



RESEARCH

Shaping Your Strategy for Web3 and the Metaverse

AUGUST 2022

Research
Sponsored By



Table of Contents

Executive Summary	3	Executive Perspective: Fidelity Investments	22
Web3: Level of Understanding	5	Competitors' Influence	24
Web3 Technologies: Challenges	6	KPMG Insight: Gaming's Lessons for the Metaverse	25
Web3 Technologies: Responsibility	7	Executive Perspective: eXp World Holdings	29
Activity Related to Web3 (By Industry)	8	A Simplified Guide to Web3 and the Metaverse	31
Web3 Technologies: Focus	9	Executive Perspective: Verizon	33
KPMG Insight: Making the Case for Web3	10	Use Cases: Metaverse	35
Executive Perspective: Recording Academy	14	Use Cases: Web3	38
Metaverse: Level of Understanding	16	About the Respondents	41
Metaverse: Challenges	17	About KPMG, Our Research Sponsor	45
Metaverse: Responsibility	18	About InnoLead Research	46
Activity Related to the Metaverse (By Industry)	19		
Metaverse: Focus	20		

What should your company be doing to explore, experiment, and roll out offerings tied to Web3 and the metaverse?

That's the central question we sought to answer with this report. We relied on qualitative interviews, a survey with 265 respondents, and a collection of case studies of what 20 large organizations have been doing in recent months (the "use cases" pages at the end of this report).

Some of our key findings included:

- While many individuals and teams have created clear definitions of Web3 and the metaverse, fewer than one-third of organizations can claim to have broadly-communicated and accepted definitions of the technologies.
- 45 percent of survey respondents say that competitors' moves related to these and other new technologies have significant influence on their decision-making, ensuring that they aren't seen as "falling behind." Just 14 percent say that they aren't influenced at all by what competitors do.

- In nearly 40 percent of responding companies, the R&D or innovation group is taking the lead on exploring Web3 and metaverse technologies, and identifying potential use cases.
- The biggest challenge survey respondents expect to face with both metaverse and Web3 technologies is identifying the best early use cases or applications. But the second challenge differs: for the metaverse, it is employee skill sets. For Web3, it is security, regulatory, and compliance concerns.
- Fewer than four percent of respondents say that they don't expect to use metaverse or Web3 technologies in their businesses.
- Among the industries furthest ahead in rolling out metaverse and Web3 technologies: healthcare, professional services, energy/utilities, and engineering/construction.

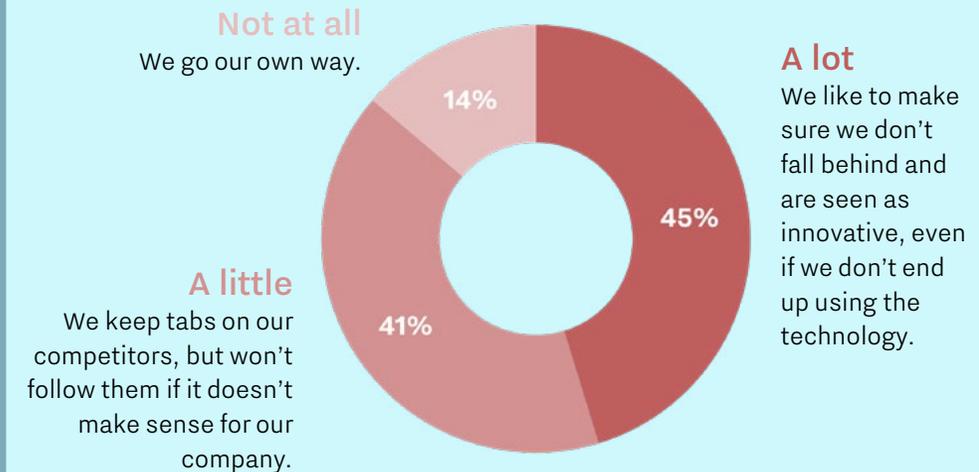
One of our interviewees, Adam Schouela, Head of Emerging Technology at Fidelity Investments' Center for Applied Technology, said that more important than defining terms and researching the landscape is a willingness to experiment:

“Our approach is to roll up our sleeves and build these things. It’s not just about building, it’s building to learn — to understand how things interact, to generate insights and implications about how are these things going to potentially impact Fidelity and our customers and society as a whole. Without trying it, it’s really hard to get to those understandings.”

When we asked survey respondents about the key issues or questions they were working through, we heard about the importance of connecting these technologies to actual business needs, and generating a return. As one respondent put it, “What are the tangible business benefits, costs, and risks?” Others said they are working to hone in on the right number of experiments and use cases for the present moment. Creating confidence with internal constituents and customers — especially amidst critical or negative media coverage — was another key issue.

The pages ahead serve as a guide to what large companies are doing to learn about these emerging technologies — along with insights from our research sponsor, KPMG, on some of the key issues to consider as you develop your own strategy.

How much do competitors’ moves related to Web3, the metaverse, or other emerging technologies influence your own decisions?



Which of the following statements represents the level of understanding and definition of Web3 within your organization?

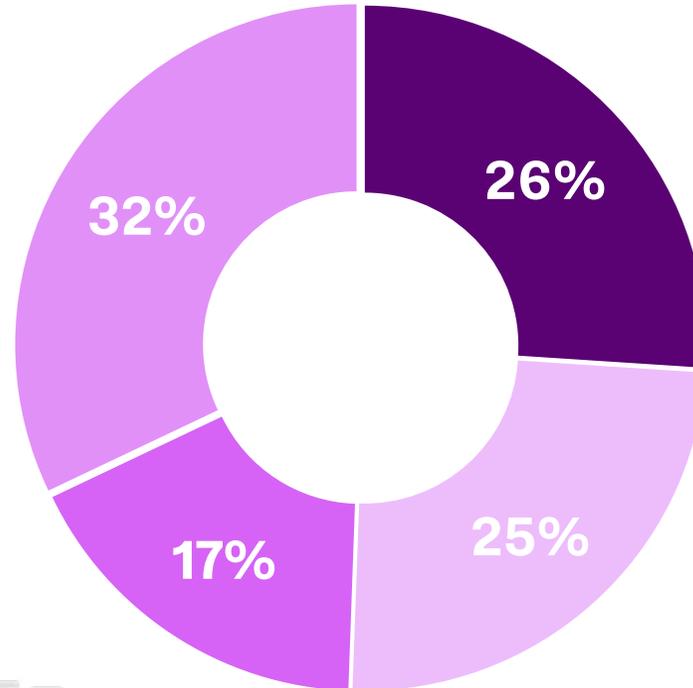
Individual

I have a clear definition of Web3 as an individual.



Team & Individual

- 1) I have a clear definition of Web3 as an individual;
- 2) We have a clear, consistent definition of Web3 within our team.



Organization, Team, & Individual

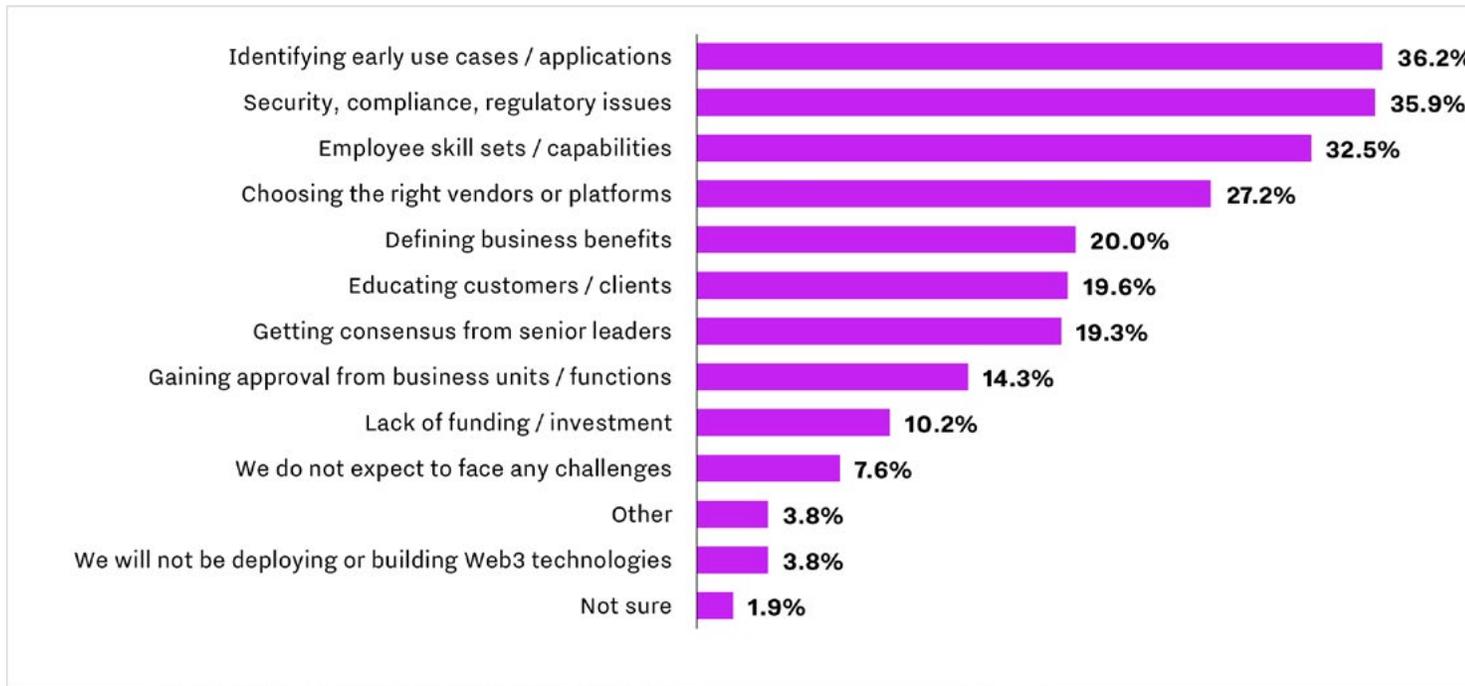
- 1) I have a clear definition of Web3 as an individual;
- 2) We have a clear, consistent definition of Web3 within our team;
- 3) Our entire organization has a clear, consistent definition of Web3.



None

None of the statements apply.

What do you anticipate will be the biggest challenges for your organization in trying to deploy or build Web3 technologies?

