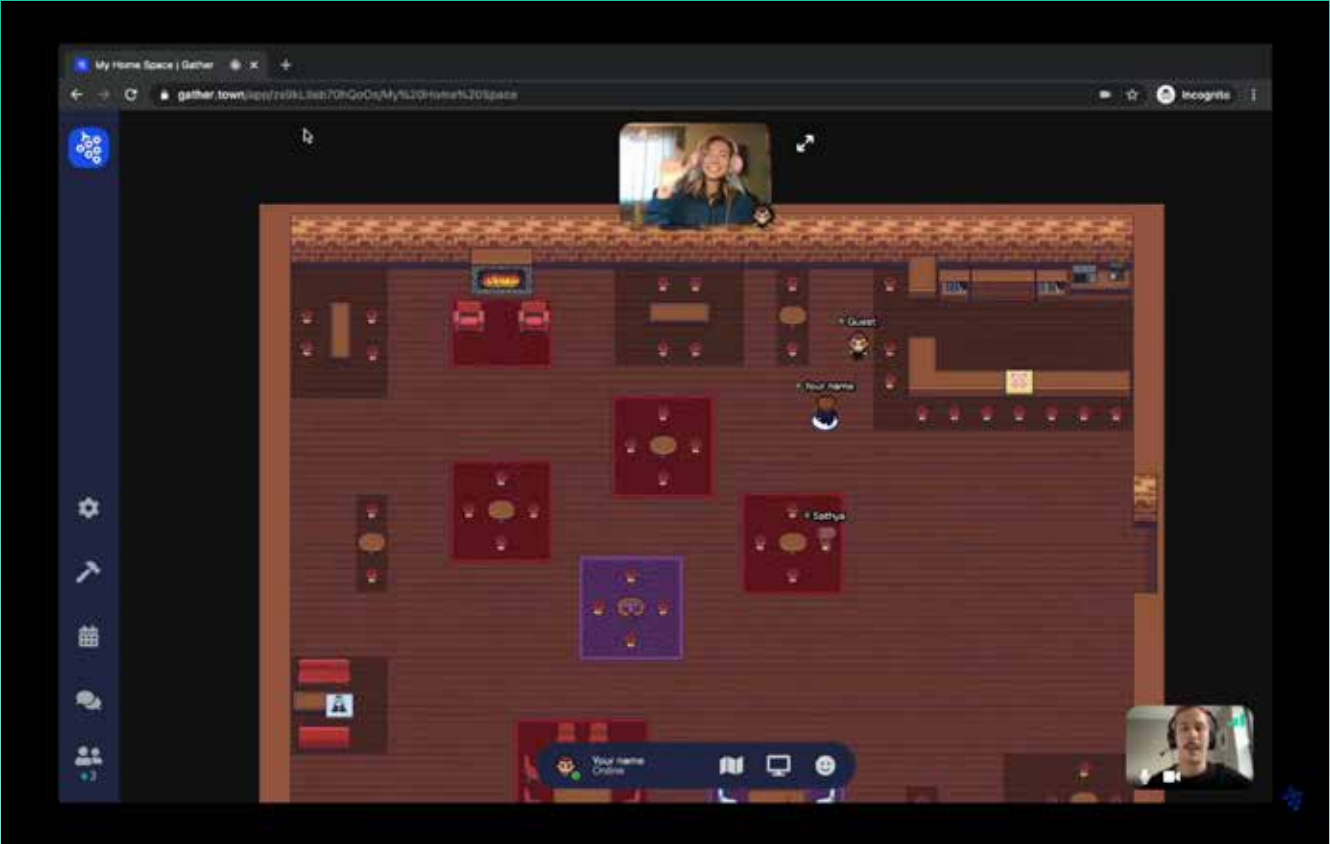
76% of global users want video chat to allow for more natural, everyday interactions

responding, including Microsoft, Verizon and Unilever, which have all announced hybrid work setups, while Spotify, Twitter and Deloitte UK are leading the way with fully remote working options.

As companies open up to the idea of employees working from anywhere, startups are tapping into gaming mechanics to create virtual workplaces that foster collaboration and creativity.

Gather launched in May 2020, born from Zoom fatigue and the need for digital spaces that enhance natural connections. The platform aims to make "virtual interactions more human." Believing the physical world has constraints that can limit work opportunities and social circles, the startup offers an alternative to this with a metaverse that features a "virtual layer over the physical world where people can work, socialize, and learn." Kumospace and gen Z startup Branch operate in similar ways to Gather, focusing on heightening organic interactions





using spatial virtual rooms that mimic physical environments, where users’ avatars can roam around and generate spontaneous moments.

Efforts are also being poured into corporate events, conferences and boardroom meetings. London’s Roomkey provides 3D virtual rooms where people can socialize and network “just like at a real-life event.” Xsolla’s Unconventional launched in October 2020, holding virtual events for the gaming industry, and Sine Wave Entertainment has been hosting gamified events in collaboration with PR agency EAK Digital since April 2020.

In July 2021, architecture companies Bjarke Ingels Group and UNStudio partnered with Squint/Opera to create the Spaceform virtual workspace. The idea is to “superpower presentations” digitally to anyone, anywhere, on any device.

