



ACCELERATING INTO THE METAVERSE

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Ryan Peterson is vice president of Accelerate Solutions, Unity's professional services team.

Previously, Ryan was the CEO and cofounder of the Finger Food Advanced Technology Group, which was acquired by Unity in May 2020. Finger Food helped companies digitally transform their business using emerging tech. Ryan comes with over 25 years of

experience in consulting and business development across several industries, including video games.

If you're interested in hearing more from Ryan about his perspective on digital twins, the metaverse and its many use cases, be sure to follow his Road to the Metaverse series, with episodes available live and on demand.

THE METAVERSE ... TRUST ME, IT'S A THING.

I see it every day. Last year, Meta invested over \$10 billion into its metaverse initiative. Companies across the Global 100 are taking their first steps into the metaverse.

At Unity, we're helping the metaverse take shape. [Accelerate Solutions](#), Unity's professional services team, is working on a number of projects: luxury brands that want to give their customers a more immersive buying experience; factories that are building digital twins so they can streamline operation; live events organizers that are creating unique virtual performance spaces for concertgoers from around the world. All of these examples are part of the metaverse.



WHAT IS THE METAVERSE?

The metaverse can be many things, including digital twins of the physical world and entirely fantastical realms. The metaverse consists of persistent and shared immersive experiences. Metaverse experiences should run on any device, accessible to anyone around the globe. It's a convergence of a number of technologies – fast networking, cloud computing, AI and machine learning, content creation tools and more. The metaverse is more than a buzzword; it is now part of our corporate strategies.

The metaverse has limitless applications across all industries, from retail to gaming, from supply chain logistics to live events. And it's being continually reinvented, opening the door for new business models. It is changing the way we communicate and collaborate, entertain and educate. It is the next evolution of the internet, and it will ultimately be the foundation of our future society.

**“THE METAVERSE IS THE NEXT
GENERATION OF THE INTERNET THAT
IS ALWAYS REAL-TIME, MOSTLY 3D,
MOSTLY INTERACTIVE, MOSTLY
SOCIAL AND MOSTLY PERSISTENT.”**

– John Riccitiello, Unity CEO



NOT JUST FOR GAMES

The roots of the metaverse can be traced to the video game industry. Games like *Ultima Online*, *EverQuest*, and *World of Warcraft* allowed millions of people to share persistent experiences in fantastical worlds. Today, games such as *Minecraft*, *Roblox*, and *Fortnite* are arguably all part of the metaverse experience. They are social, they are interactive, and they are persistent.

While video games are certainly a part of the metaverse, we are playing within walled gardens. These experiences, while amazing, are constrained by the devices that these games are played on. The use cases for the metaverse are vast, and the audience extends far beyond any video game's reach.

→ WHAT IS THE METAVERSE?