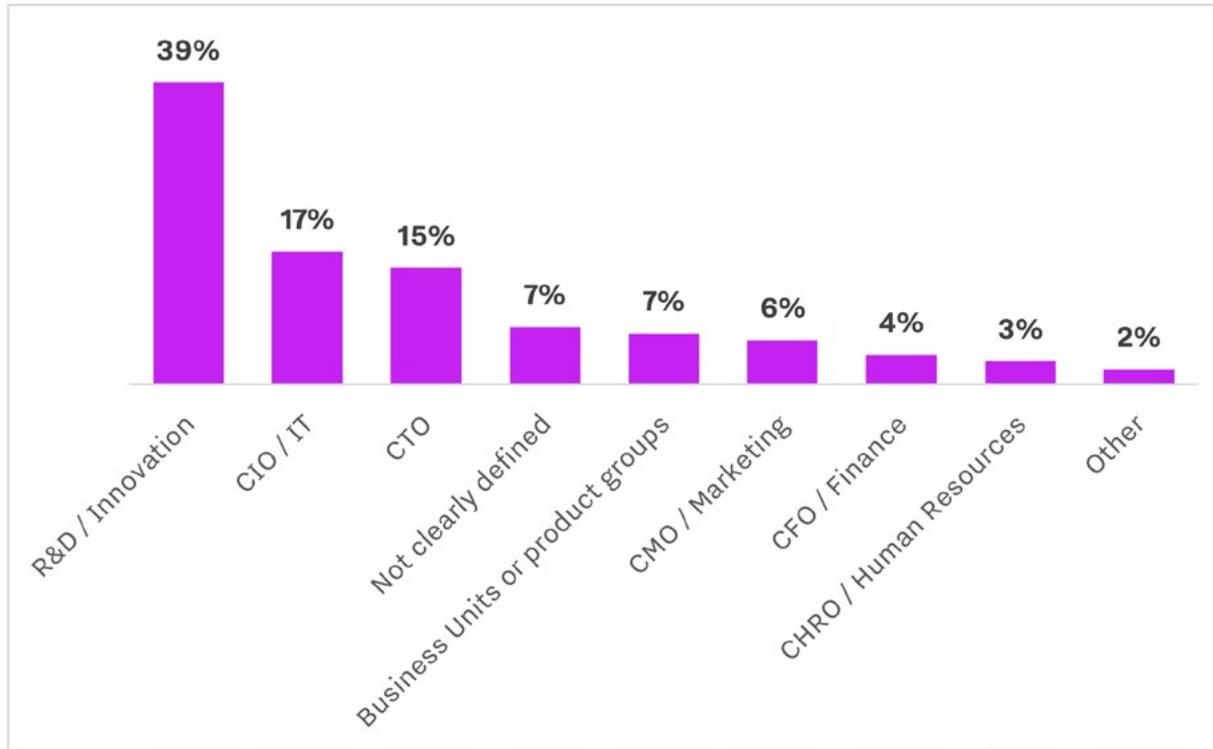


In both our quantitative and qualitative responses, the search for relevant places to apply Web3 technology characterizes the current moment. But a hazy regulatory environment and questions about security come in second. The need for employees with current and relevant skill sets rounds out the top three challenges.

Interestingly, our survey respondents largely didn't cite lack of funding as a challenge. And just six percent said that they won't be using Web3 technologies or aren't sure – suggesting that Web3 may have major ripple effects across industries.

These percentages were calculated as percentage of total responses.

Who in your organization is responsible for exploring Web3 technologies?



Of our survey respondents, the vast majority (70 percent) work in R&D or innovation roles, but they told us that in 17 percent of their organizations, it's the CIO or IT organization that is responsible for charting the course with Web3 technologies. Another 15 percent said it was the CTO. But R&D and innovation teams are largely taking the lead when it comes to exploring the potential of Web3.

Seven percent said that responsibility hasn't yet been clearly defined.

These percentages were calculated as percentage of total responses.

Which industries are still in the early stages when it comes to Web3? Which ones are beginning to define pilot tests, experiments, and business cases? And which ones are already rolling out and scaling up the technology?

Top 5 Industries Not Yet Focused on Web3

Agriculture

Chemicals

Medical Devices & Instruments

Government & Public Sector

Aerospace & Defense

Top 5 Industries Defining Web3 Experiments

Industrial Manufacturing

Consumer Goods & Consumer Products

Media & Telecom

Non-Profit & NGO

Automotive, Transport & Logistics

Top 5 Industries Rolling Out Web3 Tech

Engineering & Construction

Healthcare

Energy & Utilities

Professional Services

Retail

Is there a Web3-related question, issue, or use case your team is especially focused on at the moment? Here's a sample of our survey respondents' answers.

"Why do we need to do this? What's the return?"	Energy & Utilities
"What do organizations need to know about Web3, and in what timeframe? How are things with Web3 evolving into commercial realities?"	Engineering & Construction
"With blockchain, narrowing the use cases to the right number of experiments & pilots."	Financial Services
"How can we get a blockchain pilot funded? Who are the business stakeholders? Who are the executive sponsors? Who will care about this?"	Industrial Manufacturing
"We are identifying use cases for our leadership."	Industrial Manufacturing
"We sense that NFTs [non-fungible tokens] could be useful, in terms of some of the IP that we develop, but don't know where to start. In addition, part of our role is educating end-users about transformative technologies, such as those comprising NFTs, and we need to skill ourselves first in this."	Non-Profit & NGO
"Understanding what it is, and the implications of it on our business."	Professional Services
"Our CEO has mentioned it in earnings presentations, but no action is being taken by the organization as far as I'm aware."	Retail
"Educating employees and customers to trust this new infrastructure."	Technology



David Jarczyk
Principal, Enterprise
Innovation, KPMG LLP



David Pessah, Sr.
Director, KPMG
Ignition, KPMG LLP



Scott Wolfson
Director, Lab
Delivery, KPMG LLP



Chris Corteen
Director, Metaverse
R&D Lead, KPMG LLP

Is your organization ready for the coming Web3 tidal wave? While its full impact is still a few years away, many businesses are beginning to realize the massive implications this next iteration of the internet may have on the future of business. But what should companies be doing about it now?

While it's tempting to act on impulse to demonstrate Web3 engagement — like building something on blockchain or getting bitcoin on your balance sheet — organizations should try to avoid this type of check-the-box approach. Investing without a strategy or implementing a pre-packaged solution that employs new technologies in old ways leads to a short-term view of long-term opportunities.

Web3 represents an entirely new economic paradigm. It will unlock new business models, change how data is collected and managed, and provide businesses with high-value insights and customizations. Unlike its predecessors, Web 1.0 (static web pages) and Web 2.0 (personalization and user-generated content), Web3 operates on a decentralized infrastructure underpinned by blockchain technologies. Broad and expansive, it fundamentally changes the internet as we know it today. Therefore, before diving in, it's important to understand the evolving Web3 ecosystem and explore its vast potential to be able to decide where to play in it.

Adopt a Startup Mentality. To seize Web3 potential and launch a successful pilot program, we recommend adopting a startup mentality and methodology. At KPMG, we embrace this entrepreneurial spirit as we work to develop a Web3 strategy for our clients, and also, for ourselves. Beyond looking through a traditional return on investment (ROI) lens, we also focus on a return on innovation. Is the organization taking a strategic approach and making investments to learn and grow? Will it use its new knowledge to unlock new business value and to transform its organization?

“At each step, we overlay strategic lenses proposing three future scenarios: one future that will happen, one future that can happen, and one future filled with unknowns.”

As a trusted collaborator, we team with clients to help them learn the Web3 landscape and explore new possibilities, potential benefits, and risks. Working closely with our clients, we co-develop a custom and strategic approach to seek new business value, engage both employees and consumers in innovative ways, and pursue an entirely new kind of competitive advantage.

To drive this forward, we conduct a series of customized workshops based on a three-step approach. First, we help organizations gain an understanding of the ecosystem. Next, we explore and help them shape choices relative to their company objectives, industry, and competition. Then, we help them make informed strategic decisions on where to play. At each step, we overlay strategic lenses proposing three future scenarios: one future that will happen, one future that can happen, and one future filled with unknowns.

Step One: Understand the Ecosystem. The primary purpose of the first workshop is to gain an understanding of the Web3 ecosystem from a business perspective. We do this across different levels of the organization, not just with a handful of employees. We start by going down the Web3 rabbit hole, exploring the ecosystem, asking questions, and defining a common language to ensure clear communications. We immerse in deep knowledge sharing sessions,

helping participants build mental models of the space by framing it in a business context, not just a technical one. Together, we compare, contrast, and debate current business models with those that may emerge in the future.

During this first step, clients are typically not sure what they are looking for, but they know it is a space in which their company needs to be. As we take them on a discovery tour, they become more familiar and are ready to examine in greater detail the areas that are most applicable to their business goals.

Step Two: Shape Custom Choices. Next, we do a deep dive into the organization to explore its objectives, interests, challenges, culture, brand, risk tolerance, and more. We look for potential opportunities for success within its industry sector. Using custom strategic intelligence and detailed analysis, we search the competitive landscape to see what competitors are doing in Web3. Are they active in decentralized finance (DeFi)? Mining crypto? Tracking their supply chain? What challenges are they facing now? What will they face? We unpack all of the competitive dynamics and examine the startups attacking their space to help identify and make choices about where to play.

Step Three: Make Informed Decisions. During this step, we converge the immersive learnings from the first two workshops to highlight specific hotspots of opportunity. We begin narrowing down the areas to make informed decisions about where to play and how to test it. Is this really a good place to start based on your brand? Technology? Skillsets? We look to help the organization find its right place to play — and not just for today, but for tomorrow when Web3 technologies and capabilities are interconnected. Our goal is to help organizations think strategically, decide on a good place to start, and build from there. Through co-development, we help them identify the lowest-hanging fruit to test the decisions.

Exploring Three Futures. During each of the three steps, we co-experiment with clients by questioning the impacts of three futures: what will happen, what could happen, and what is unknown. We apply these three strategic lenses about the future across specific categories, such as technology, economies, markets, people and social, political, regulatory, and competitive environments. Using design thinking perspectives, we help analyze these concepts to create better choices and more strategic decisions.

Looking Ahead. Web3 is early in its evolution. Tech hurdles, such as interoperability, will need to be overcome, and privacy, security

“Mindset’ could actually be the biggest barrier for Web3 today, because not enough people are thinking strategically about the impacts it will have on their business.”

and governance concerns will need to be addressed. However, “mindset” could actually be the biggest barrier for Web3 today due to a lack of strategic thought about the impacts it will have on business. It’s time to change mindsets and prepare a strategy for an undeniable shift that will move a fully functional Web3 from a state of gradual change to sudden acceleration. Will you be ready?



Panos Panay
Co-President
The Recording Academy

Headquartered in Santa Monica, Calif., the Recording Academy was founded in 1957. It oversees the annual Grammy Awards, in addition to overseeing philanthropic activities like MusiCares. Tech entrepreneur Panos Panay joined as Co-President in 2021.

Why we're experimenting. The Academy is a 65-year-old organization, and for 65 of those years, we've been primarily known by the Grammy Awards. I like to say that the invention reflected the intention, which was to use a stage to honor excellence, and to celebrate it with the medium that was available of the time, which was broadcast TV. Fast forward to today, and audiences are fragmented and changing. A new generation of viewers and consumers are accessing content through different media. Our approach in terms of architecting the next 65 years is to experiment with different technologies, platforms, and partnerships, precisely because we acknowledge that we just don't know what the next broadcast television will be. It could be the metaverse, gaming, streaming, a blockchain-based future world, all of them — we have no idea.