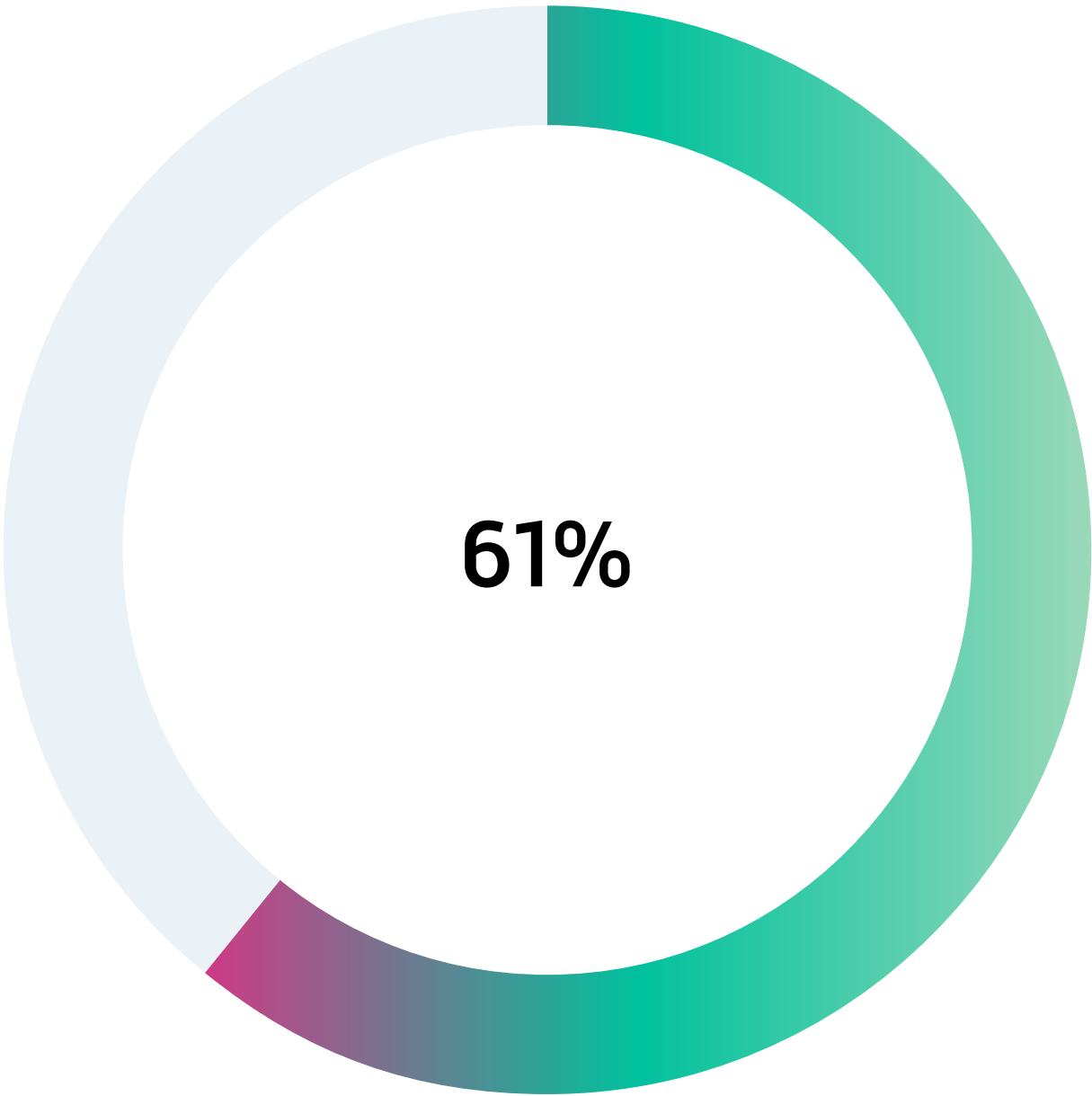
Tech companies are already preparing for the rise of the digital workforce. Dropbox announced in October 2020 that it is becoming a “virtual-first company,” and the entire employee experience, from hiring to day-to-day work, will have a digital setup. WeTransfer opened a digital version of its Dutch HQ in May 2020, allowing decentralized working.

Why it’s interesting:
The way we connect, live and work is transforming as a result of the digital revolution, and a metaverse workforce is in the making. The future of work will foster a hybrid setup for many, leading with a virtual front that generates new forms of creativity, collaboration and immersion.

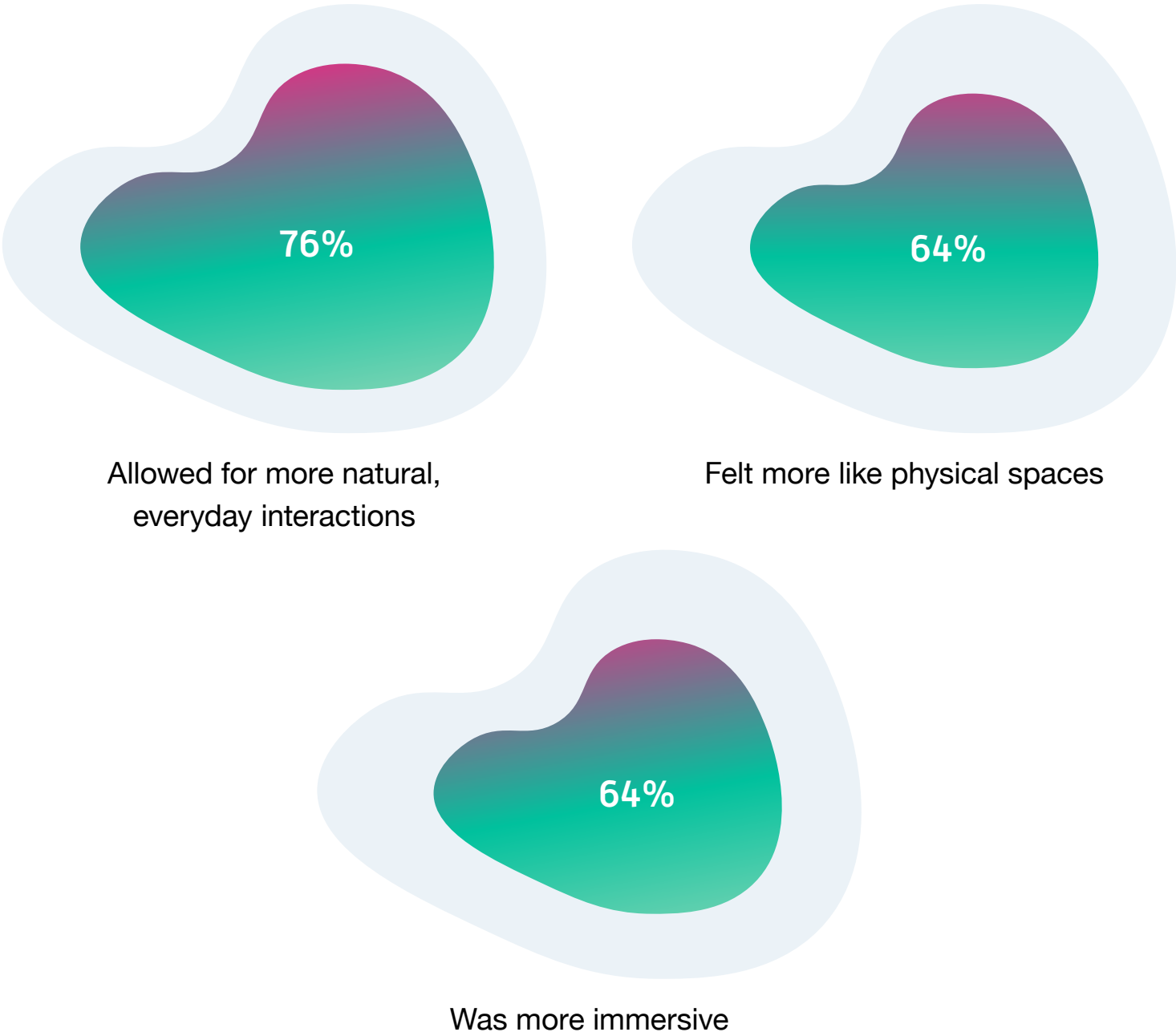


The metaverse workforce

My livelihood depends on technology



I wish video chat...



Three experts explore the potential of the metaverse

VR is the future for businesses



Says who: Leon Ng, founder and CEO of LNG Studios
About LNG Studios: Real estate developer specializing in creating immersive experiences and visualization tools for pre-sale markets.
Why it's interesting: "In VR you have

way more control when it comes to the storytelling component. The key thing is that you can fully immerse yourself into a space. For one masterplan community project we did for Concord, we gave away 10,000 headsets to realtors around the world. So someone from Shanghai was able to visualize the virtual showroom in the comfort of their own home. Something like that is very powerful. It's a huge cost saving—you don't have to build a physical showroom, you just build a virtual showroom. I'm very bullish when it comes to VR and the technology is getting way better."
Our analysis: With hardware companies like Facebook's Oculus and Samsung's Gear VR upping investment in bettering VR technologies, businesses are leveraging the immersive factor to reach clients and other businesses, wherever they are in the world.