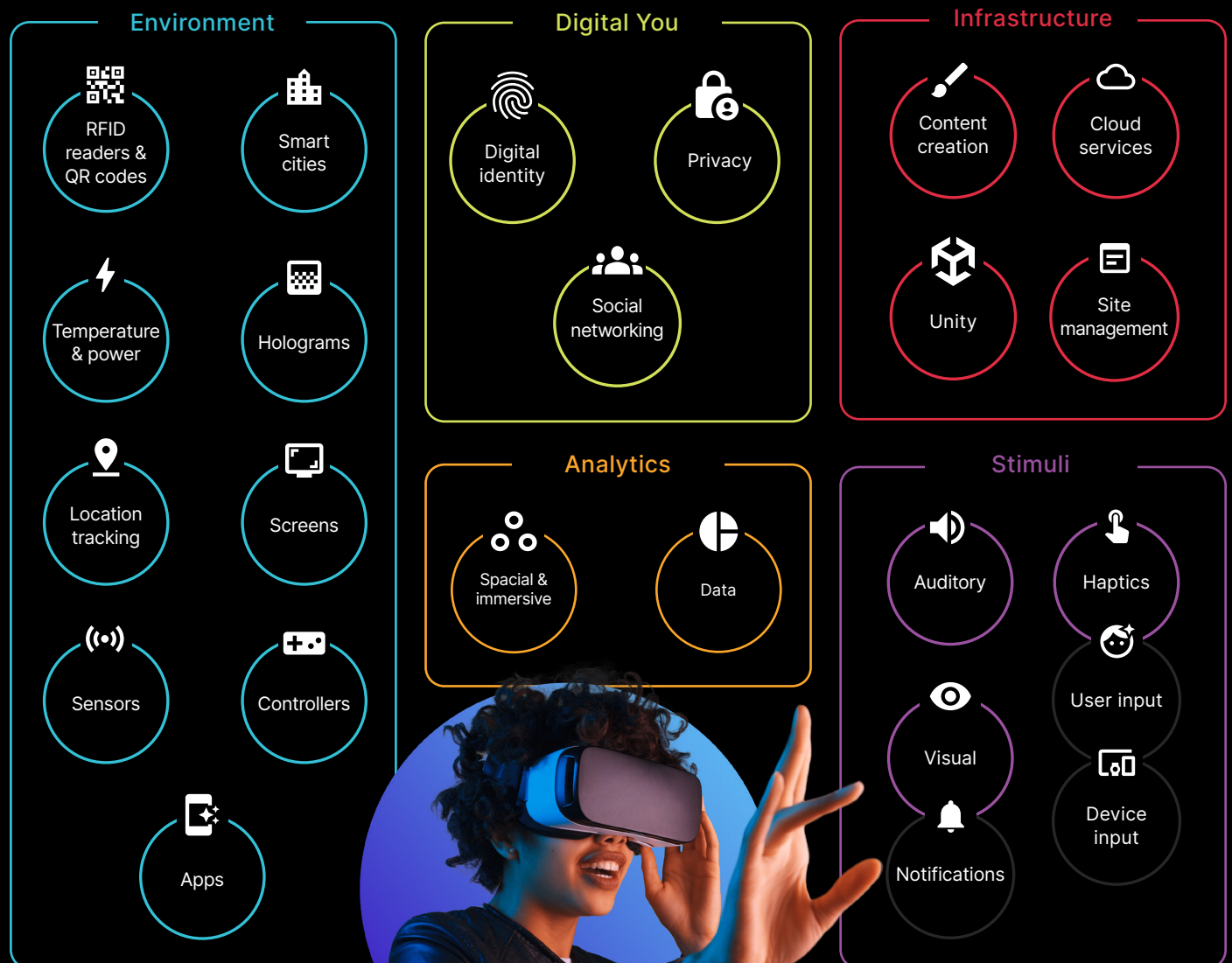
THE METAVERSE ECOSYSTEM

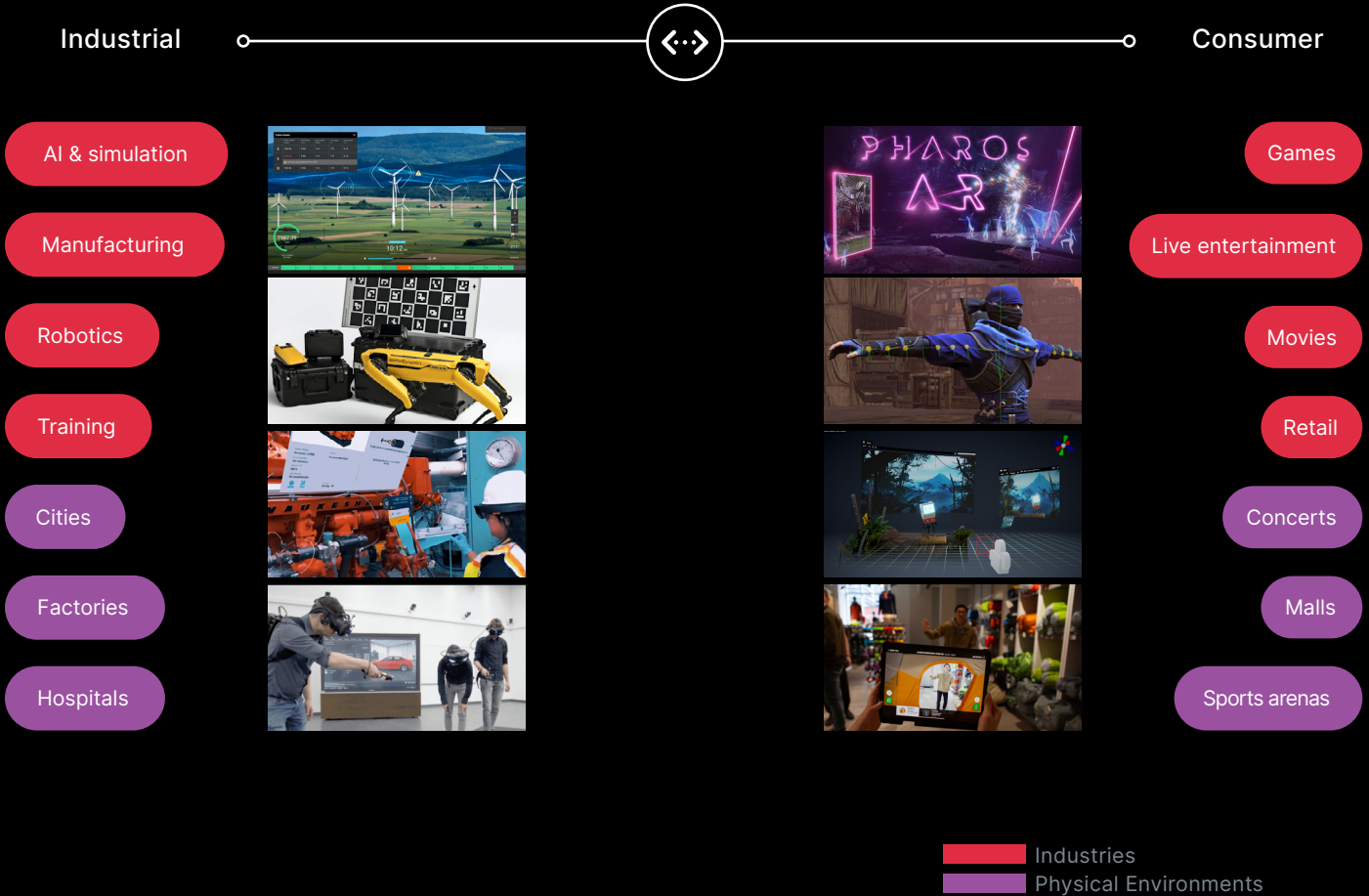
As technologies evolve, many of them converge. And as technologies are adopted, they become more accessible. From this synergy of technologies, the metaverse is emerging and an ecosystem is being forged. The metaverse ecosystem consists of:

- 5G, which lets us stream way more data
- augmented and virtual reality and headsets

- content creation tools
- technology for industrial sectors, including data analytics, location tracking, and sensor networks

Metaverse technology is cutting edge and, to help entrepreneurs bring their ideas to market, it's also highly accessible.





THE METAVERSE SPECTRUM

The metaverse encompasses a vast range of modes of existence, including both industrial and consumer experiences. The industrial metaverse often uses [digital twins](#) to help visualize data or optimize operations to meet goals related to business strategies, whereas the consumer metaverse tends to focus on individuals' experiences, such as live events or shopping.

