

It's been hard to miss the metaverse over the last 12 months. Conversations on Facebook are up 13 times year-on-year and a recent research report suggests its global impact could be worth as much as \$3 trillion by 2031.

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But for businesses, the most important question about the metaverse isn't what it could be or might become. It's what they can do with the technology right now. How can it help them? What challenges can it solve? And what value can it unlock?

And in fact, if we're going to answer these questions, we're going to have to stop talking about "the metaverse" entirely. Instead, this ebook will focus on one particular aspect of the metaverse; on a technology that we believe is already having a transformative impact on organisations around the world. That technology is virtual reality and we're going to examine six ways in which businesses are putting it to work right now.

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## Back to the future

## **PHYSICAL**

Presence Spontaneity Stimuli Belonging

> **SWEET SPOT FOR** TRADITIONAL WORKERS

## **VIRTUAL**

Presence Spontaneity Stimuli Freedom Future

**SWEET SPOT FOR DISTRIBUTED WORKERS** 

## **DIGITAL**

Flexibility Speed Autonomy Efficiency

**IN-OFFICE** 

**WORKFORCE MODEL** 

**DISTRIBUTED** 

If we want to understand why VR is changing the way we work, we have to take a quick trip back in time to 2020 when COVID-19 lockdowns kickstarted a global experiment in remote work.

Early signals were good: by the time the world started to reopen, only 9% of employees actually wanted to return to the office full time. But gradually, the initial euphoria has faded.

With the shift to hybrid work, we're becoming increasingly aware that we're not wired to spend our day as a box on a screen. And for all that we've gained through digital ways of working the speed, the autonomy, the efficiency - we've also lost something. Each other.

Virtual reality helps us reset the balance. It refers to immersive, three-dimensional environments that feel real. Its superpower is that it helps us feel truly present with other people in a way that a computer screen can't, but without actually having to be together in the same place.

VR takes us back to the future of work. It brings the best of the physical office and digital technologies together in one place a place that doesn't have to be a fixed location but can be wherever we want it to be. It reconnects us with the things we need while opening the door to new experiences and ways of working that we haven't even imagined yet.

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of work

# Why virtual reality?

6 ways virtual reality is changing the future of work



At Meta, we get to talk to a lot of businesses that are already using VR technology day-to-day. And we consistently hear them describe the same five benefits.

## PEOPLE FEEL LIKE THEY'RE THERE

VR experiences are so immersive that people forget about the technology and lose themselves in the experience.

## MORE NATURAL CONVERSATIONS

Virtual avatars have accurate facial expressions and hand gestures, so talking to colleagues feels just like a regular conversation.

## THERE ARE FEWER DISTRACTIONS

VR removes the temptation to multitask or

keep the camera off, which means everyone is fully engaged.

## IT'S MORE CONVENIENT

With VR, you can create your perfect work space, with multiple screens and customised environments, then take it with you wherever you go.

## IT LEADS TO BETTER OUTCOMES

For all these reasons, businesses tell us that VR increases the effectiveness of their work.

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But what, exactly, is that work? What are businesses doing in VR? And what kind of success are they seeing?

We're going to take a deep dive into three areas where VR is already transforming the way people work.



Learning
Learning
Where VR is delivering
Learning
Where VR is delivering
Learning
Where VR is delivering
Learning
Where VR is delivering



Meetings
& Collaboration

Where VR is bringing people
together to build community,
things done.



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Creating new things is hard. Not only do you need an idea, you have to convince other people it's a good one. So what do you do? Make something? Sketch it? There are risks either way.

VR gives creative teams a new option: The ability to create lifelike designs that replicate the real thing. Why does this matter?



## **TEAMS CAN BE MORE AGILE**

Ideas can get to the shelf or showroom faster because creatives can skip traditional 2D processes and design directly in 3D.

## **IT LOWERS COSTS**

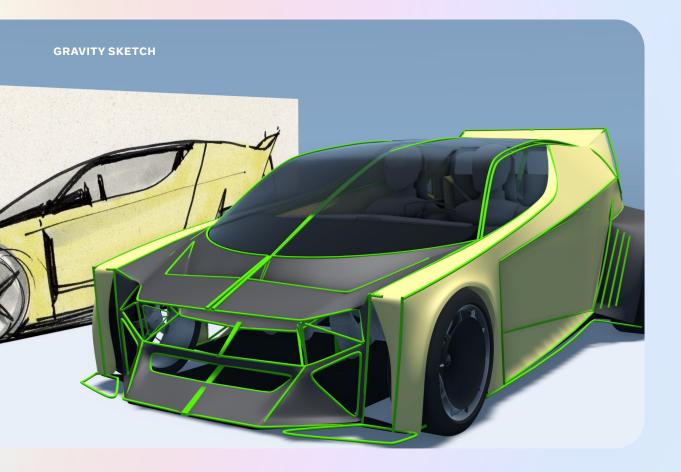
New products can be handled, manipulated and stress-tested without investing in physical equipment or ramping up production capacity.