Virtual possessions are the future of sustainability



Says who: Kerry Murphy, founder and CEO of The Fabricant
About The Fabricant: A digital-only couture fashion house that aims to be "the wardrobe for the metaverse."
Why it's interesting: "The most sustainable clothing is clothing that has

never been made before. By introducing these digital business models, we're going to be able to reduce the amount of physical items, because people are simply going to start seeing value in digital items and realize that they'd rather interact with a digital item or have an infinite wardrobe of digital fashion items, but a very limited wardrobe of physical items."
Our analysis: Digital possessions are the next phase in anti-excess consumption. The emerging formula for digital possessions offers consumers another—perhaps more effective—way to prioritize environmental impact when purchasing.

There will be no more "portal" to the internet



Says who: Kai Bond, partner at Courtside Ventures
About Courtside Ventures: A venture capitalist fund focused on gaming and technology startups.
Why it's interesting: "I worked at Microsoft in the late '90s, early 2000s.

[At that time], it was unthinkable that anything could come along to displace those portals. Then all of a sudden Facebook came along. They just absolutely destroyed the idea of a portal. The biggest thing that I think we're missing right now is a digital rendition of a decentralized advisory platform that allows you to seamlessly go between different worlds."
Second take: Kerry Murphy adds: "Once glasses get an AR filter, I won't need a laptop anymore. I could be having this video chat with you just with my glasses—just a virtual interface. And everything that I have in my physical space is connected to the internet. So I would be able to interact with my digital items in my physical life without, let's say, this clunky laptop. Laptops are going to disappear. Maybe even smartphones are going to disappear."
Our analysis: The idea of a single entry point to the internet—whether through a platform or a device—is disappearing. In the future, engagement with digital spaces and items won't be funneled through any one gatekeeper; rather, it will be seamlessly superimposed on the physical world.

A circular inset image showing three people from behind, looking at a large, ornate castle with green roofs. The sky is dark with many colorful fireworks exploding. The people are a man with dark hair, a woman with dark hair in a bun, and a woman with long blonde hair.

MetaSocieties

A digital reality that reflects the values and standards of our physical lives is in the making.



With more than 4.6 billion active internet users around the world engaged in online activities and an average daily screen time of five to six hours a day in the United States, our digital and physical lives are undeniably intertwined.

Habits and beliefs from our physical lives are not only extending into the digital realm, but becoming more significant. “In this day and age our digital identity is almost more important than our physical one,” suggests Amber Slooten, cofounder and creative director of The Fabricant.

Hyper-realistic digital identities

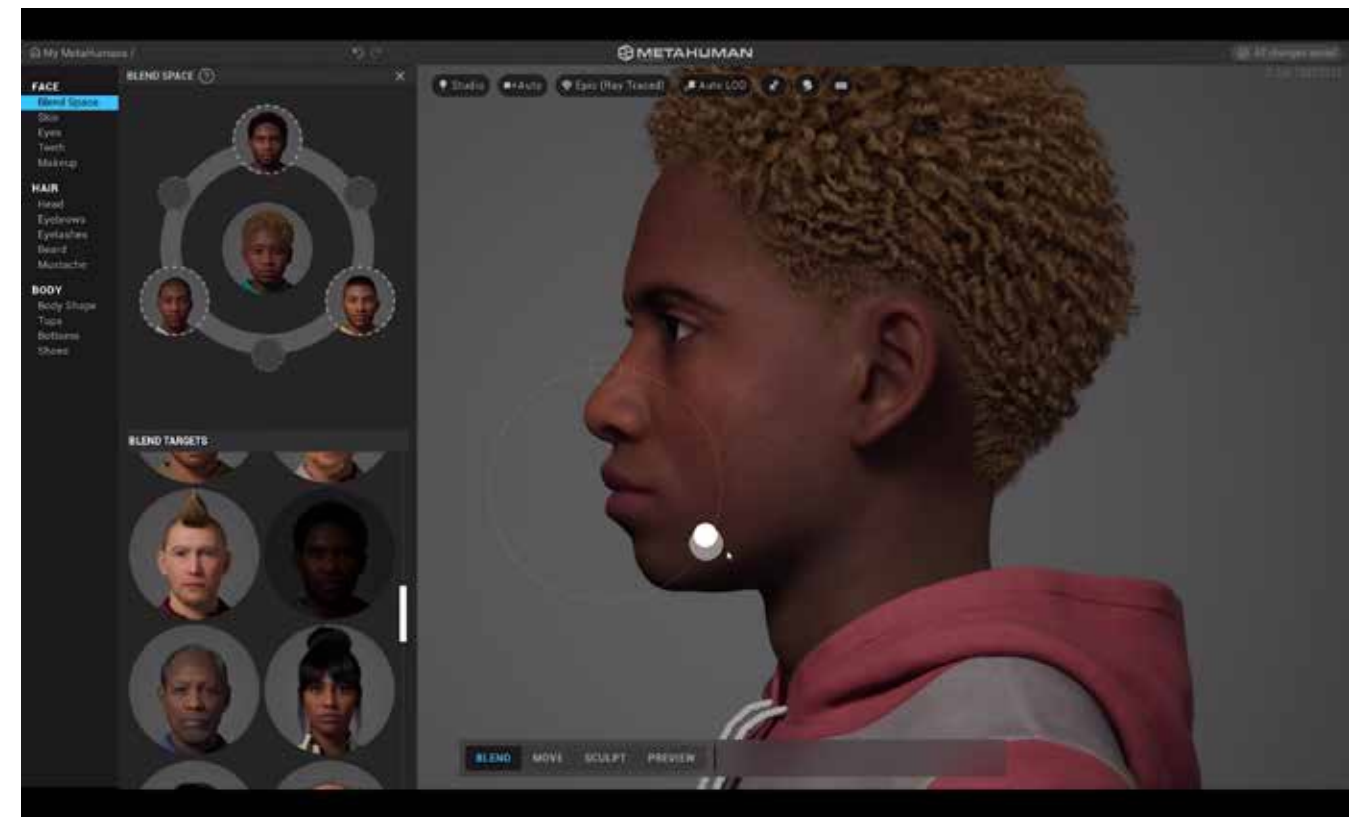
The need to reflect users’ physical identity is becoming easier, more accessible and inclusive thanks to Unreal Engine’s MetaHuman Creator by Epic Games. With the central belief that “digital humans are the future,” MetaHuman Creator is a real-time cloud-stream generator that can replicate intricate details of a person’s features, from skin complexion and wrinkles to broken capillaries and scars. DNABlock are on a similar mission to make avatars in the metaverse more inclusive and diverse with the help of Softbank's recent investment.