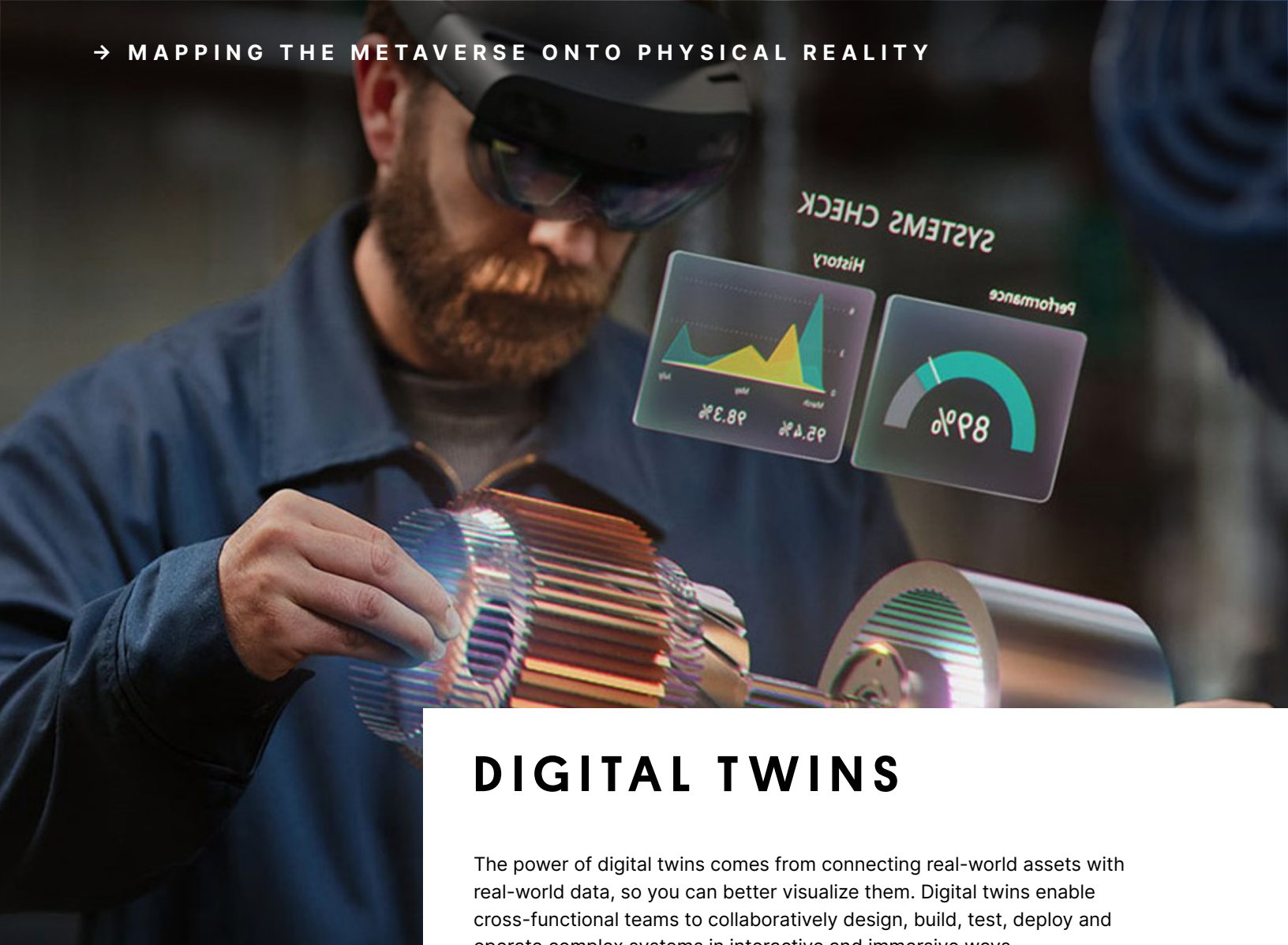
Think about where your organization fits within this spectrum. This convergence of technologies has the potential to transform our lives, and your business can be a part of that change. The shift into the metaverse will affect a range of human experiences that, from a business perspective, can include training a new workforce, building a new factory, and rethinking your supply chain, as well as going to the mall.

MAPPING THE METAVERSE ONTO PHYSICAL REALITY



DIGITAL TWIN

A digital twin is a dynamic virtual copy of a physical asset, process, system or environment that looks like and behaves identically to its real-world counterpart. A digital twin ingests data and replicates processes so you can predict possible performance outcomes and issues that the real-world product might undergo.



DIGITAL TWINS

The power of digital twins comes from connecting real-world assets with real-world data, so you can better visualize them. Digital twins enable cross-functional teams to collaboratively design, build, test, deploy and operate complex systems in interactive and immersive ways.

