

A high-angle photograph of a cobblestone street. A large puddle in the center reflects a colorful, multi-story building with orange and yellow accents. The reflection is clear and detailed. In the upper left corner, the lower legs and feet of several people are visible, standing on the dry cobblestones. The overall scene is urban and atmospheric.

# Cutting through the metaverse hype

Practical guidance and use cases  
for business



# Introduction

You've heard about the metaverse. But what is it exactly? And why does it matter? There's currently a lot of confusion, speculation and skepticism around the metaverse and the future it promises. And it's true that the definition and boundaries of the metaverse are still taking shape. But we believe that this next evolution of the internet represents a huge opportunity for business — and a great risk, if ignored.

The good news? You can take small, concrete steps now to start building a foundation that takes advantage of the early metaverse. We can help you begin that journey, experimenting with pilots that align with and use the wider investments being made in this space.



# The metaverse connects the physical, the virtual and everywhere in between

## Imagine meeting with your financial adviser in 2027.

You sit in the same room (or rooms in different cities, if you like), both wearing augmented-reality glasses that let you see your financial information arrayed around you — your mortgage, bank accounts, insurance policies, stock portfolio, college savings for your newborn.

All these materials come to life — as shapes with mass and motion, not just numbers on a spreadsheet — and you can intuitively understand their relative sizes and how they interconnect. They update in real time, but you can also see them shrink or grow as you rewind or fast forward in time, by months, years or decades. You ask your adviser, *“What happens if we try this strategy? Or that?”* And you see the results play out around you, giving you more understanding and confidence than you ever felt from a static statement.

## Imagine later you’re at the office.

You’re talking through a new product over a video call with your designers in Buenos Aires. You decide to move the meeting into the team’s virtual workshop — a shared, persistent space, with holographic recordings of real-life user tests that you can replay and study, and whiteboards with months’ worth of notes that you can search through. Some colleagues join you in the workshop using virtual-reality headsets, others from their laptops or phones.

The team has made fast progress with 3D models of the latest prototypes, and you’re getting ready to invite buyers in for a virtual visit. Your team talks through final refinements to the product’s digital twin, so you can start using the asset to prepare for rollouts. You know that marketing wants to use the digital twin to anchor a new experience at your retail partners. Customer service is planning to use the digital twin to initiate metaverse support calls based on real-time data.



**It's not difficult to imagine that in this new world, the businesses that have adopted these new experiences and technologies will be the ones shaping the future — the ones creating products and experiences that set new standards, the ones sought out by customers and talent alike.**

The definition of the metaverse is a moving target. But we think about it in a way that focuses on business value, even as the concept continues to take shape. This is how we define the metaverse right now: An evolution of the internet, but a revolution in the making for business. The metaverse spans physical places and digital spaces, enabling us to collaborate and exchange value through shared interactions and experiences.

The metaverse represents a new approach for how businesses build and deliver products and services, furthering the shift from web to mobile. Most importantly, the metaverse will change the way we explore, understand, and relate to data, supercharging data visualization and collaboration, bringing new dimension and clarity to complex systems.



# The metaverse is evolving

Just 20 years ago, companies were creating websites for information sharing. Today they drive commerce. In the 2010s, mobile phones, tablets and broader connectivity started changing the way that we interact, enabling new sets of tools for frontline workers.

The metaverse is the next step in this evolution, part of a continuing acceleration of the pace of change. Businesses are trying to figure out new, more productive ways to collaborate, engage with customers and generate value. The future is being shaped by the work that's starting today, and organizations need to tread carefully as they navigate the early unknowns. But by investing wisely, you can set yourself up to realize the potential of a fully integrated metaverse of the future.

Five of the top 10 most tested and adopted **emerging technologies** will power the metaverse:

- **IoT and edge computing**
- **Blockchain**
- **Next-generation connectivity**
- **Digital twins**
- **Extended reality**

By 2026...

**25%** of people will spend at least **one hour a day** in the metaverse.

**30%** of the organizations in the world will have **products and services** ready for the metaverse.

# The dawning of the enterprise metaverse

The continuum of experiences and technologies that we associate with the metaverse is still evolving quickly — including visiting digital worlds, buying goods and services, and interacting with people in new ways, using everything from head-mounted displays and augmented-reality devices to laptops and phones.