But it’s not just the realistic looks that resonate with people. Increasingly, the days of creating fictional digital aliases are largely behind us, as today 88% of global consumers say their online self should reflect their real-life ethics and values. This is perhaps why H&M offered virtual recycling in *Animal Crossing* in April 2021, with users able to recycle game outfits into new ones through an online version of Looop, the brand’s in-store garment-to-garment recycling system, available in selected stores. Capturing the attention of people wanting to do good online is becoming increasingly important.



“Games are becoming environments in which people are defining their identity.”

Grant Paterson, head of gaming and esports, Wunderman Thompson



“Think about creating a new online society but doing it right from day one”

Daren Tsui, CEO, Together Labs





Borderless social networks

Defying geographic restrictions, new communities connecting around shared values are being created in the digital world. After all, 83% of global consumers believe that technology brings people together. Now a metaverse of new social groups is in the making.

IMVU by Together Labs is a 3D avatar-based friendship discovery social network—a new kind of network that exists in the metaverse where people are actively working on building new and meaningful relationships. Daren Tsui, CEO of Together Labs, observes that “social platforms are not really satisfying our needs for friendship—they’re more media than social network.” Tsui believes that IMVU is fostering “more authentic and immersive” experiences, which establish the platform as the next-generation social network. IMVU’s approach



reflects academic research suggesting interacting with others in a 3D environment that feels immersive and real helps develop social presence—the feeling of being in the same place as someone else.

“The more you play, the more you’re getting to know other people,” explains Tsui. “Think about creating a new online society but doing it right from day one.”

Nowhere is a new social networking platform where people float in nine-sided polygons within 3D environments that range from forests to clouds to an island in the sky. Jon Morris, CEO of Nowhere, describes the platform as “the first online event space where you can truly be present, whether feeling the raw energy of a virtual performance or serendipitously vibing with a stranger you just met.”





Facebook Horizon is currently in beta mode but aims to be a “VR social experience” where explorers play, build and create together. A series of virtual worlds are in place but requires people to participate, collaborate and connect to fully exist. Microsoft acquired AltspaceVR back in 2017, a VR platform that can host gatherings such as live shows, meetups, and festivals with people from around the world.

Games have long provided spaces for players to meet, connect and bond, gradually becoming persistent worlds defined by users. The Sandbox is described as a “virtual world where players can play, build, own, and monetize their virtual experiences.”

Virtual utopia

Alongside these increasingly social experiences, groups are being formed that champion social causes and political campaigns—new forums for activism. Digital strikes took off in spring 2020 when pandemic-related lockdowns were introduced around the world. Greta Thunberg famously called for climate protests to shift online, initiating the still-trending #ClimateStrikeOnline.

IMVU has also become a place for self-expression and community building. “Users are transferring their real-life antics into the virtual world,” explains Tsui. There are many social causes led by the IMVU community, including amplifying the voices of LGBTQ+ people, Black Lives Matter, and COVID-19 relief.

A wider range of people are now stepping into the metaverse arena. New York City mayoral candidate Andrew Yang launched a metacampaign in June 2021. Avatar-Yang held a press conference in the metarealm and addressed an audience largely consisting of digitally driven gen Zers. Could this be the future for political campaigns?

People expect companies to take the initiative too: 88% of global consumers say brands need to work just as hard to create inclusive spaces online as they do offline, and more than half (67%) believe that online/digital platforms are more inclusive than the physical/offline world.

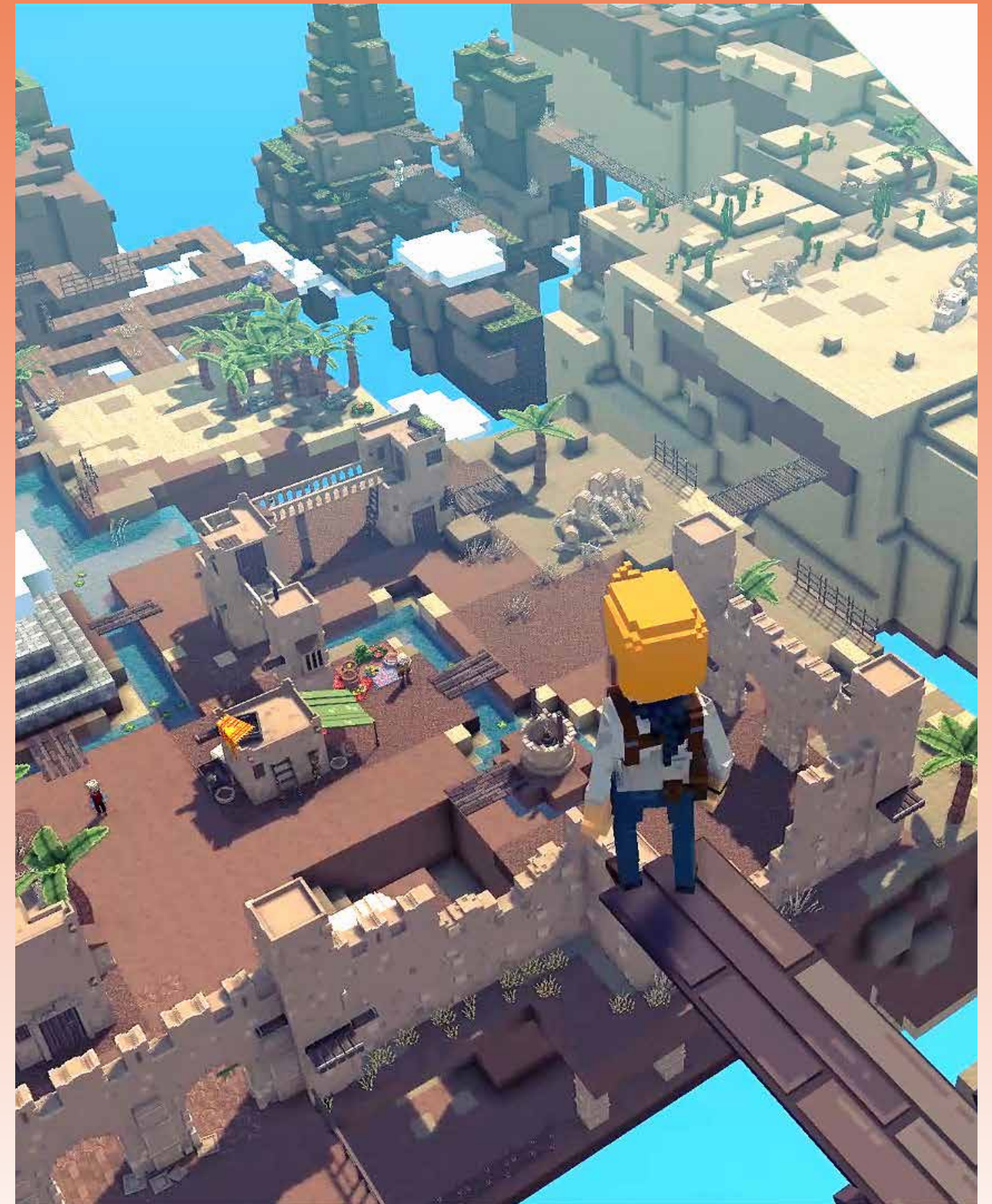
Decentralized futures

Technology is here to stay. But will its influence be for the better? Tech can make the world a better place according to 88% of global consumers, and 78% agree it can help create a more equitable society.