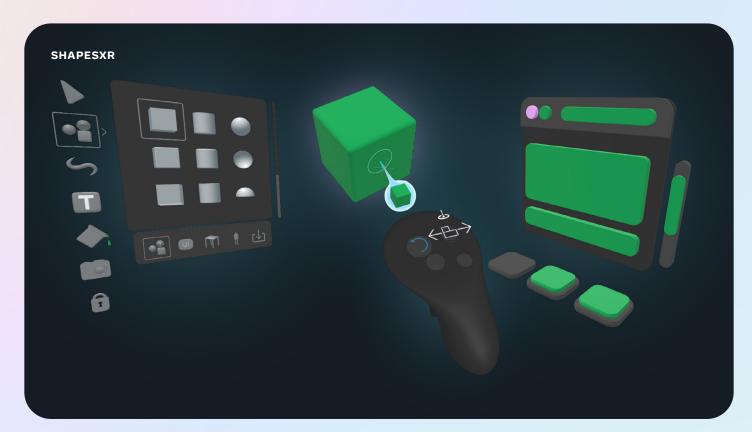
## YOU'LL GET DIFFERENT PERSPECTIVES

Not everybody is comfortable reviewing technical drawings. Showing people the real thing makes it easier for anybody to offer constructive feedback.

## IT CAN ELIMINATE SILOS

VR is a collaborative environment that helps companies bring creative departments together instead of working in isolation.







## **PRODUCT DESIGN**

Broadly speaking, we're seeing two popular VR use cases for creative and design teams. The first is **product design**, but you can think of it as creating new objects.

The ability to conceptualise and collaborate on 3D models in virtual spaces is changing the way we design everyday things, from retail products and packaging to fashion items to medicine. And although, like a lot of VR, it can seem futuristic, it's actually pretty easy to get started.

Once you've got a headset, there's an abundance of 3D design tools to choose from. Apps like Gravity Sketch, Nanome and ShapesXR can all bring a new dimension to existing workflows, helping designers create anything from quick sketches to detailed models. And it's not a case of VR or bust - yes, the software is made for VR but it'll work just as well on a desktop computer or tablet. Some of VR's first power users were prototype designers looking to accelerate the pace of innovation at their companies. The Ford Motor Company actually started experimenting with VR back in 2019 when they worked with Gravity Sketch to develop a co-creation feature that allowed designers on different

sides of the world to work on the same vehicle design at the same time.

After rolling the technology out to five global design studios, the carmaker quickly realised that collaborating in VR "could revolutionise the entire process" by drastically cutting development time for new models.

More recently, PepsiCo turned to VR when a massive project to redesign its two-litre bottles (which had stood unchanged for three decades) was rudely interrupted by a global lockdown. As PepsiCo shifts 500 million of these bottles every year, the pressure was already on the firm's Chief Design Officer, Mauro Porcini, even before his team was sent home. The designers used VR headsets and 3D printers to collaborate on prototypes. They even did consumer testing in VR to see how real people handled the bottles. The end result was a new product that 90% of consumers found easier to hold and pour.



## **BUILDING INFORMATION MODELLING**

## Where prototype design is about creating things, Building Information Modelling (BIM) is all about designing spaces.

Technically speaking, BIM is a process for creating and managing information through the full lifecycle of a construction project.

More simply, VR gives architects, engineers or project managers the ability to literally walk clients through creative concepts.

Instead of staring at blueprints, project stakeholders can put on a headset and actually see the final build, which helps them identify issues or opportunities much earlier in the planning process.

Technology companies like **Arkio**, **Resolve**, **Sentio VR** and **The Wild** are already building powerful solutions that have been adopted by some of the world's leading architecture and construction firms to do just that.

One of our favourite examples comes from Norway's A-lab, which uses VR to make client reviews more "human scale", a process that A-lab's Technology Director, Angie Mendez, described as a "game changer". Mendez tells the story of an A-lab client who was concerned about an issue with a particular design, but "once they saw it in virtual reality, they began to understand distances and scale density within the project, and the conversation was very different from the one you would have around a set of drawings.

"The main advantage of using VR is that the project's outcome is probably going to be much better," she concluded. "We can incorporate feedback, make quick decisions and speed up the design process."

"The main advantage of using VR is that the project's outcome is probably going to be much better"

ANGIE MENDEZ,
TECHNOLOGY DIRECTOR AT A-LAB



Learning matters – a lot. According to LinkedIn, 76% of Gen Z say learning and training (L&T) in the workplace is important for their success. Other research suggests organisations with a focus on internal mobility linked to strong learning cultures can increase retention rates by 86%.

## 6 ways virtual reality is changing the future of work THAIN IN THE STATE OF THE ST

Shifting learning experiences to VR can unlock even more value, giving companies many of the benefits of on-the-job training while also reducing both the cost and the complexity.

## Learning both the co

### IT CAN MITIGATE RISK

VR can simulate difficult or dangerous training scenarios accurately but safely.

## IT CAN INCREASE ENGAGEMENT

VR is an immersive, hands-on experience that helps to make people more engaged and less distracted.