Creating high expectations. For organizations dipping their toes into this, if you put too much expectation on it, you're bound to be disappointed. Also, I know that people like to paint all these technologies with a single brush, but they're very different, and at very different stages. Is the metaverse going to be transformative? Will blockchain really unlock all kinds of remuneration possibilities for creators that didn't exist at the beginning of this digital revolution? Maybe, but

they're not all as advanced as they're going to be. Placing too much expectation on them is only going to lead to disappointment, and people backing out of them prematurely. In the late 1990s, there was a massive euphoria about how the Internet was going to change everything. Then, the dot-com bubble burst, and then all of a sudden, everybody started saying, "Ha ha ha, the internet will change things. Looks like the so-called incumbents, the brick and mortar businesses, are back in action."

It's a long journey.

Tech goes mainstream when it's no longer an acronym.

Music is important to society, and it needs to be handled with care. We issued limited-edition NFTs celebrating the artwork of the Grammys this year, using OneOf. In selecting OneOf for our NFT partner, we also care about the externalities of the partnership — how it affects the broader ecosystem — and we care about the environment. We believe that their tech and the way they're minting NFTs is much more efficient and environmentally-friendly than other NFT companies.

The idea of a non-fungible token — a digital asset that can be transacted and resold — that technology has tremendous implications. NFTs as we understand them today — like Bored Ape

Yacht Club — [are] just a brief moment in time. I'm a big believer in the underlying technology of NFTs. They're going to reach the mainstream when we stop referring to them by their acronyms — just like we don't refer to [the Internet protocols] TCP/IP, http, or SMTP. Ninety-nine point nine percent of people have absolutely no idea what TCP/IP stands for.

Crypto market gyrations. We can't confuse temporary market gyrations [in cryptocurrency and NFT prices] and fluctuations that are really reflections of multiple things. Mostly, the thing that they reflect is expectations of a return within a very finite period of time, [not] a definitive casting vote on the value of those technologies.

[Saying the technology has no potential because of the current prices of a given coin, or a cryptocurrency company's stock] is like saying the musical scale has no future just because a particular song sucks. But somebody with those exact same notes will create something that's timeless and different.

Technology is the scale, companies and currencies are the notes, and financial prices are people saying, "I like this song or don't like this song," which is extremely subjective.

Which of the following statements represents the level of understanding and definition of the metaverse within your organization?

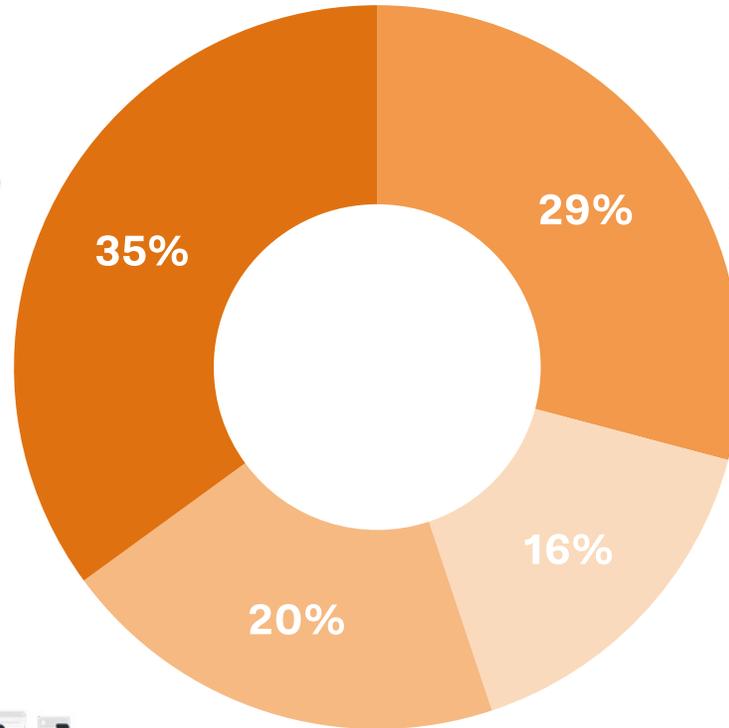
Individual

I have a clear definition of the metaverse as an individual.



Team & Individual

- 1) I have a clear definition of the metaverse as an individual;
- 2) We have a clear, consistent definition of the metaverse within our team.



Organization, Team, & Individual

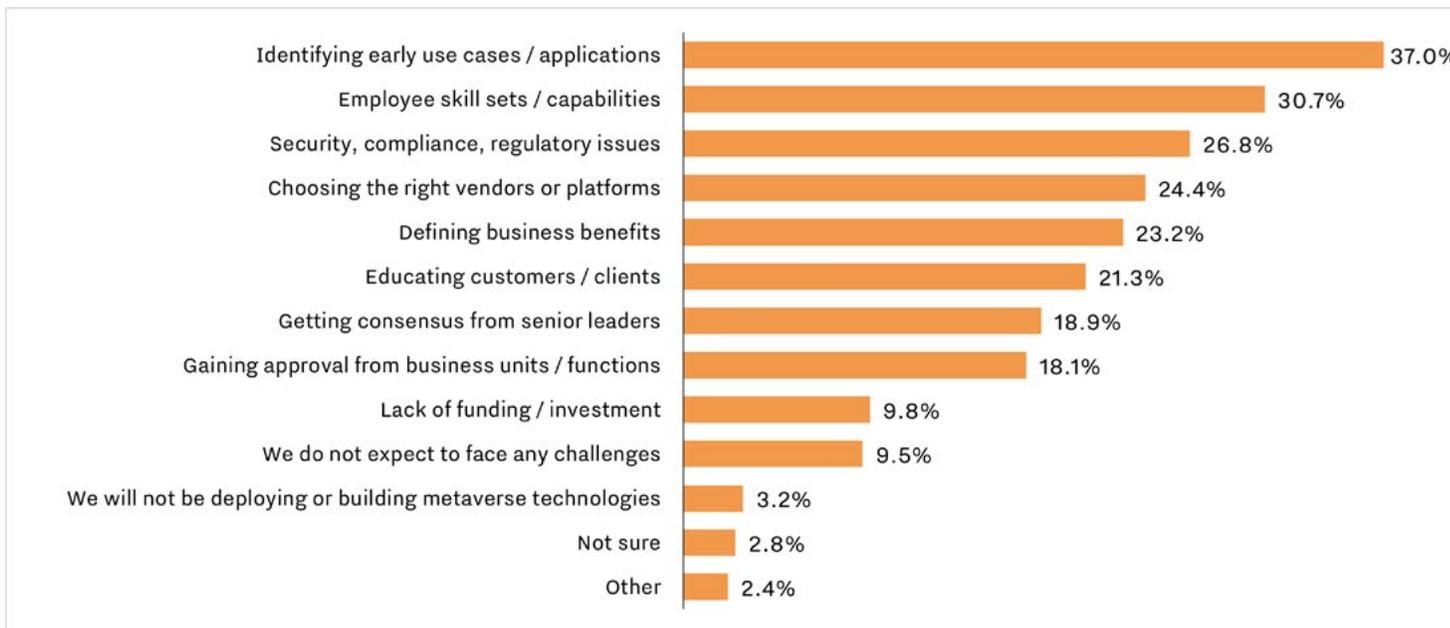
- 1) I have a clear definition of the metaverse as an individual;
- 2) We have a clear, consistent definition of the metaverse within our team;
- 3) Our entire organization has a clear, consistent definition of the metaverse.



None

None of the statements apply.

What do you anticipate will be the biggest challenges for your organization in trying to deploy or build technologies, applications, or experiences related to the metaverse?

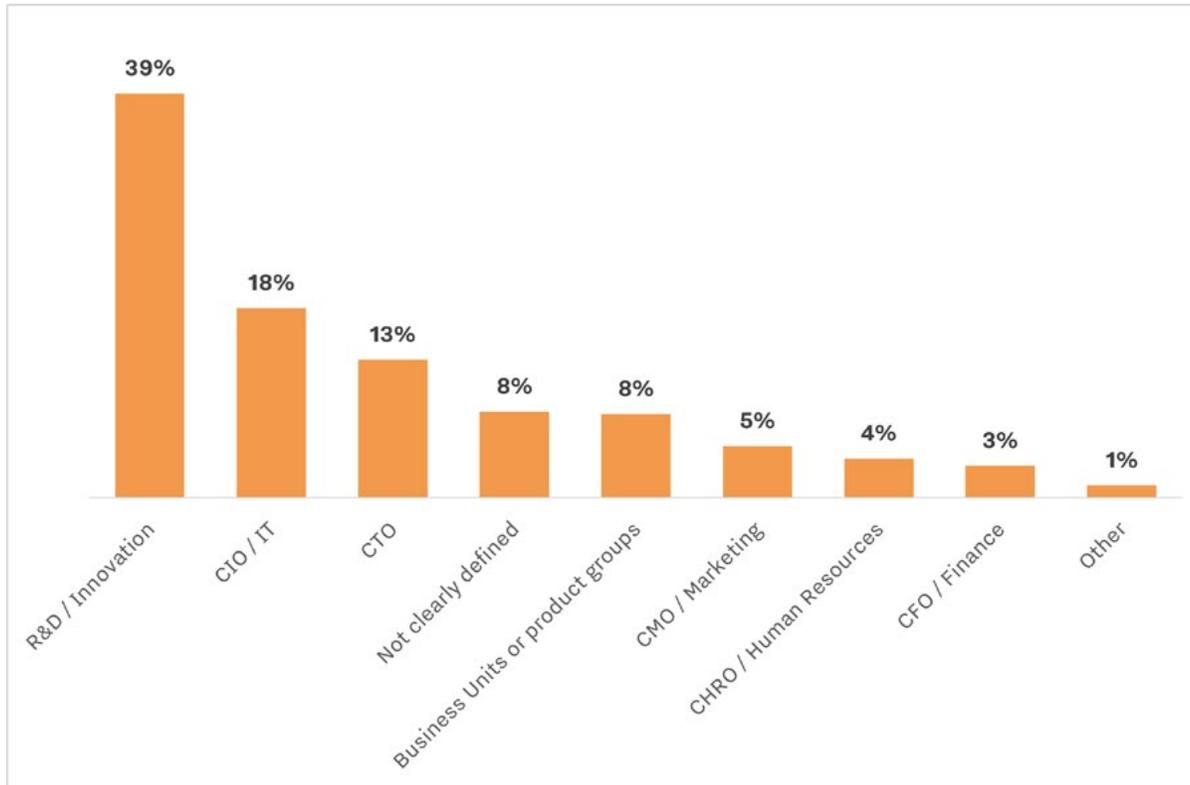


These percentages were calculated as percentage of total responses.