As the future moves into the metaverse, there are some key issues to address. “We have two conflicting goals,” Keith Stuart, games editor at the *Guardian*, tells Wunderman Thompson Intelligence. “One is that big corporations want to own everything we do and expect us to accept that. But the second is that the user-base wants everything to be free, available and cross-platform, and they want to remove that technological gatekeeper.” In an age when the power is shifting into the hands of the user, there is undeniable pressure from brands to create an equitable and decentralized metaverse that belongs to the people.

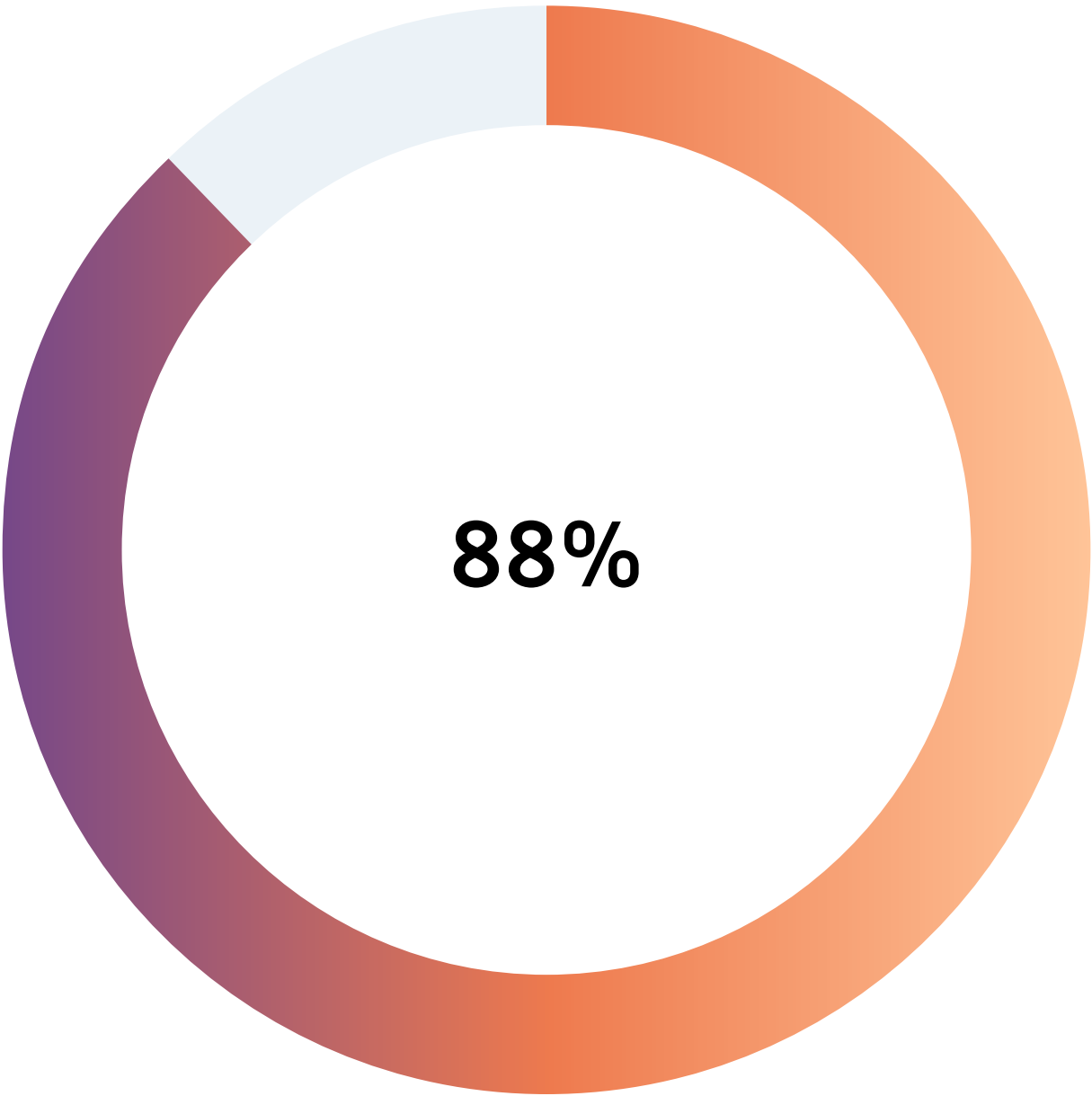
Why it's interesting:

“When you're born, you don't choose who you are, but in the virtual world you're starting from scratch,” Sébastien Borget, cofounder of The Sandbox, told *High Snobiety*. The metaverse is offering a chance to create a world that is inclusive, ethical, and based on meaningful connections. People want to reflect their real-life ethics and values in the metaverse, and there's potential for them to do better.