You can create a digital twin of anything.

Retailers can scan objects, create interactive experiences, and place them anywhere. Buyers can quickly visualize their purchases in context.

Engineers can conduct limitless research, design, modeling, prototyping, and user testing to validate their ideas virtually. Manufacturers can showcase complex products in every possible configuration. Automakers can test self-driving cars safely.

Architects and builders can work in an immersive and collaborative virtual environment to review designs and give tours to execs, sales teams, or prospective owners.

If you are building a physical asset, you can build its digital twin with the data you and your partners already have.

You can build simulated environments to look at different outcomes, optimize your current state, and visualize your key data. Digital twins can inform your decision-making.

DIGITAL YOU IN THE DIGITAL MIRROR

The metaverse is not limited to digital real estate and non-fungible tokens (NFTs). Those things may be a part of it, but in the end, the metaverse is about new user experiences. The metaverse is about your audience and their digital presence.

BRAINSTORMING QUESTIONS

- How do you maintain key touchpoints with your new consumer?
- How can you adjust your business model to personalize the experience for the metaverse consumer?

The digital version of you can explore the metaverse and allow you to have a personalized experience in a way that gives you the most joy and satisfaction.


The metaverse has room for a digital you that is a precise representation of your physical self, but it can accommodate other avatars as well.

The digital mirror is our reflection in the digital world. In the real world, we have only one self, and when we look into the mirror we see its reflection. In the metaverse, that digital mirror can reflect many personas, much like a three-panel mirror in a changing room. Businesses need to understand how to connect with the many versions of an individual.



In *World of Warcraft*, for example – a game I love – you can create dozens of playable characters. Typically, you have a main character – the one that you play most of the time – but you could also have dozens of alternative characters that you play occasionally. This gives you the opportunity to experience multiple storylines and play different races, character classes and genders – to experience the game in endless ways. The metaverse offers similar possibilities.

Your business has the opportunity to connect with users in multiple universes – physical and virtual. You can tap into who they are, who they want to be, and who they need to be. That could mean creating new augmented reality experiences for live events. It could mean building [a real-time 3D product configurator](#) or allowing your customers to do a virtual try-on as part of their shopping experience.



BUILDING THE METAVERSE: FROM IDEA TO IMPLEMENTATION

Talk about the metaverse is everywhere: on LinkedIn, in your favorite business podcast, and in the news.

Technology can trigger a huge change across the market landscape. Augmented reality (AR) is one advancement that is transforming the automotive industry by updating the design process from clay modeling to real-time 3D, which allows for improved collaboration and faster iteration. Today's creator economy and the accelerated pace of technological advancement have set the stage for new business models and shifting markets.