The expected challenges of entering the metaverse look rather similar to those of working with Web3 technologies. Finding relevant use cases tops the list, and security and regulatory issues drops from the #2 to #3 position — still a prominent spot. Employee skill sets and capabilities are also among the top concerns.

As with Web3, choosing the right vendors and platforms shows up as a significant challenge. And only about six percent of respondents say they will not be entering the metaverse or aren't sure yet.

What parts of your organization are responsible for exploring metaverse technologies?



Responsibility for exploring the potential of the metaverse looks very similar to our Web3 survey data, with the bulk of organizations placing that work with R&D and innovation groups, the CIO, and CTO.

Just eight percent of respondents say that they haven't yet clearly defined who is responsible.

These percentages were calculated as percentage of total responses

Which industries are still in the early stages when it comes to the metaverse? Which ones are beginning to define pilot tests, experiments, and business cases? And which ones are already rolling out and scaling up the technology?

Top 5 Industries Not Yet Focused on the Metaverse
Agriculture
Chemicals
Communications
Government & Public Sector
Medical Devices & Instruments

Top 5 Industries Defining Metaverse Experiments
Consumer Goods & Consumer Products
Retail
Media & Telecom
Technology
Aerospace & Defense

Top 5 Industries Rolling Out Metaverse Tech
Engineering & Construction
Energy & Utilities
Healthcare
Professional Services
Media & Telecom

Is there a metaverse-related question, issue, or use case your team is especially focused on at the moment?

“Creating new venture avenues to use that show clear ROI investment.”	Pharmaceuticals & Life Sciences
“How will it fit into what we are doing in order to improve our company?”	Professional Services
“What governance structures are emerging? This will be critical for us to have confidence in future investments.”	Automotive, Transport & Logistics
“How to overcome the negative implications of the word ‘metaverse.’”	Consumer Goods & Consumer Products
“What are the tangible business benefits, costs, and risks associated with leveraging metaverse capabilities?”	Engineering & Construction
“Is it insurable?”	Financial Services
“We’re interested in learning more about the the industrial metaverse, and how business value can be derived from it.”	Industrial Manufacturing Services
“Are primary metaverse opportunities purely virtual, or do they have applicability IRL [in real life] as well?”	Non-Profit & NGO

Is there a metaverse-related question, issue, or use case your team is especially focused on at the moment?

“Part of our organization’s role is [educating] end-users on transformative or disruptive technological forces. But first my own team needs to better understand what the metaverse is; how it differs from what already exists; and what the potential implications are that we need to engage our users around.”

Non-Profit & NGO

“How do we get organizations like InnoLead to not accept (and therefore support) Meta’s terminology, and to use the broader terms XR, VR, and AR [extended reality, virtual reality, and augmented reality]?”

Technology

“Where is the real money amongst all the hype, paid pilots, and lack of real business and market traction after 10+ years of XR promise, now rebranded as the metaverse?”

Technology



Adam Schouela
Head of Emerging
Technology, Fidelity Center for
Applied Technology

Privately-held Fidelity Investments has been experimenting at the cutting edge of virtual reality, Web3, and the metaverse for years. The investment giant began mining Bitcoin in 2014 to learn about cryptocurrency, and started offering cryptocurrency trading and custody for institutional investors in 2018. A virtual Fidelity building in the Decentraland metaverse includes a game, the Invest Quest, that teaches players about exchange-traded funds.

Building to learn. Web 1.0 was about reading — people posted and consumed content. Web 2.0 was more social — think of everyone being able to contribute now. Web3 is read, write, and own. There's a lot of implications to that.

Our approach is to roll up our sleeves and build these things. It's not just about building, it's building to learn — to understand how things interact, to generate insights and implications about how are these things going to potentially impact Fidelity and our customers and society as a whole. Without trying it, it's really hard to get to those understandings. The real innovations or sparks that come out [are] in the white spaces between technologies — the mashup of all these different types of things together. Without mixing and matching, you don't necessarily get the front row seat to see what could possibly happen.

Differences and definitions. I don't necessarily think Web3 and the metaverse are the same. They're different technologies. An example is insurance. It's not exciting, but the idea [with



Fidelity's "Stack" building in the Decentraland virtual world (Graphic: Business Wire)

Web3 is] that I could insure a deposit or something, and pay premiums on what I'm insuring, or I could take the other side of that equation and put up collateral and take the premiums. I see that as separate from the metaverse, but those two things have the strong potential to intertwine together.

We probably don't have a universal definition of the

metaverse, and I actually think that's OK. The current working definition is a graphically-intensive, parallel world to the IRL [in real life] world we live in. Some of the most impactful parts of the technology, I've found, is not the visual stuff but it's the 360-degree sound. I've been in some worlds before where you can tell exactly where someone is inside the landscape because of the sound.

Digital twins to take care of tasks. We most certainly have thought of the concept of a digital twin of ourselves in [the

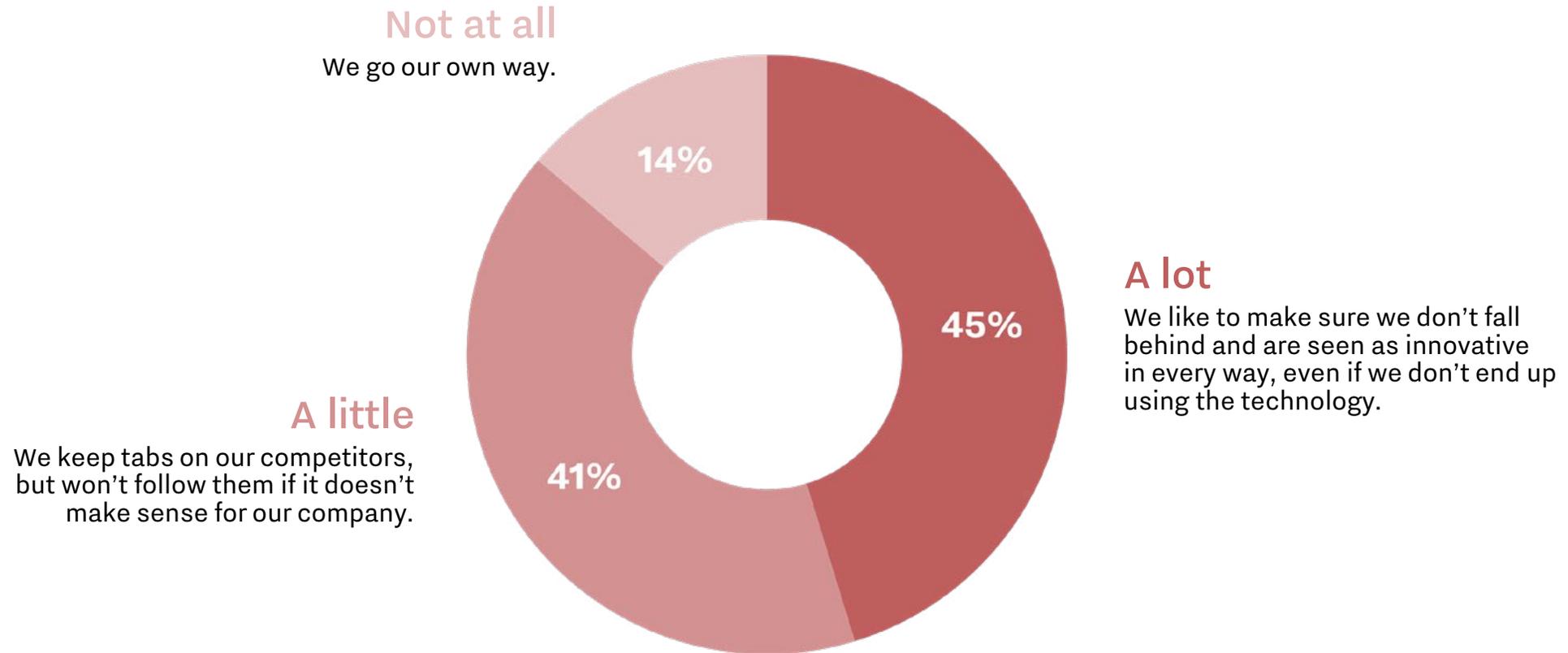
metaverse], taking care of things that we might need. What are the types of things we might want taken care of for us in that kind of space? The other thing is, given this new type of space, what are the new business opportunities and models that will show up in these new types of environments?

We're used to securing financial transactions, but what about social transactions? Is the person I'm talking to really the person I think I'm talking to? In some cases, anonymity is a strength, and in others it can be a cautionary tale.

One of the perspectives we're looking at it is how easy is it to build in these [metaverse] spaces. You have some worlds where it's rudimentary, and others where it's more complex and rich, where you need specific people [with the skills] to build in it. That's an axis we've been exploring.

What comes first? Will Web3 or the metaverse arrive sooner into the mainstream? I have the luxury of not needing to think about that, and it's really hard to predict the future. They're two very interesting trends, and we look at the use cases and the design principles. What if these two hit the shore together, then what are the implications? [The question is] not necessarily what's going to win.

How much do competitors' moves related to Web3, the metaverse, or other emerging technologies influence your own decisions?





Nikola Ognjanovic
Senior Associate - Tax
Ignition, KPMG LLP



Michal Pol
Senior Manager - Tax
Ignition, KPMG LLP

The metaverse is here. But how many people are familiar with it? According to a recent KPMG survey of more than 1,000 consumers, over 65 percent of respondents say they are already aware of the metaverse – and that awareness grows to more than 80 percent for Gen Z and millennial respondents.

In fact, many people have already interacted with the metaverse by playing games like Fortnite and Roblox. These games operate virtual 3D worlds where millions of people worldwide gather to play, socialize, buy virtual items, attend special events, and participate in a digital economy – all within the game. Although these two games are not decentralized, they offer a clear path toward Web3 metaverses.

The evolution of Web3 capabilities and the convergence of virtual reality, augmented reality, and other technologies has ignited a sense of urgency around the metaverse. While its full functionality will take some time to develop, metaverse excitement aligns with significant changes in consumer behaviors and widespread digital acceptance occurring over the last two years. This shift, largely driven by pandemic lockdowns, thrust the bulk of people's lives online, forcing new virtual experiences for work, socialization, shopping, healthcare, entertainment, and more.

For many gamers, this shift was less dramatic. They've been interacting on virtual gaming platforms, using VR/AR technologies, sharing experiences, participating in communities, and starring in gaming narratives online for quite some time. So, while many may see the metaverse as a new phenomenon, gamers likely view it as the next logical step in bringing the virtual future to life.

As more brands venture into the metaverse, they can learn a lot from the gaming industry. Some lessons learned include:

1. Seek Continuous Innovation

Earlier video game models involved a one-time purchase to play console games. These games offered limited

gameplay with friends on the same console. Online connectivity soon followed, enabling the ability to download game content and play online with others. Further evolution introduced the free gaming model, unleashing big revenues by monetizing microtransactions within the game. Innovating from one big purchase to many microtransactions increased a game's longevity by continuously offering new digital items to purchase. For other industries, the microtransaction model provides access and acceptance, should they want to monetize assets in a similar way. Businesses should be agile in their approach, with an emphasis on innovating business models, exploring use cases, and improving user experiences.