While much of the current buzz centers around consumer experiences, we believe the true opportunity lies in the workplace. These are just some of the use cases we're working on with clients that are already delivering value:

## Employee experiences



**Remote collaboration** uses virtual spaces and extended reality to streamline collaborative design, construction and maintenance with customers and colleagues.



**Remote operations** are more viable as physical automation increases, providing opportunities for humans-in-the-loop to operate machinery from a safe distance with precision.



**Meetings and events** take advantage of the ubiquity of digital tools for remote and hybrid work, providing a virtual space to collaborate and connect.



**Training** is a natural fit for metaverse spaces, which work especially well for simulations of unsafe scenarios and for generating empathy.



**Disaster recovery/catastrophe modeling** allows utilities, insurance companies and other organizations that manage physical infrastructures to envision and model various scenarios using historical data.

## Customer experiences



**Digital marketing** is becoming richer and more responsive as marketing organizations create new channels and immersive experiences for customers to learn and interact with organizations before buying.



**Retail** has become increasingly popular in the metaverse, with social shopping, virtual stores (either through Snapchat "lenses" or in a virtual shopping gallery) and try-on-at-home experiences in virtual fitting rooms.



**Digital goods** provide virtual things for virtual worlds, and luxury brands in particular are excited to offer non-physical goods for sale to show off status in the metaverse.



**Community** brings people together for shared experiences that persist over time and space to create larger communities of interest.





As these use cases mature, businesses will continue finding new applications. The key is exploring what makes the metaverse unique — like bringing people together in new ways and in new kinds of spaces, enabling far more immersive and contextually rich access to data, and imagining new categories of shared, persistent experiences.

It's those qualities that will enable businesses and people to be and do more, improving creativity, accelerating innovation and connecting you more meaningfully with your customers and their needs.



# The power of safe interaction

There's a reason the metaverse is taking off now — we're craving more meaningful interaction online. Asynchronous, text and image-based communication only scratches part of our itch to truly connect across time and distances. Interactions incorporating multiple senses and a sense of space, as those in the metaverse do, allow us to feel present, together. This generates better interpersonal connection and group cohesion, with opportunities for genuine empathy, shared experience and more in-depth collaboration.

Global communications firm Edelman describes distrust as society's default emotion in its **2022 Trust Barometer**, so it's more important than ever for organizations to **build trust as we explore new use cases**, spaces and interactions. For example, studies show that experiencing images in virtual reality generates **more emotional response** from participants than viewing the same images in 2D. That means we need to be mindful of the potential for those responses to be either positive or negative as we build interactions in this space. Positive experiences will generate trust and excitement for further engagement, and trust is vital to help employees and customers navigate a continually changing landscape.





For the metaverse to engender and encourage trust — and for it to intersect with our physical and virtual lives in safe, inclusive ways — we need to carefully consider all the factors that go into building and maintaining it. These are some of the considerations that should be top of mind when instituting a metaverse strategy framework:



**Accessibility** and **inclusivity** — Create a welcoming environment for everyone. Use accessibility features to make experiences more enjoyable for every user.



**Privacy** — Obtain clarity and consent for what data is collected and aggregated and how it's controlled and used, while instituting safeguards that keep pace with the quantity and granularity of data generated by the metaverse.



**Identity** — Look for ways to safely carry identity management and authentication protocols across worlds and platforms to protect against fraud and abuse, taking extra precautions if using biometrics for identification.



**Security** — With massive amounts of data and complex, interconnected virtual and physical systems, maintaining a secure environment is critical. Assess the risk of attacks, breaches and outages for your unique metaverse use cases and position security as a core component of user trust.



**Safety** — Identify and address any physical threats to personal health and safety that might exist in the metaverse environment. Maintain that same level of care for emotional safety so participants feel protected from abuse, harassment and other potential harms.



**Human psychology** — Work to understand the short- and long-term psychological implications of these technologies before enabling widescale adoption. Think about how individuals might use these new tools for self-expression in ways that promote personal growth, satisfaction and engagement, while anticipating shifting norms.