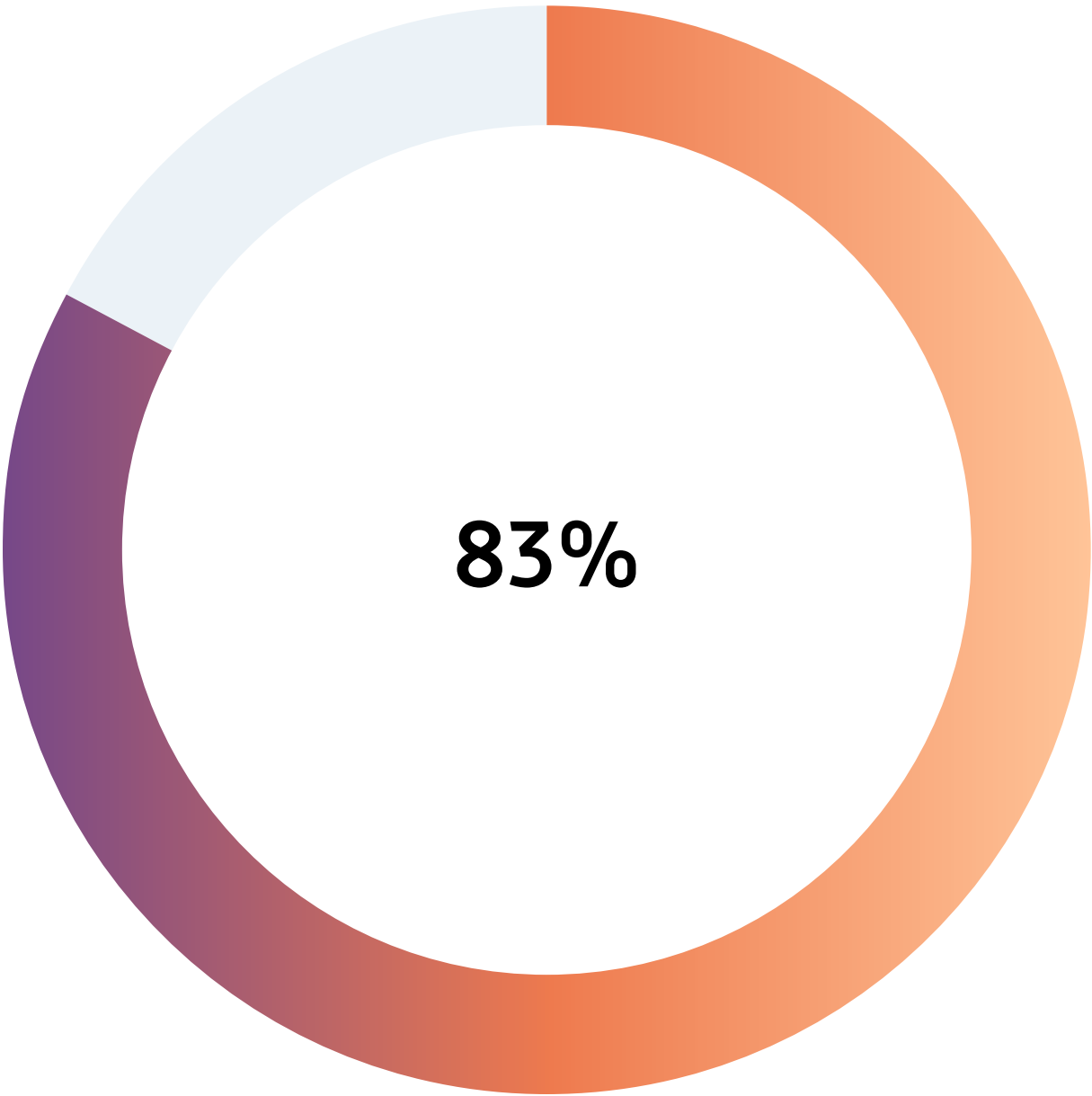
Hyper-realistic digital identities

My online self should reflect my real-life ethics and values



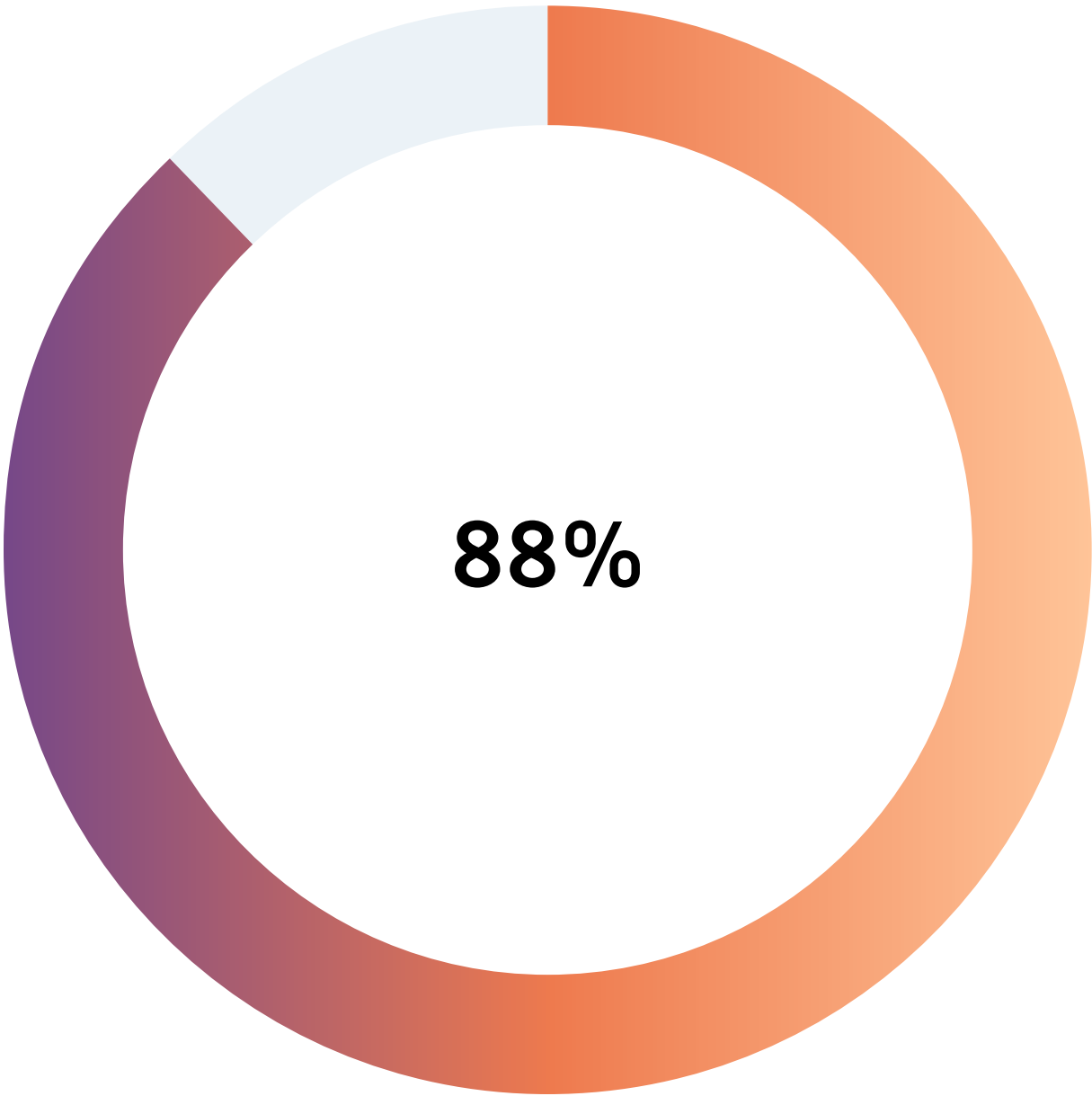