2. Pursue New Revenue Streams

From digital fashion for avatars, to buying digital items, to in-game concerts or other events, gaming is leading the march into a whole new digital economy. As the metaverse evolves into a shared universe across platforms and consoles, possibilities for cross-gaming intellectual property (IP) (such as uniting characters from different games) offer significant revenue potential in the future. As functional digital assets, non-fungible tokens (NFTs) offer new revenue streams in the metaverse. Players can create, buy, sell,

and trade NFTs, opening new doors of opportunity as gaming monetization models mature and use cases advance.

Taking cues from gaming, companies are creating NFTs, which can offer a win-win scenario. Consumers benefit from collecting NFTs and selling them when their value appreciates, while companies profit from the initial sale and royalties on secondary sales. Higher demand and trading activity incentivize both parties to contribute to the market's success through support, community building, and participation in games and other metaverse activities. In addition to NFTs, companies can gain from collaborating with gaming platforms to build a brand presence, offer new products and services, and create special branded experiences.

3. Master the Art of Storytelling

In gaming, user experience reigns supreme. Players can become engrossed in a good gaming storyline as the narrative unfolds and players seek to achieve desired outcomes to win the game. Done well, a compelling story and an immersive experience can lure a gamer to come back and relive the experience again and again. Like gaming, brands want to create a virtual experience that attracts consumers to participate, enables free expression, and provides a compelling reason for being there – and wanting

to return. Businesses in the metaverse need to focus on superior storytelling, understanding their brand purpose for being there, and giving the consumer a reason to partake in the narrative. Most importantly, storytelling must be authentic to the brand and provide a seamless experience between physical and virtual worlds.

“Businesses in the metaverse need to focus on superior storytelling, understanding their brand purpose for being there, and giving the consumer a reason to partake in the narrative.”

4. Understand the Importance of Communities

Gaming communities often optimize player experiences by creating spaces to socialize, share values, and enable meaningful interactions. Essentially, the business model for games like Roblox and Fortnite rely on successful communities. It's critical for companies to build community-centric virtual spaces and keep the consumer in mind every step of the way. With few exceptions, truly vibrant communities on decentralized platforms grow organically and are not owned or controlled by a brand. As such, a company's strategy should focus on deepening connections between the brand and consumers within a fluid and open virtual community space. Doing so will create meaningful experiences, where friendships develop, loyalty grows, and time and money are spent.

5. Seek Talent with a Gaming Mindset

A wealth of video game experience is entering the workforce as younger generations grow up. This is the type of talent that may not be found in school programs or promoted on resumes, but may be already on the payroll. Determine if there are people already within your organization that can help navigate the metaverse, and identify opportunities to upskill employees. Look for tech-savvy workers who have experience in creating digital assets and user-

generated content. In addition to their technical knowledge, they will likely bring an authentic passion derived from a love of gaming that will help drive business success in the metaverse.

While these lessons from gaming can help companies advance their metaverse strategies, it's important to note that challenges still exist around governance, data, and privacy issues. The future governance of a decentralized metaverse may rest on decentralized autonomous organizations (DAOs), where users act as shareholders with voting rights depending on ownership levels. Companies will need to determine rules and assess risk considerations when their brands enter these virtual spaces. There's a real need for companies to truly understand the difference between centralized and decentralized models — not only from an infrastructure perspective, but also from a governance perspective.

Brands Join Games in the Metaverse

Many businesses are moving quickly to establish a brand presence in the metaverse via gaming platforms. For example, Nike created Nikeland, a virtual space built on the Roblox platform, where users create 3D avatars to play mini games, try on Nike gear in the showroom, and experience a new blend of sports, games, and fashion. Considering that Roblox users spent about 4.2 billion hours on the game in 2021 and nearly 55 million daily users logged into the gaming platform in January 2022, Nike's presence on the platform enables it to greatly expand its reach to new and existing customers.



Jeff Whiteside
CFO & Chief Collaboration
Officer
eXp World Holdings

In 2016, the publicly-traded real estate brokerage eXp World Holdings collaborated with a startup called Virbela to create a “cloud campus” – an always-open digital environment where its agents could get training, collaborate, and socialize. eXp acquired Virbela in 2018, and still uses the technology as its primary office. Other companies, like Royal Bank of Canada, HTC, and RioTinto also use the platform. In 2021, eXp generated \$3.8 billion in revenue.

The need to explore. The metaverse was a word made up by Facebook. We’ve been in the metaverse for years. When you think about professional services, you’re being charged for the cost of their offices. Many of these firms have massive offices, and hardly anybody has been there for a couple years. A huge trend right now is employees don’t want to go to the office, and at the same time, they’re demanding more money. I think you’re at a disadvantage if you’re not exploring new ways to collaborate.

The advantages. The big advantages are that it enables us to provide the agents with a better overall compensation package. When you see what happened back in 2007 and 2008, whenever there has been a down cycle in the real estate market, brokers go out of business because they can’t afford the fixed costs. What we’ve been able to do in our compensation model is put the money we’re not spending on brick-and-mortar back into a higher commission split, a revenue share, and equity awards. And when something goes bad – i.e., COVID – most of the other offices



An eXp conference held in the Virbela virtual world in 2020 attracted 12,000 people.

shut down. You couldn't go to your brokerage. But we're open 24/7; we run our entire brokerage globally on this platform. Just like you'd drive in your car downtown, I go into my office. We have meetings, board meetings, education sessions, staff meetings with 2,000 people. We opened 18 new countries during COVID, without getting on a plane.

I travel about one-third of my time – being out with agents, or at events. But when I'm in one place, I'd say I'm online in the [Virbela]

world, or in Frame [a lighter-weight, web-based piece of software Virbela makes] probably 70 percent of my time.

I started working in e-commerce when it was less than two percent of retail. To me, it's a very good analogy for the metaverse and online collaboration. When you think about e-commerce, why would you go to a mall when you can just get it on Amazon? It's such a better way to do things.

On blockchain. You have a lot of companies, even in real estate, they go on and on about blockchain. The real estate agents don't care about that. We're heavily invested in technology, but our agent is our customer. The value proposition is what we work on. If [blockchain] makes more sense for doing a transaction, we'll get there. A lot of real estate has to follow compliance and regulations by state. That part of the business is older, and it's more traditional. When you go to a closing, you still see a lot of paper.

Web3 and the metaverse are two concepts that catapulted out of the world of startups, venture capital, and cryptocurrency enthusiasts in 2021. Now, many larger companies are exploring potential use cases and developing strategy for both Web3 and the metaverse. So we've created a brief guide to these two concepts, and how they may eventually be linked.

...

Web3. This next evolution of the web is being built right now on top of a more decentralized internet infrastructure powered by public blockchains, tokens, and smart contracts. Just as cryptocurrencies use “consensus algorithms” and “distributed ledgers” to maintain ownership records of tokens like bitcoin (BTC), emerging Web3 projects are being developed by new kinds of organizations without traditional ownership or organizational structures.

Projects. Many new Web3 services call themselves “projects” – versus startups or companies – due to their decentralized, community-based approach to development, operations, and governance. These projects are appearing in nearly every industry,



from areas like lending, to consumer and enterprise services like social media and cloud storage.

Coins. A large share of these projects utilize “native” token incentives to bootstrap growth and reward participation and value creation within their ecosystems. These tokens can be distributed directly by the projects or purchased on cryptocurrency exchanges, and they represent everything from a stake in the project, to credits for a future service, to governance rights, and more – often at the same time. As an example, a project called Filecoin in 2017 raised more than \$200 million to offer decentralized data storage, letting users rent out empty space on their hard drives to one another. Filecoin is both the name of the coin and the name of the storage service. Similar to shares of stock, as projects launch, improve, and attract users, the coins tied to them can gain in value.



1, 2, 3. What's now being referred to as Web1 was the original World Wide Web that many people first experienced in the late 1990s – largely static web pages that you could view. Web2 came about in the mid-2000s, when websites became more dynamic, enabling people to post their own writing, audio, and video, and

rate or comment on what others shared. Social networks like Friendster, MySpace, and Facebook emerged.

Power shift. Because a key aspect of Web3 is that the technology is decentralized, and ownership from the start is open to individuals (not just venture capitalists and private equity investors), part of the vision is that power may shift away from major platform operators like Facebook and Amazon, and into the hands of the people organizing these new projects — who purport to operate more transparently. Could Web3 projects eventually knit together to replace many of the things that we do today on the Internet? That’s the vision espoused by many Web3 boosters.

Metaverse. The term metaverse is used to describe the emergence of more immersive, 3D, virtual worlds using avatars that interact with digital assets. The term originated from Neil Stephenson’s 1982 science fiction novel Snow Crash. Today, there are many popular metaverse worlds enabling consumers (Fortnite, Minecraft, Roblox) and enterprises (Horizon Workrooms, Virbela, EngageVR) to communicate, collaborate, transact, and more. While many of today’s worlds can be viewed as walled gardens



— similar to AOL — the future of the metaverse is expected to be interoperable, with the avatars and digital assets able to move seamlessly from world to world.

Virtual reality. You don’t need virtual reality goggles to enter most metaverses. The most popular entry point for today’s metaverse destinations are still desktop-based. But these worlds — and many others that have recently launched or are in development — are being designed to support fully-immersive, VR-based, “you are there” experiences. The metaverse is also expanding into physical spaces through augmented reality headsets and smartphone applications.



Linking the two concepts. Together, the metaverse and Web3 may prove key drivers in the next evolution of the internet, representing the convergence of immersive and interoperable digital worlds (metaverse) running on top of a more decentralized internet infrastructure powered by blockchains, tokens, and smart contracts (Web3). This will enable new forms of interactions (experienced through avatars), commerce (including digital assets paid for in cryptocurrencies or traditional fiat currencies), and more.



Christian Guirnalda
Director
Verizon 5G Labs &
Innovation Centers

Verizon, the telecommunications giant with \$134 billion in revenue, has been active in NFTs, Web3, and the metaverse. The company has explored opportunities with Meta (formerly known as Facebook) to use 5G wireless networks to support metaverse experiences, and using blockchain to verify the authenticity of press releases.

Not everything will be ‘on the chain.’ We think [Web3] is really a coming together of a lot of these technology domains. I don’t think everything needs to run on the chain...[but what’s taking shape is] a new type of system that includes the support for truly immersive content on one end, and the decentralized nature of how those pieces of content can interact with people, locations, and devices. It’s going to be interactive and participatory and contributory.

Call that the metaverse, call that Web3, [but the key question to ask is], where do we have ways to solve customer problems, monetize, and grow profitably as a business – versus trying to perfectly define what the metaverse is and what Web3 is. [For Verizon], we can do virtual reality training, or we can use augmented reality to help consumers install their router.