**Digital assets** — Maintain customers' trust in the authenticity and security of transactions and investments they make in the metaverse by exploring digital assets like cryptocurrency and NFTs.



**Oversight and accountability** — Put in place an ethical framework to safeguard experiences and outcomes in the metaverse, with additional and enhanced controls to address the considerations above. Create experiences that reflect your organization's core values to build trust with your customers and employees, while maintaining frequent dialogue with stakeholders to ensure their experiences meet expectations.

Organizations that focus on building positive and safe interactions will have the strongest foundations for success in the rapidly maturing metaverse.



# The human, process and technology foundations of the metaverse

**To ensure that our ways of working evolve into the future, you should start by equipping your organization with the talent and skills needed for doing business in the metaverse. With a blended approach combining training, hiring and reskilling, new roles will also emerge to oversee functions created by the metaverse. Beyond the training and skilling lens, you'll need a plan to educate and engage stakeholders, manage change and create a robust adoption culture that encompasses technology and emotional/cultural implications. Simultaneously, workplace and HR policies will need to evolve to accommodate new ways of working and collaborating.**

The metaverse represents not just a shift from paper-based processes to digital processes, but a jump to experiential processes made possible by massive amounts of data that take physical shape in the virtual world. You can use this “data in context” to enhance everyday work processes, integrating those processes with a cloud data platform that lets you do more, faster, with data while minimizing friction.

It will be important to consider systems readiness as you venture into the metaverse. One of the first access points is hardware like virtual reality headsets (Oculus Quest), mixed reality headsets (HoloLens), augmented reality glasses and spatial audio, but it can be expensive, uncomfortable and time-consuming to build cross-platform access. Software infrastructure is also starting to mature, with Microsoft, Unity, Unreal and Blender offering some of the most common software tools used to create 3D spaces. From a user perspective, social interactions are well developed, but truly collaborative applications are still early in development.

With technology still in flux, the right combination of hardware and software will vary based on use case, tech-savviness of the people involved, the access they require and the ability to invest in and manage hardware that will be frequently updated. You should ensure that your experiments in the metaverse are well defined to best make strategic decisions about these investments. It may be wiser to focus on limited pilots or use cases that will deliver the most concentrated value for your business.

But, as with any other digital evolution, this only works if you've laid the initial groundwork to understand what this future looks like for your organization. Envisioning where you're going and why, as well as how to get there, starts with building the business case for achieving your strategic goals in the metaverse. To understand what areas of the business stand to benefit the most, you should evaluate use cases against potential gains in efficiencies, new insights or new experiences.



# “Where do I begin? What’s working now?”

Three use cases that you can start today

The following use cases are just a few examples of what we’re working on with clients today. Keep in mind that a small initial investment can go a long way: Assets and experiences you start building in the metaverse now can compound over time to create new opportunities.

For example, a digital twin built for training could in turn be used for onboarding, then recruiting, then remote operations or a new product. Those new experiences can then accelerate further growth, as the metaverse becomes more pervasive and its associated technologies become more affordable, scalable and mainstream.



# Team collaboration and meetings



## *How we're working with clients*

A wealth management firm wanted to build client loyalty and engagement by showing its commitment to innovation in financial experiences. Avanade worked with the firm to create an immersive interaction that imagines how a financial review would unfold 10 years in the future.

A client and adviser use HoloLens 2 devices to view financial information together, based on the client's digital profile. Then the adviser calls up a timeline and uses machine learning to predict potential outcomes before generating recommendations. In single-user mode, a virtual agent can guide the client through a similar process.



## *How to get started*

These types of experiences can involve many different kinds of content: You need to be able to combine 2D and 3D rendered assets, like images and audio with time-based input, and then connect that to data-storing systems for user interactions and behavior. Avatars will become more realistic (and match real participants) with continued investment in AI technology to analyze 3D scans and images.

Data management also plays a huge role in the way these kinds of interactions will use AI and immerse clients in information. A good medium step to take now is to consider how much of the data you want to share in a new client universe is already shared to client-facing roles. If it's not much, that could mean you need to work on data management, governance and strategy.