Borderless social networks

Technology brings people together

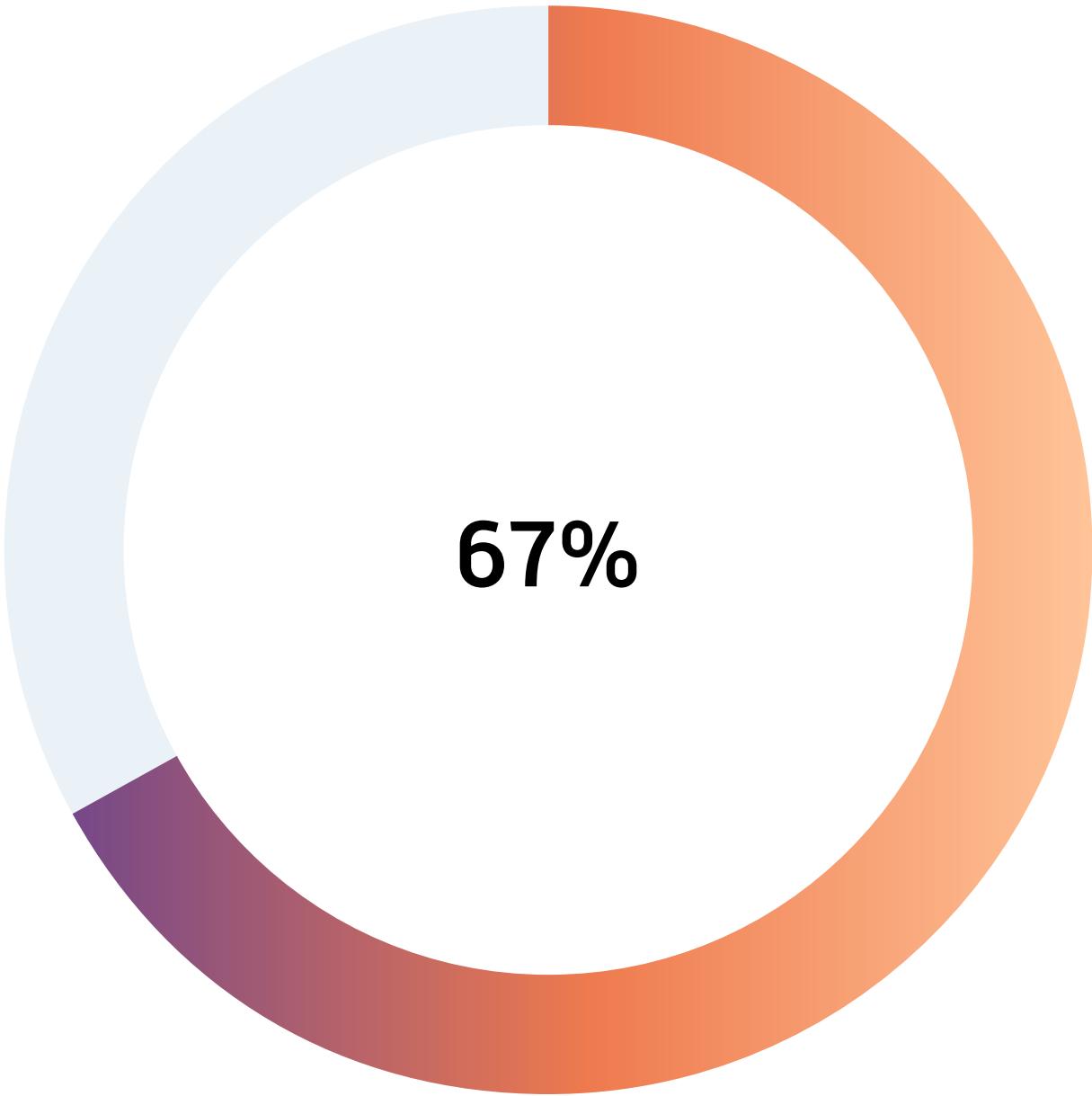


Virtual utopias

Brands need to work just as hard to create inclusive spaces online as they do offline