An NFT experiment. Players from our esports team, Dignitas, did a social campaign. During E3 [an annual videogame expo], we announced we were going to do an NFT drop. You got an NFT if you were hashtagging “#dignatures.” We gave it to 50 or so fans, and the fans joined a BlueJeans videoconference where the [esports] player was on the other end. It was just like

getting a baseball player to sign a program. The fans chatted with the players, and the signatures were appended to a hologram that we minted as an NFT. That was an experience and a digital asset that makes them feel like part of the team.

Testing out different metaverse platforms. As an innovation team, we used to have to bring folks into the 5G Labs. When the pandemic hit, we built our own virtual lab and started to have engagement there. Constraint is the mother of innovation. We had to make a virtual space, which also taught us about the differences in different options for virtual worlds and metaverses – about the constraints and communities and feature sets that differed, based on community and comfort and business model.

Gaming the ‘when’ question. Web3 and the metaverse will be another set of words. Your strategic approach should enable you to test and learn how emerging technologies will impact your business. If you’re just getting into corporate innovation, you might not have been around for as many cycles and buzzwords as some of us war-tattered vets have been. Start with what your business needs to defend or contribute to these two areas.

I was talking recently with Rus Gant [a futurist who runs the Visualization Research Lab at Harvard]. He told me, ‘We’re always

pretty spot on with the technology. The question has always been the when.’ The when can only be predicted if you as a company are experimenting in a way [where] you can get a little bit higher fidelity on that time frame. Things will become more clear over time, but having a scientific and thoughtful approach to gathering the right data, and making decisions on whether to dive in or not, will help you determine not when the thing hits, but when it’s impactful for your business.

We've collected 10 examples of how large organizations are developing metaverse strategy and launching experiments.



COCA-COLA

Objective: Marketing / Engaging Customers

Partner: PWR

Initiative: After experimenting with NFTs, Coca-Cola has made another foray into the metaverse with its Coca-Cola Creations line, which are beverages purchased in the physical world that can unlock experiences in the metaverse. The company has released two iterations of its Creations line – one called Starlight and another named Zero Sugar Byte. Starlight, the earlier of the two products, enabled users to scan their bottle or can with a phone to unlock special augmented reality concerts featuring the singer Ava Max. By scanning the second Creations product, Zero Sugar Byte, users can unlock exclusive entry to Pixel Point, Coca-Cola's island inside the videogame Fortnite. The island, created in partnership with PWR, a gaming company, allows users to play four augmented reality games. Access to these features is only available after purchasing Coca-Cola Creations products.

[Source: Coca-Cola Press Release](#)



CVS HEALTH

Objective: Sales / Meeting Consumers Where They Are / Customer Acquisition / Providing Services

Initiative: In late February 2022, CVS Health filed a trademark application that may lay the groundwork for doing business in the metaverse. The trademark covers selling virtual, downloadable goods, like medications and health and beauty items, as well as offering health services. The goal of the project is partially to meet CVS customers

– existing and potential – where they are. CVS spokespeople have made it clear that the company has begun moving toward a more virtual-centric approach to customer interaction. But since filing the trademark application in March 2022, CVS has not yet made a concrete move into the metaverse.

[Source: The Block](#)



ESTÉE LAUDER

Objective: Customer Acquisition / Self Expression / Marketing

Partners: Alex Box, Decentraland

Initiative: Beauty and cosmetics brand Estée Lauder dipped a manicured toe into the metaverse in March 2022, during Metaverse Fashion Week. The brand partnered with Decentraland, a virtual world owned by users, where the event occurred. Estée Lauder created an NFT based on one of its most famous products, Advanced Night Repair, a skin serum designed to make consumers' skin glow. Alex Box, an artist well-known in the metaverse, helped to design the NFT, which was free to 10,000 attendees of the fashion event. Users could keep the wearable NFT for use in Decentraland even after the event concluded. Spokespeople for Estée Lauder said the company is looking to redefine beauty and its expression, both in the physical and virtual worlds. Though the cosmetics company does not offer a retail store inside Decentraland, its fashion week appearance put the brand on the map for metaverse users.

[Source: WWD](#)



FIDELITY INVESTMENTS

Objective: Customer Acquisition / Education / Metaverse Real Estate Purchase
Partner: Decentraland

Initiative: Financial services firm Fidelity Investments has a variety of ways customers — prospective and existing — can interact with the company in the metaverse. Fidelity began selling an exchange-traded fund (ETF) in late April called the Fidelity Metaverse Index (FMET), which tracks the global movement of companies working to enhance the metaverse. Beyond that, Fidelity has also purchased real estate in the Decentraland metaverse. The firm's eight-story building, called the Fidelity Stack, allows metaverse users to engage in various interactive experiences that allow them to learn more about investing, the metaverse, and FMET. Fidelity has been looking to engage a new generation of investors, which became the driving force for its new building in Decentraland.

[Source: Fidelity](#)



GUCCI

Objective: Metaverse Real Estate Purchase / Marketing / Consumer Engagement
Partner: Roblox

Initiative: Gucci recently launched Gucci Town in the Roblox metaverse. Gucci Town is a more persistent investment in the metaverse for the luxury fashion brand, which had previously partnered with Roblox for shorter-term experiences, like Gucci Garden, which attracted millions of visitors in its two-week run. In Gucci Town, users can purchase virtual merchandise at the Gucci Shop, make virtual art in the Creative Corner, and participate in various contests run by Gucci. Gucci Town also features

the Vault Plaza, an experimental virtual exhibition space. Gucci Town is expected to evolve over time.

[Source: The Verge](#)



JPMORGAN CHASE

Objective: Metaverse Real Estate Purchase / Brand Awareness
Partner: Decentraland

Initiative: Financial institution JPMorgan Chase built a lounge in Decentraland called the Onyx Lounge. The lounge itself does not have interactive features or sell NFTs, but it is a developed piece of real estate in the virtual world. The bank's executives have said people may soon expect that interactions that were previously conducted in person will shift into to the virtual world. And since experts predict the metaverse will have its own currencies and GDP, JPMorgan's expertise in banking and transactions could make it a key player. The financial firm has also released a research report on the profitability and viability of the metaverse, which estimates the metaverse will become part of every sector.

[Source: JPMorgan Chase](#)



SAMSUNG

Objective: Consumer Engagement / Self Expression
Partner: Pixelmind

Initiative: Technology mogul Samsung has built its own world inside the metaverse; it's called Samsung 837X. While 837X originally launched in January, a new, more

advanced version came out in late March. Users now have the option to choose their own adventure with 837X's "You make it" quest, which provides a unique experience for each user. Upon completing the quest, users are presented with a You make it NFT for the 837X world. Because of the highly customized nature of the design, Samsung partnered with Pixelmind, a company which uses artificial intelligence to create the art users see on their interfaces. Samsung has stated the world was built based upon its flagship store in New York City.

Source: [Samsung](#)



TOMMY HILFIGER/PVH

Objective: Facilitating Transactions / Marketing / Consumer Engagement
Partner: Boson Protocol

Initiative: Like some other luxury fashion brands, Tommy Hilfiger joined metaverse Fashion Week, hosted in Decentraland in late March. When users teleported to Boson Protocol's Fashion District in Decentraland, they could enter the Tommy Hilfiger store, where they saw floating renderings of the Tommy Hilfiger collection and a special sweatshirt for sale. Consumers could purchase NFTs for their metaverse avatars through the Decentraland Marketplace, but they could also purchase goods in the metaverse that would be shipped to their address in the physical world through Boson Protocol, which provides infrastructure for e-commerce transactions. Tommy Hilfiger has previously worked in the augmented reality space, having launched partnerships with Animal Crossing and Roblox in 2020 and 2021, respectively.

Source: [Forbes](#)



VANS

Objective: Meeting Consumers Where They Are / Self-Expression
Partner: The Gang Stockholm

Initiative: Vans created an interactive experience inside Roblox called "Vans World," where fans of the skateboarding brand can purchase customizable merchandise to wear while they skateboard in the metaverse. Vans partnered with The Gang Stockholm, a group of community developers for Roblox that help to execute on design and technology inside the virtual realm. Vans World offers virtual shoes, skateboard parts, and accessories that can be bought with Robux, the currency used inside Roblox. Consumers can also collect a free "item of the day" in Vans World.

Source: [USA Today](#)



NIKE

Objective: Marketing / Consumer Engagement / Sales
Partner: Roblox

Initiative: In late 2021, Nike launched Nikeland, a virtual experience in the Roblox metaverse where users can play games and purchase digital Nike products to wear. Users can participate in games like dodgeball, tag, and more on Nikeland's interactive courts and fields. Nike merchandise can be worn outside of Nikeland, in other parts of Roblox. Special guest stars have made appearances in Nikeland including LeBron James. Nikeland also gives users the opportunity bridge the real and digital worlds by using fitness trackers in smartphones to keep tabs on offline movement and translate it to metaverse play. In December 2021, Nike acquire RTFKT Studios (pronounced "artifact"), which was making and selling NFT collectibles.

Source: [Forbes](#)

We've collected 10 examples of how large organizations are developing strategy around blockchain, non-fungible tokens, and cryptocurrency, and the types of experiments they've been running.



THE ASSOCIATED PRESS

Objective: Sales / Community Building

Partner: Xooa

Initiative: The Associated Press entered the NFT sphere with its own marketplace built on Xooa, a platform for creating NFT marketplaces. The AP sells photographs taken by its photojournalists, giving users exclusive rights to the original photography. Since launching the marketplace in late January, AP has facilitated “drops” for its NFTs, which are minted on the Polygon blockchain. The project aimed to create a community of collectors who share an interest in photography. According to the AP, profits from the NFTs go back to the organization to further its goal of fair and accurate news coverage.

Source: [The Manual](#)



GAMESTOP

Objective: Facilitating Transactions / Acceleration of Technology

Partner: Immutable X

Initiative: The videogame retailer GameStop launched its own cryptocurrency wallet that can be used seamlessly across apps. The GameStop wallet, which supports self-custody of Ethereum (ETH), gives users full control over their own assets, rather than a third-party intermediary. The wallet will also support a future GameStop NFT marketplace. The NFT marketplace project will be built in partnership with Immutable

X, which facilitates minting and trading NFTs on the Ethereum blockchain.

Source: [Bloomberg](#)



MICROSOFT

Objective: Startup Support / Acceleration of Technology

Partner: Astar Network

Initiative: Microsoft has partnered with Astar Network on the Astar Incubation Program, which will support emerging entrepreneurs in Web3. Microsoft has pledged marketing, cloud computing, and mentorship assistance to companies chosen for the program. Recently, Microsoft allocated some of those resources to AstridDAO, a decentralized money market built on the Astar platform. AstridDAO also has ownership of a stablecoin that is linked to the US Dollar, called \$BAI.