# Scenario simulation



## *How we're working with clients*

Together with Accenture and Microsoft, Avanade is partnering with a steel producer to enable increased situational awareness of — and insights into — its manufacturing process through visual representation of operational data. We'll work to create 3D models of production lines at one of the manufacturer's plants to build a 3D representation of the steel-making process. The assets created in this digital twin pilot could also provide a new way to model disaster recovery scenarios, an approach that could apply across other industries.

The solution will allow multiple people to work together remotely to solve issues within the plant. Users will be able to see status and operational data embedded and highlighted in the digital twin 3D visual app. The platform created in the pilot will help enable near real-time insights into operational status, with the ability to increase scale or expand capabilities in line with the company's roadmap for IoT and intelligent manufacturing.



## *How to get started*

Investing now in IoT, edge and digital twin technologies will provide a data foundation that supports agility and ongoing innovation. As you develop your digital twin strategy, make sure you examine your intended business outcomes and impacts. To inform your strategy, consider what data you already have and the maturity level of your AI and machine learning systems.

As a next step, holographic devices like Microsoft HoloLens allow you to create a

virtual representation of a physical product or system, and they give you a powerful way to interact with its functionality and performance. Technologies like Dynamics 365 Remote Assist can be a good starting point too for remote operations and service, creating experiences in which customers and workers can solve issues quickly and cost efficiently.





# Immersive training



## *How we're working with clients*

Avanade partnered with the [University of Wales Trinity Saint David \(UWTSD\)](#) on a proof of concept to help its engineering program students take advantage of the latest technologies. The joint Avanade-UWTSD team explored solutions including mixed reality (HoloLens 2), Microsoft Dynamics 365 Business Applications Guides and connected edge (AI/IoT) technologies. The team ultimately used Dynamics 365 Guides to develop holographic teaching and learning aids. These aids focused on advanced machining skills and equipment

in the university's Robotics and Automation Lab.

The proof of concept uncovered several use cases, showcasing the benefits of integrating immersive technologies into the workplace. Avanade and UWTSD have an ongoing partnership, connecting to other industry partners to help explore opportunities to deliver agile, innovative solutions for factories of the future.



## *How to get started*

For many of the technologies that will be used in the metaverse, the best way to be an early innovator is to begin by using them internally. This is what Accenture is doing in creating its own enterprise metaverse, the "Nth Floor" — [deploying 60,000 VR headsets](#) to employees around the world and providing immersive VR environments for onboarding, learning and collaboration.

Enabling VR, especially on an enterprise-wide scale, requires a significant investment in headsets, platforms, mobile device management, content creation and more. To get your feet wet without the upfront cost, Microsoft Mesh for Teams lets enterprises test a basic metaverse training program, allowing you to explore use cases and demonstrate business value.





# The right approach to the metaverse is a pragmatic one

Tech giants will continue to make huge investments in the metaverse, but most companies need to take a more measured view regarding resources and risk. That doesn't mean the metaverse should be ignored, of course. The last time we saw a shift in technologies and experiences like this, Netflix was sending DVDs through the mail and Amazon was an online bookstore. This moment presents an enormous opportunity.

At Avanade, we're helping our clients become metaverse ready. We're guiding them on a journey that takes advantage of the most significant investments and strategic trends in the enterprise metaverse.

Using our expertise in data and experiences and our strong alliance with Microsoft, we're helping clients build proofs of concept and pilots that realize the opportunity of the metaverse — for businesses to be and do more, and to find value in all the new ways that we'll relate to places, data and each other.



# Whatever your goals and timeline, we can help you get started on your journey to the metaverse:

- *1 hour* – Let's chat over lunch or set up a meeting in the metaverse.
- *1 day* – Let's get together with a few of your colleagues and explore the potential of the metaverse for your organizational needs.
- *1 week* – Let's build a metaverse roadmap and strategic plan together.

## Learn how we can help you become metaverse ready.

### About Avanade

Avanade is the leading provider of innovative digital, cloud and advisory services, industry solutions and design-led experiences across the Microsoft ecosystem. Every day, our 56,000 professionals in 26 countries make a genuine human impact for our clients, their employees and their customers. Avanade was founded in 2000 by Accenture LLP and Microsoft Corporation. Learn more at [www.avanade.com](http://www.avanade.com)

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