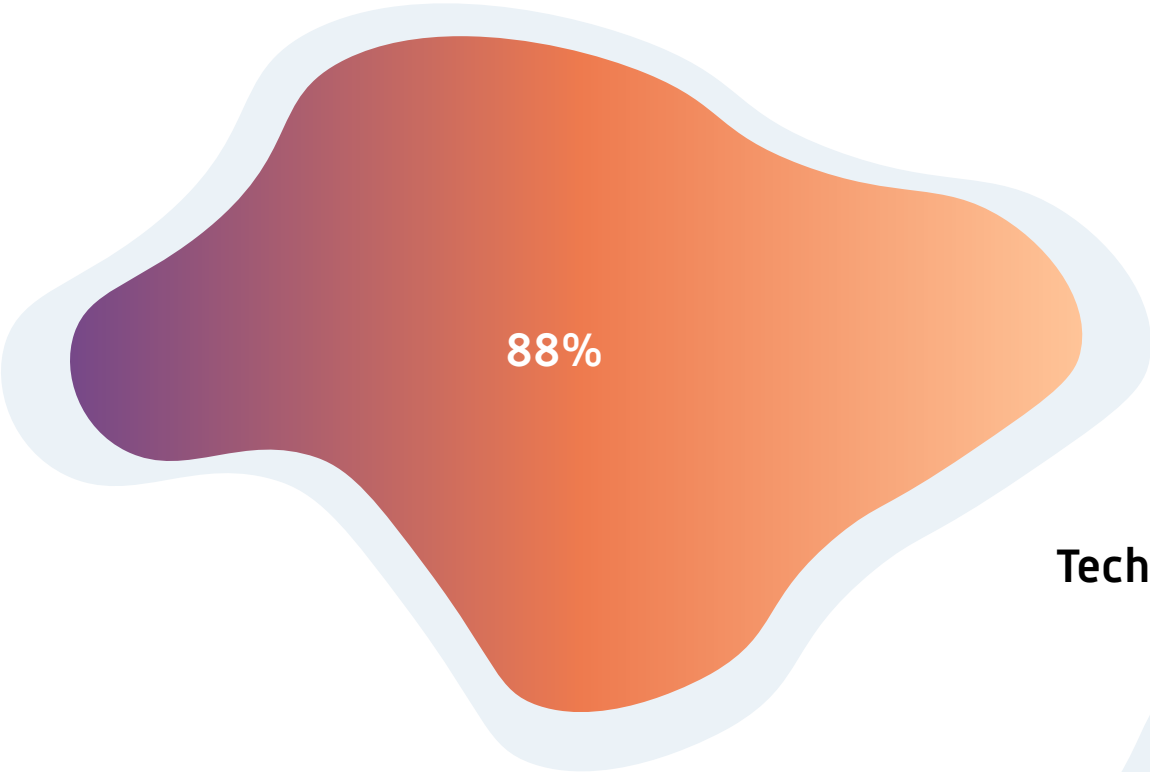


Online/digital platforms are more inclusive than the physical/offline world

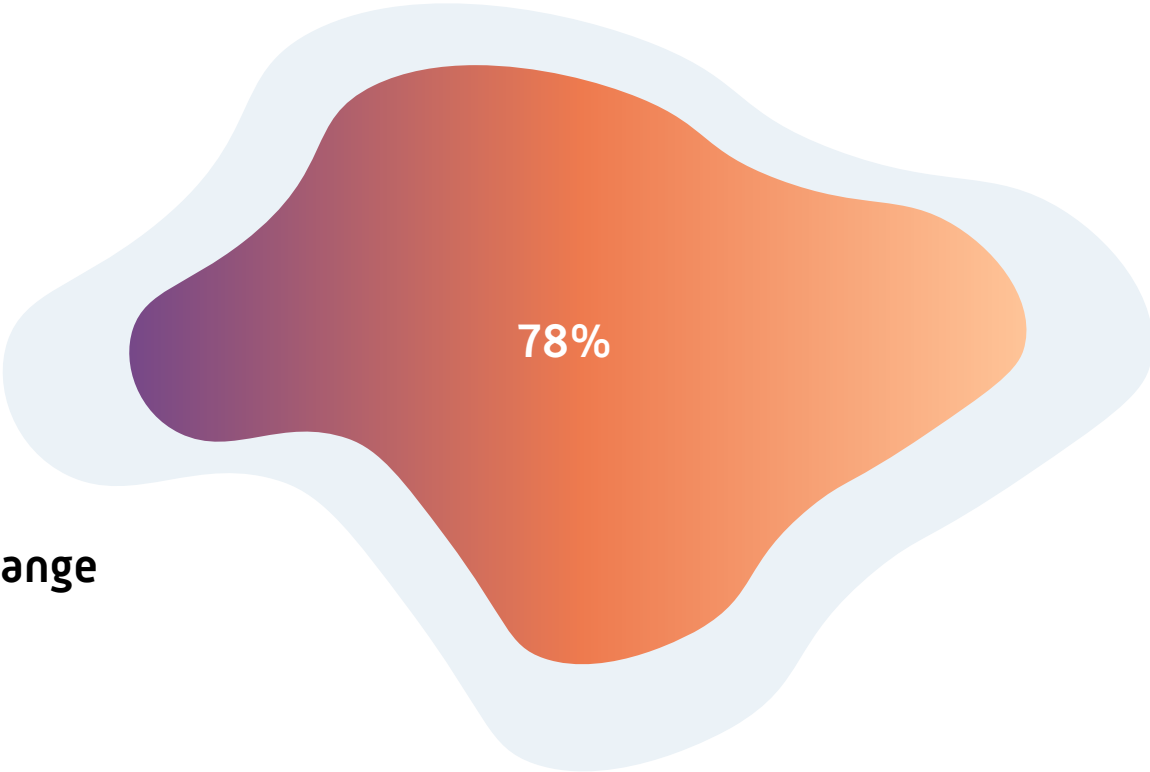


Decentralized futures

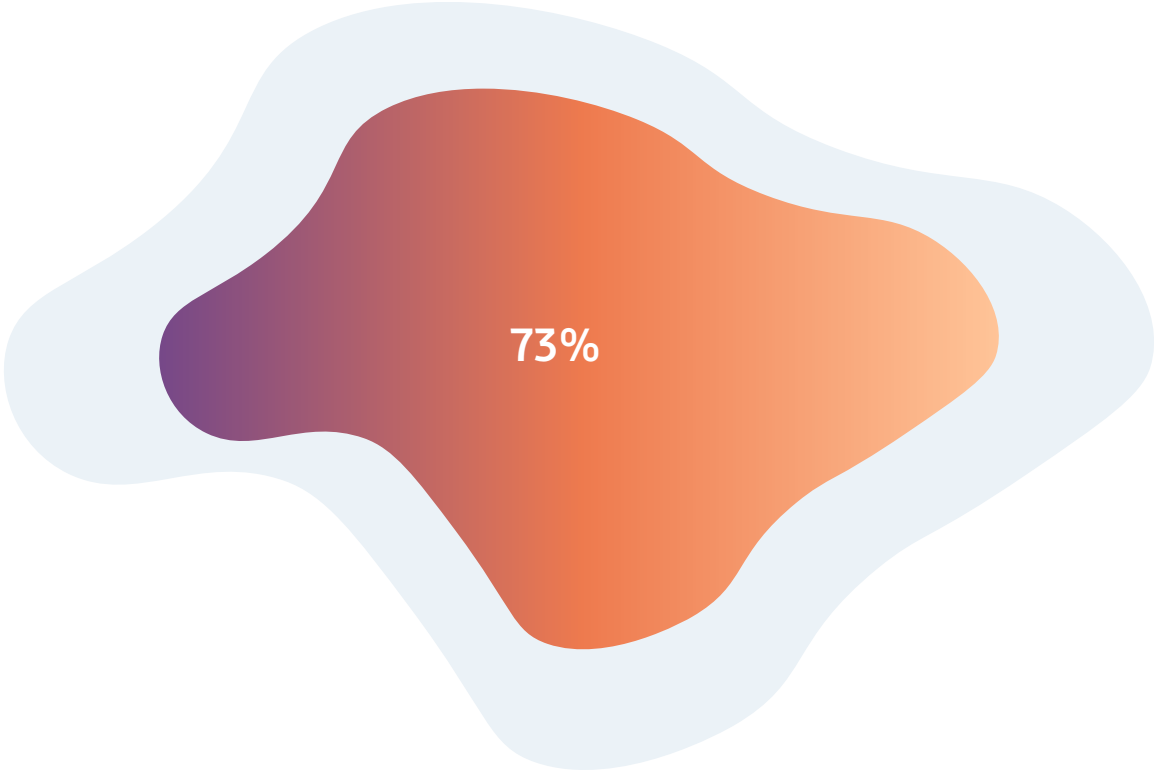
Tech can make the world a better place



Tech can help create a more equitable society



Technology can help stop climate change



When asked how tech will improve life in the next five years, global consumers led with pragmatic needs including “communication” and “information.” This is closely followed by broader life values connecting to equality and social responsibility such as “sustainability,” “inclusivity” and “internationality.”



5 brand lessons for entering the metaverse



Things to remember...

What this means...

- 1 People are spending more time online—giving rise to a new ecosystem of virtual living that encompasses digital possessions, relationships and social spaces.
- 2 People want their virtual existence to reflect what’s important to them, and are bringing their IRL ethics, values and identities with them into the virtual realm.
- 3 Virtual and physical realities are becoming superimposed—bringing augmented and digitally-influenced elements into the physical world and making the digital realm hyper-realistic.
- 4 To help bring the metaverse to life, brands have two key pathways they can take: developing the technical tools that will power the metaverse, or perfecting the end user experience.
- 5 Remember, the metaverse will not be owned or regulated by any one brand.

Brands will need to be a part of the digital third spaces that are pulling people’s time and attention, because people aren’t just socializing in digital spaces—they’re working, shopping and discovering products there, too.

To meaningfully engage with consumers in the metaverse, brands will need to think beyond entertainment and novelty. How can you contribute to the creation of an inclusive and ethical virtual world?

What happens in the virtual world will have real-life consequences for brands and businesses—and could change the way physical products are tested, manufactured and sold.

Do you want to contribute to the functional and technical creation of the metaverse, or do you want to focus on how you—and your consumers—exist within it?

As the metaverse develops, collaboration between brands will not only be essential, but the quickest point of entry.

Acknowledgements

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ABOUT WUNDERMAN THOMPSON INTELLIGENCE

Wunderman Thompson Intelligence is Wunderman Thompson’s futurism, research and innovation unit. It charts emerging and future global trends, consumer change, and innovation patterns—translating these into insight for brands. It offers a suite of consultancy services, including bespoke research, presentations, co-branded reports and workshops. It is also active in innovation, partnering with brands to activate future trends within their framework and execute new products and concepts. The division is led by Emma Chiu and Marie Stafford, Global Directors of Wunderman Thompson Intelligence.

For more information visit:

wundermanthompson.com/expertise/intelligence

About the data in this report

Unless otherwise stated, all findings in this report were collected by Wunderman Thompson Data as part of a survey on technology, digital spaces, and the metaverse. The quantitative survey was fielded from July 9-July 27, 2021 among 3,011 respondents across the United States, United Kingdom and China. When citing data from this report, Wunderman Thompson Data must be credited.



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SuperReal at Cipriani. Image courtesy of Moment Factory

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