Source: [Coincu](#)



SHELL

Objectives: Environmental Consciousness / Increasing Efficiency / Optimization

Partners: VAKT Global Limited, Komgo SA, LO3 Energy

Initiative: Shell has been building its blockchain capabilities since 2017 thanks to its Blockchain Center of Excellence. Its decentralized digital passport helps track supply

chain processes at all stages, so manufacturers can more efficiently source materials and understand where they come from. This allows for fewer disruptions in the supply chain, but it can also enable manufacturers to understand the environmental impact of the products they source. Another of Shell's projects focuses on trading operations and finance. Instead of continuing to use an inefficient paper trail, Shell has partnered with VAKT Global Ltd. and Komgo SA to optimize its energy trades and gains using a digitized platform. Shell is also a founding member of the Energy Web Foundation, a nonprofit focused on decarbonizing the global economy and accelerating the energy transition through decentralized solutions.

Source: Shell



COINBASE

Objective: Consumer Engagement / Facilitating Transactions

Initiative: Cryptocurrency company Coinbase has launched its own NFT marketplace, Coinbase Marketplace. Users can rely on a variety of cryptocurrency wallets to buy, sell, and trade on the platform. The platform includes social features, so that users can not only buy and sell but also follow, like, and comment on others' NFTs. The social features are designed to create a more cohesive community around NFTs. All of a user's NFTs — either owned or created — are displayed on their profile. The marketplace currently supports Ethereum blockchain. Some popular NFT creators, like Bored Ape Yacht Club, Azuki, and Doodles offer their work on the platform.

Source: MUO



FIDELITY INVESTMENTS

Objective: Asset Management / Investing

Initiative: In 2018, Fidelity Investments launched a business called Fidelity Digital Assets, which helps investors to manage cryptocurrency. The platform allows investors to secure, trade, and support their digital assets. The unit serves as an enterprise-grade platform for cryptocurrencies. According to the parent company, the platform is intended to make these currencies more accessible to its clients. Users have access to offline cold custody storage of Bitcoin and Ethereum. Fidelity has been working on digital asset management since 2014. One of Fidelity's most recent ventures has been allowing investors to include Bitcoin in a 401(k) account.

Source: Fidelity



SILVERGATE BANK

Objective: Meeting Consumer Demands / Facilitating Transactions

Initiative: California-based Silvergate Bank, one of the larger financial institutions involved with cryptocurrency, has established the Silvergate Exchange Network, which allows companies and customers to send and exchange Euros to US Dollars and vice versa over the network 24/7. Silvergate recently purchased Diem, which was meant to be a Meta-funded stablecoin. The institution has noted its plans to integrate the software into the SEN for more efficient and electronic currency transfer, and plans to create its own stablecoin based on the infrastructure for Diem. The CEO of Silvergate has said that customers want a way to move money without barriers while still having some security from a regulated institution.

Source: The Motley Fool



WALMART

Objective: Supply Chain Transparency / Safety

Partner: IBM

Initiative: Walmart has partnered with IBM to create better ways to track its food supply using blockchain. The partnership, which dates back to 2016, allowed Walmart to track items like produce all the way through the supply chain without requiring that each involved company keep its own records — instead, users can see and access all changes and movement directly on the blockchain. This allows Walmart to track a food source in seconds. Previously, that process could take up to a week. The company has used this process to track produce, like leafy greens, which can be prone to foodborne diseases. Because the company can identify exactly where food comes from, it can better keep customers safe. The company has said the initiative will also increase transparency and foster trust with consumers. Walmart joined other retailers and food companies in the IBM Food Trust initiative to continue working on blockchain technology for tracking products for health, safety, and efficiency.

Source: [Walmart](#)



SHOPIFY

Objectives: Meeting Consumer Demands / Facilitating Purchases

Partner: Crypto.com, GigiLab

Initiative: Shopify, an e-commerce provider, now allows merchants to receive payment for transactions in cryptocurrencies. Users can now buy goods from certain shops using Crypto.com Pay, and pay with Bitcoin, Ethereum, and Cronos, among other digital currencies. Prior to the partnership with Crypto.com, Shopify also

integrated with other cryptocurrency platforms and wallets, like BitPay, Coinbase Commerce, and Strike. Merchants on Shopify can also sell NFTs through GigiLab, a blockchain company that mints the NFTs on behalf of Shopify merchants. Shopify says it is trying to make transactions more convenient.

Source: [BetaKit](#)



MONDELÈZ INTERNATIONAL

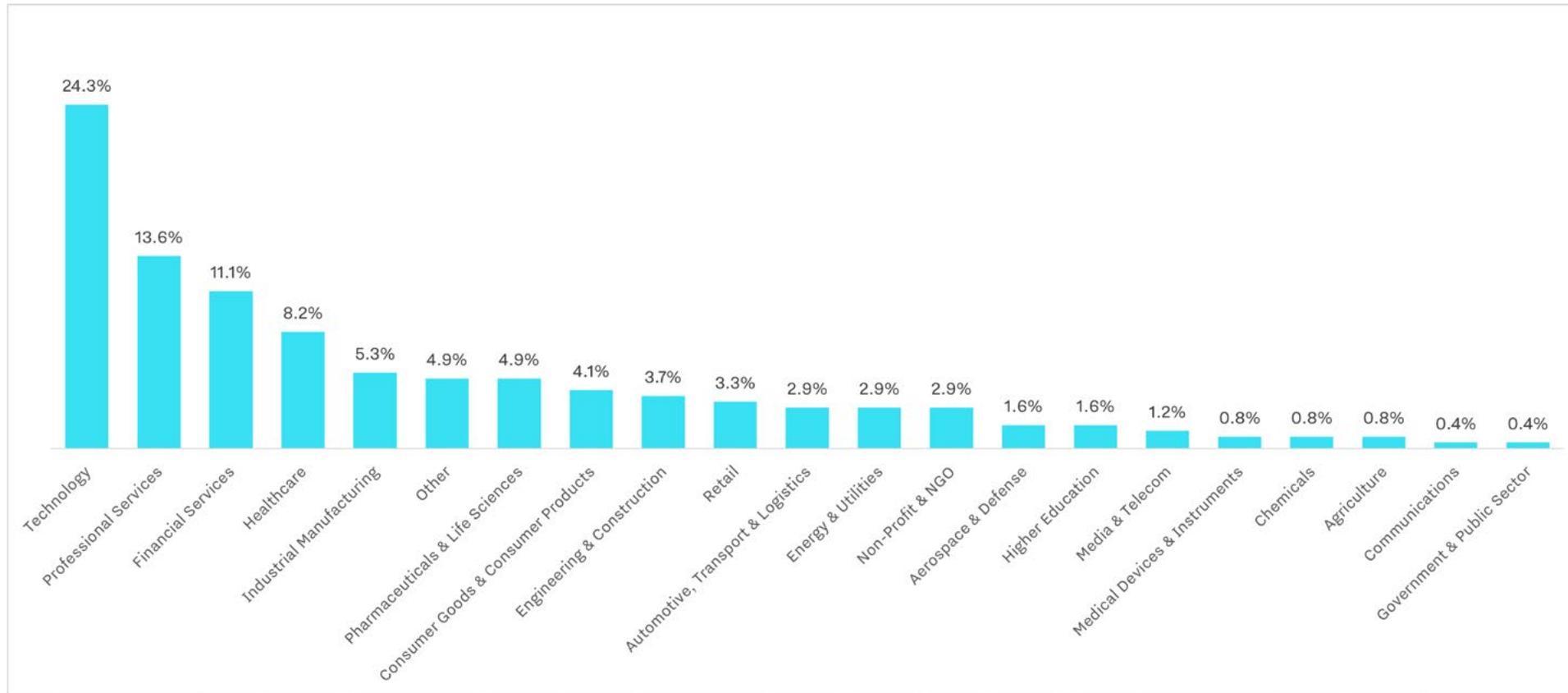
Objective: Transparency / Consumer Engagement

Partner: Connecting Food

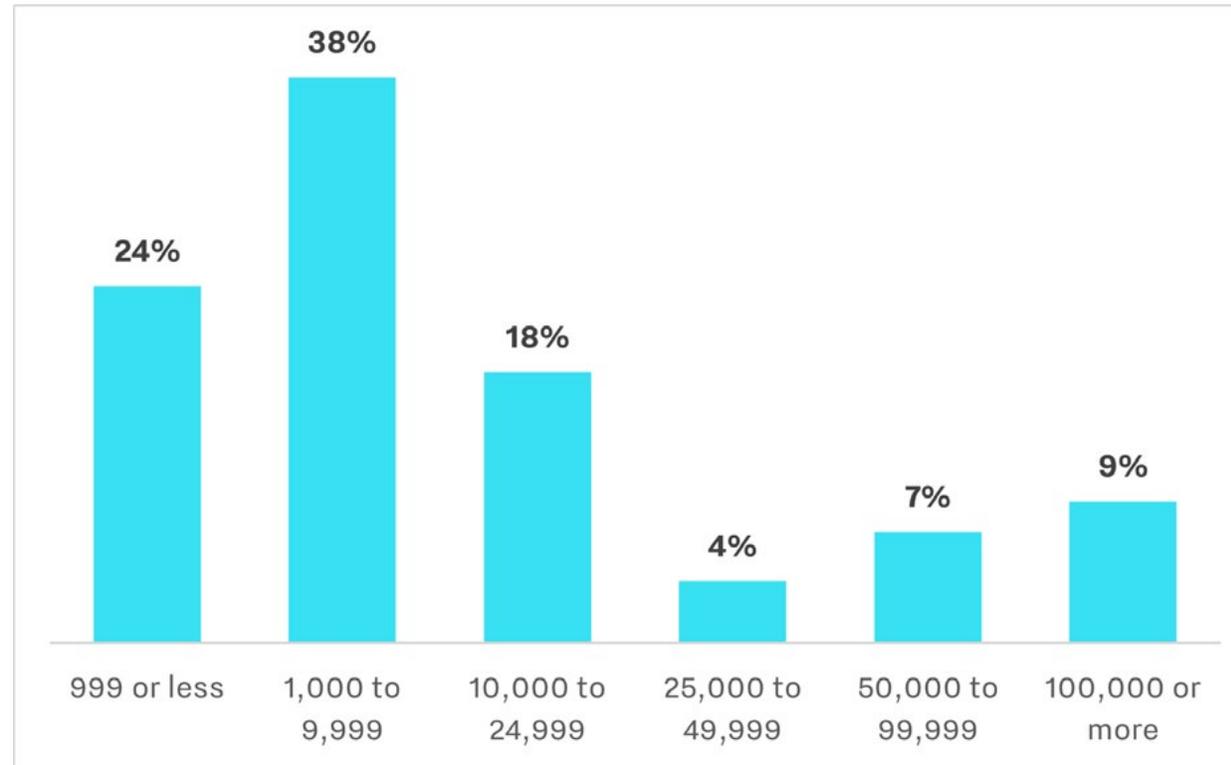
Initiative: Mondelēz International, the maker of snack foods, used blockchain technology to allow its consumers to better understand the origin of their products in 2021. The global brand partnered with Connecting Food, a company that uses blockchain to trace food end-to-end to certify its authenticity. By using a smartphone, consumers could see the growing process for two of Mondelez's brands — Triscuit, popular in the United States, and LU, popular in France. Consumers scanned a QR code on the packaging, which enabled them to view the journey of the wheat used to make the product, all the way from farm to factory.