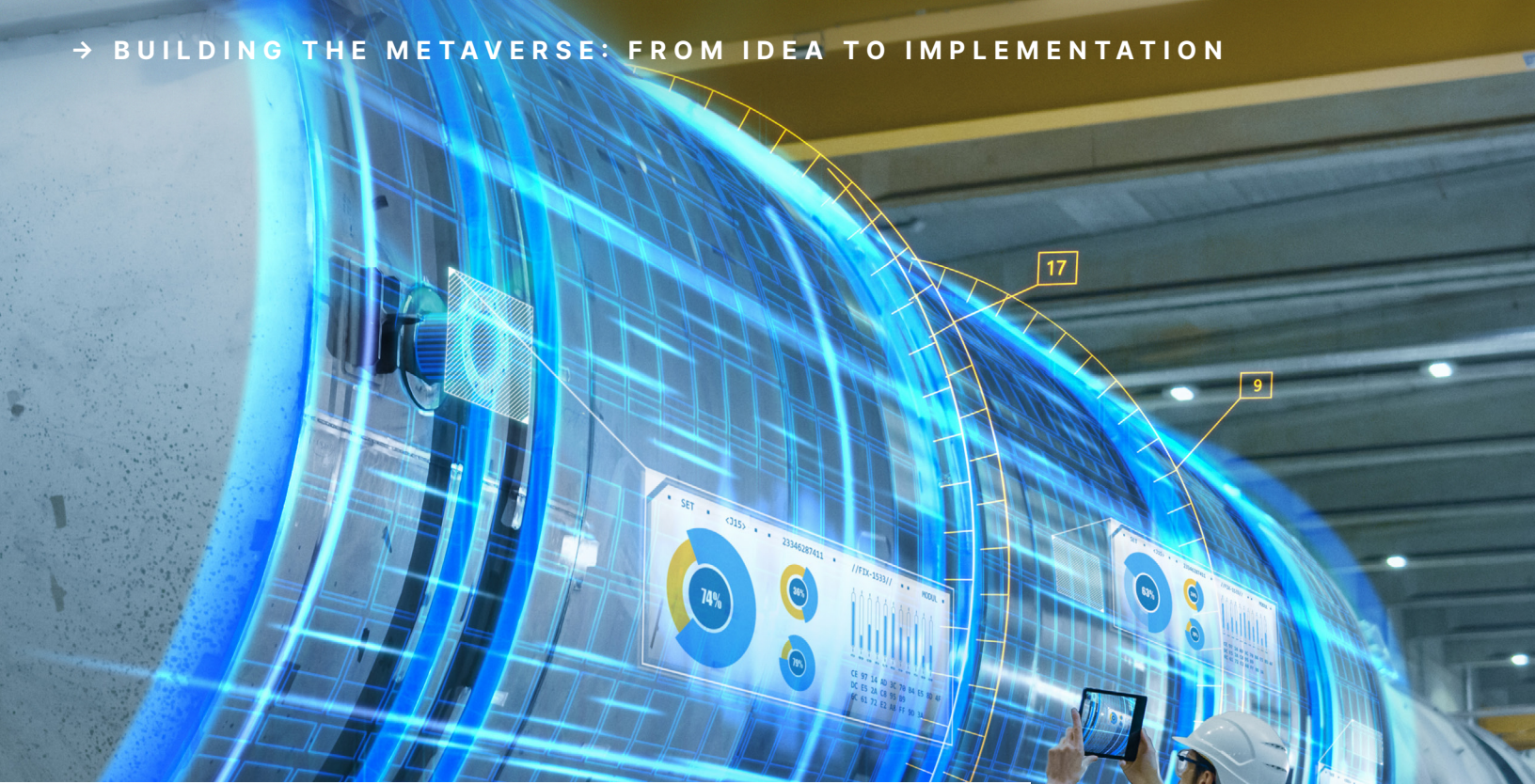
A small improvement to your business processes can kickstart a full digital transformation.

Companies such as [Unity](#) provide the building blocks for the metaverse in the form of real-time 3D software. With Unity, you can build fully interactive and immersive metaverse experiences.

At Unity, we believe the world is a better place with more creators in it, and they have the potential to capture the world and captivate audiences in new ways. With the right tools, you can build digital spaces to bring a new dimension to your business.

CONSUMERS ARE EVOLVING.

Hundreds of millions of people are engaging with – and buying into – metaverse-like experiences. Your business needs to adapt to that.



THE JOURNEY TO SUCCESS

When you see an opportunity, you should consider that other smart people probably see it too, and that opportunity has already begun to close. Someone at [Blockbuster Video](#) surely considered shifting their business model to a video streaming service, but it was too late to change their business culture and execute on an evolved strategy – too late to catch up – as the world moved beyond physical video rentals.

Whether you are an equipment manufacturer or a new consumer brand, success and longevity are the result of a solid strategy, supported by an appropriately trained workforce and a suitable technology stack.

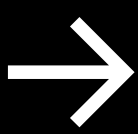
Your business needs to stay relevant. For decades, businesses have been evolving beyond bricks and mortar. They have adapted to e-commerce and social media. As the next iteration of the internet takes shape, the world is looking for richer content. Your business model needs to accommodate consumers' expectations.

The metaverse is not a destination; it's a journey. You need to invest and ideate it for your business.

Determine whether you need to retool your tech stack or retrain your workforce, and consider the processes and resources required to realize your desired future state. Whether it's creating a [3D configurator for your website](#) or building a [digital twin of your facility](#), you can take your first step toward the metaverse today.



SIX TIPS TO BEGIN YOUR METaverse TRANSFORMATION



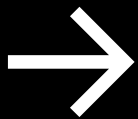
1

IDENTIFY THE PROBLEM OR THE OPPORTUNITY.

How can you create a better experience for your users? Do your users share many pain points? Can a better digital experience unlock business opportunities?

Perhaps you're the administrator of a large hospital. A digital twin could help you efficiently allocate resources, ensure nursing staff aren't being overworked, and be a platform for sharing patient notes. Or maybe you sell highly complex machinery. A 3D product configurator could let your customers customize their dream machine and see it instantly.

Real-time 3D is a new way of connecting with your customers and enhancing your relationship.

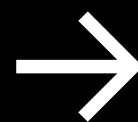


2

FIND YOUR OWN PATH.

Don't start by copying other people. If you chase someone else, by the time you get there, they will have moved on. If you think you can lead your industry by following along, you may need some entrepreneurial business inspiration (check out [Rework](#)). You'll have to discover for yourself what your business needs to do.

Make sure your investments align with your core brand strategy. Many companies have aligned their brand with goals like reducing emissions and decarbonizing their workforce. A digital twin may help connect and optimize the complex data systems you may use to monitor, simulate and predict.

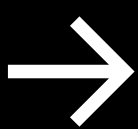


3

THINK BIG, BUT START SMALL.

Massive opportunities start with a first step. Find the first domino in your business that you can push over to start the transformation process. Take one step, but plan for what three months, six months, one year, and even 10 years could look like. You need to be able to manage your resources and budget.

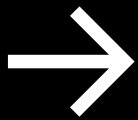
There will always be bumps in the road, but you can learn and adapt as you lay down the infrastructure for growth and success.



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KNOW YOUR USERS.

Put your users first – they are the foundation of your business. Observe your users. But remember that your users will evolve. Too many now-defunct businesses believed their users would remain the same.

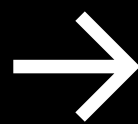


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KNOW YOUR BUSINESS.

You need more than a strategy to succeed in the creator economy. You need to make sure your workforce has the right skills and that you have the technology in place to support them. This may require a cultural shift. You may need both technical engineers and concept artists to design immersive real-time experiences.

You may need advisors to guide you through this transition. You need to be realistic about your resources. Know that the longer you wait, the harder (and more expensive) it'll be to catch up.



6

FIND THE RIGHT PARTNER.

Don't expect to do it on your own, especially if you don't have the expertise to do so.

Find a partner like Unity, who are experts in real-time 3D technology, and who can give you the building blocks required for the foundation on which to build your metaverse.

A METAVERSE OF OPPORTUNITY

Our world is changing rapidly. The enabling technologies that are building the metaverse are driving accessibility. It's a new age of engagement for both creators and consumers. The metaverse unlocks opportunities for everyone. It can remove silos, improving communication, collaboration and productivity. It can provide truth by way of data. It is transforming how we work and play.

We now have the tools to build experiences that surprise, engage, and educate us, give us new ways of seeing, thinking, interacting – better ways of being in the world. I am thrilled to be working on the threshold of this new era, with innovators who have a vision of tomorrow. Together, we can build a smarter, safer and more sustainable reality.



ABOUT UNITY

Unity is the world's leading platform for creating and operating interactive, real-time 3D content. Creators, ranging from game developers and architects to automotive designers, filmmakers, and more, use Unity to make their creations come to life. Unity's platform provides a comprehensive set of software solutions to create, operate and monetize interactive, real-time 2D and 3D content for mobile phones, tablets, PCs, consoles, and augmented and virtual reality devices.

The Unity Accelerate Solutions team offers custom development solutions for businesses in any vertical that need assistance. This world-class software development team collaborates with customers to architect robust, scalable digital twin solutions – based on Unity's products and platform – from ideation to delivery and support.



unity.com