Source: [Mondelēz International](#)

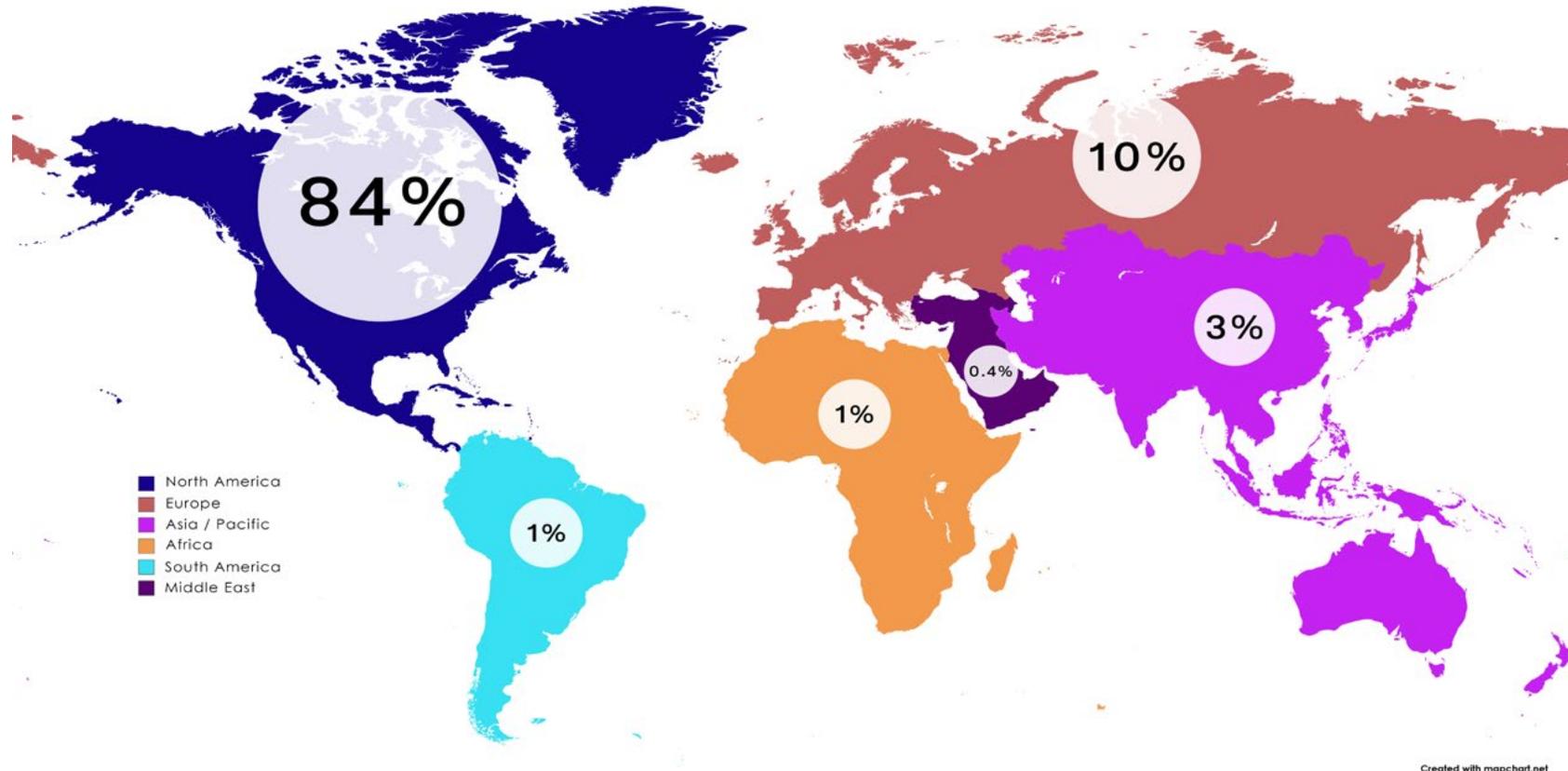
What is your organization's primary industry?



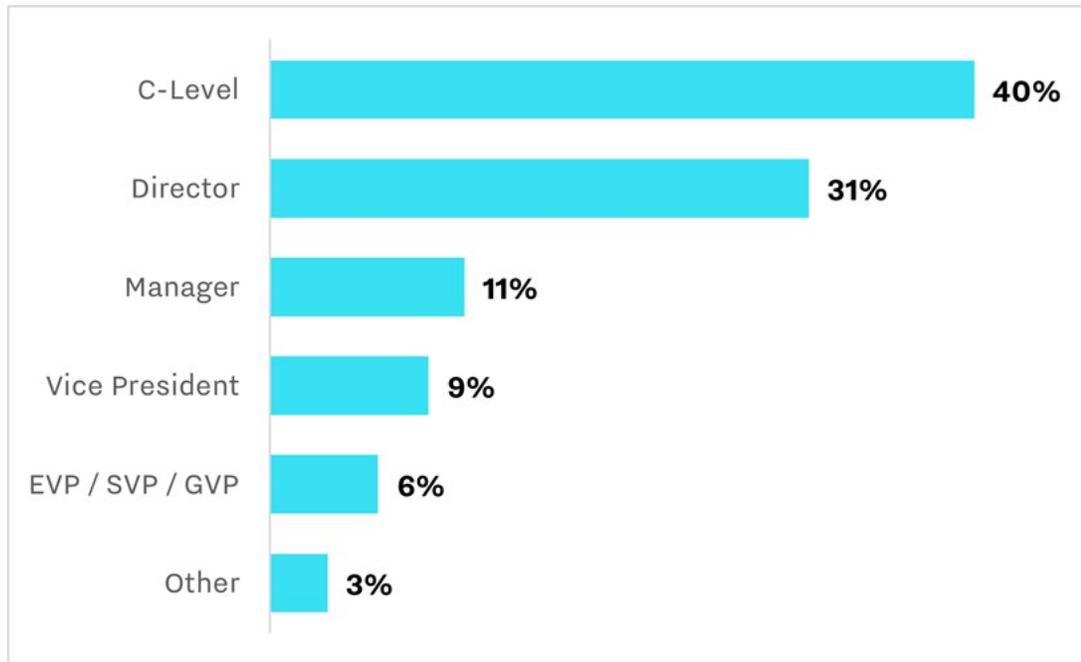
How many employees are in your organization?



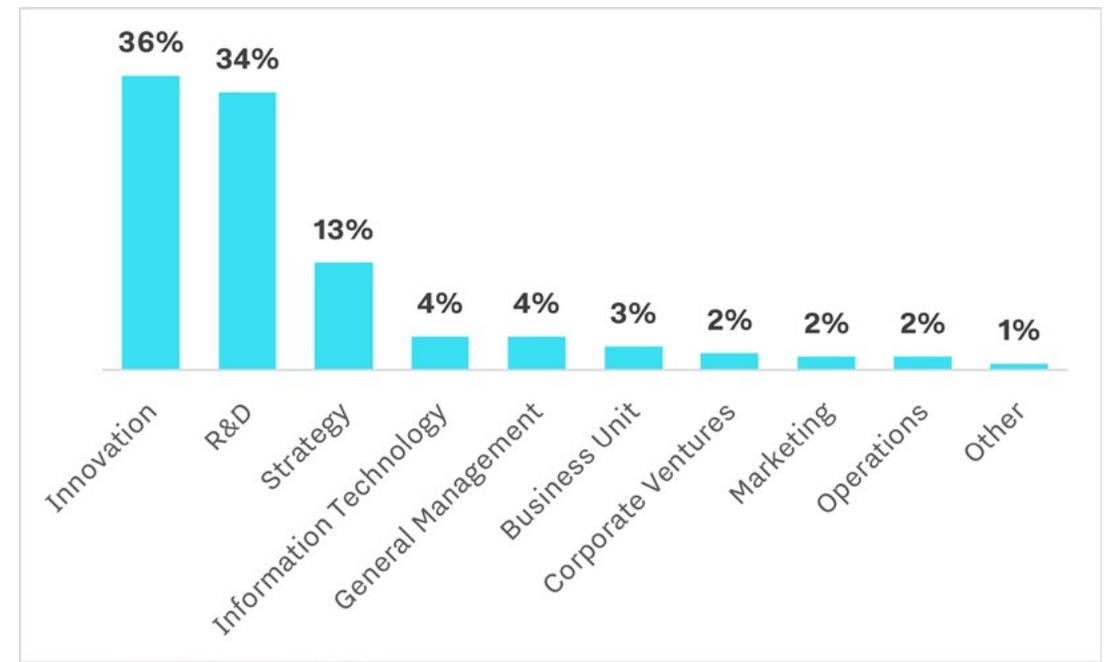
Where is your organization headquartered?



What is your level of seniority?



What is your functional area or discipline?



About KPMG, Our Research Sponsor

KPMG is one of the world's leading professional services firms, providing innovative business solutions and audit, tax, and advisory services to many of the world's largest and most prestigious organizations. KPMG is widely recognized for being a great place to work and build a career. Our people share a sense of purpose in the work we do, and a strong commitment to community service, inclusion and diversity, and eradicating childhood illiteracy. KPMG LLP is the U.S. firm of the KPMG global organization of independent professional services firms. KPMG firms operate in 144 countries and territories with more than 236,000 partners and employees working in member firms around the world. Each KPMG firm is a legally distinct and separate entity and describes itself as such. KPMG International Limited is a private English company limited by guarantee. KPMG International Limited and its related entities do not provide services to clients. Learn more at www.kpmg.com/us or follow us @KPMG_US and @KPMGUS_News.

CONTACT

Cliff Justice, U.S. Leader, Enterprise Innovation, KPMG LLP | cjustice@kpmg.com.



Some or all of the services described herein may not be permissible for KPMG audit clients and their affiliates or related entities.

The views and opinions expressed herein are those of the authors and do not necessarily represent the views and opinions of KPMG LLP. The information contained herein is of a general nature and is not intended to address the specific circumstances of any particular individual or entity.

The KPMG name and logo are trademarks used under license by the independent member firms of the KPMG global organization.

About InnoLead Research

InnoLead is the world's largest network of executives responsible for strategy, R&D, new product development, design, and innovation in established organizations. We connect those executives through online and in-person events, and we supply information and guidance on our website – all focused on helping them to build competitive advantage.

InnoLead's research reports are written by InnoLead staff; whenever there's input from outside entities, we make that clear. We ask that you not republish or post this report in its entirety; if you quote from it or reference it, kindly credit InnoLead. To access prior InnoLead research reports, visit innovationleader.com/research.