## IT'S STICKIER

Because they're so engaged with the material, people who learn in VR often retain information better than classroom or online courses.

### IT'S BETTER FOR THE ENVIRONMENT

With VR, you can run global courses or connect new hires without flying people halfway around the world.



## **SPECIALISED SIMULATION TRAINING**

We're seeing two use cases gaining traction with HR and L&T teams.
The first is **specialised simulation training**, but you can think of it as hard skills.

Hard skills are technical activities that have to be done the right way. Some are harmless, like learning how to install a washing machine. But some aren't. What if you need to land a plane, perform heart surgery, operate heavy equipment or put out a fire? Mess any of those up and you're not just looking at a bad customer review.

Virtual reality is a safe space for people to hone their skills in lifelike, high-stress scenarios without any real-world risks, through apps like Osso VR, Interplay Learning, Precision OS Technology and Transfr VR.

Many of these have a specific emphasis on medical procedures, which makes sense when you consider that surgical training hasn't actually changed much in the last century or so, and yet this is a field where the pace of innovation is high. That means there's more to learn than ever before.

The Technology and Innovation team at Johnson & Johnson decided that VR was the answer. They now have over a dozen virtual training modules that give surgeons the opportunity to get hands-on with the latest medical devices.

According to Sandra Humbles, Vice President of Global Education Solutions for Johnson & Johnson Medical Devices, students trained in VR on one particular procedure (a simulated intramedullary nailing of a tibia, in case you're wondering) scored 233% higher than non-VR learners. As a result, she said, "We want to make VR available to every surgeon in every hospital around the world."

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## **LEARNING & DEVELOPMENT**

While specialised simulation training is critical in certain industries, general learning and development is applicable in every workplace. What we're referring to here are the kind of squishy, interpersonal, EQ-over-IQ stuff that help make businesses a better place to work. Things like being a good teammate, solving problems or helping others, as well as more formal programmes like new hire onboarding and Diversity, Equity and Inclusion (DE&I).

Virtual reality can support these moments through immersive workshops, first-person storytelling (literally seeing the world through someone else's eyes) or just creating a space in which people can feel present and make deeper connections. All of these things help to create more engaging learning experiences which, in turn, can drive a culture of empathy and respect.

We're seeing companies like **Talespin**, **Skills VR** and **Jenson 8** emerging as early leaders in the field, using their extensive content libraries and integrated platforms to enhance skills and boost company performance.

One of the best-known examples of soft skills development in VR comes from Accenture, the global IT services company. The company's VR campus, the <a href="Nth Floor">Nth Floor</a>, has been used for

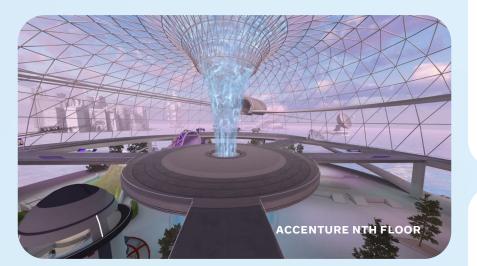
everything from hosting Christmas parties to holding company meetings. But its primary purpose is to connect new hires so they can understand the company's culture and plant the seeds of new relationships. It's estimated that 150,000 new hires have been onboarded through VR.

Accenture isn't the only IT services company to make the leap. <u>PricewaterhouseCooper (PWC)</u> <u>estimates</u> that immersive training will be worth as much as \$234bn to the global economy by 2030 – and with good reason.

In a trial of managers using either VR, online tools or live classroom instruction for soft skills development, PwC found that VR learners delivered the most impressive outcomes, including:

2.3x

more emotionally connected to the content than e-learners



more focused than classroom learners



4x

faster to complete the training than classroom learners

35%

improvement compared to e-learners when it came to acting on what they'd learned

The study also found that VR learning achieved cost parity with classroom learning at 375 people and hit the same result with e-learners at 1,950. When PwC scaled up the experiment to 3,000 learners, they found that VR delivered cost savings of 52% compared to live sessions.

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If there's one topic that's been top of mind for employees and leadership during the shift to hybrid working, it's the role of meetings and the impact on collaboration.

## Collaboration. Collaboration

According to a digital workplace report from Igloo, 60% of remote workers feel like they're missing out on important information, while 80% say they face challenges that their in-office peers don't.

Where traditional video conferencing tools put people in a box (literally), VR sets them free to be more present, more engaged and more themselves. How? It all goes back to that VR superpower: presence. When people feel like they're truly together, communication and collaboration become much easier. But there are other benefits too.

## PEOPLE FEEL CLOSER

In VR, expressive avatars and clever audio help you feel like you're really there, so meetings are more natural and teamwork is easier.

## **MEETINGS ARE MORE FLEXIBLE**

Unlike physical offices, virtual meeting rooms can be customised to suit specific tasks like company presentations or team ideas generation sessions.

## IT'S EASIER TO FOCUS

In VR, no one is distracted by their physical surroundings or multitasking with their laptop.

### YOU CAN REDUCE COSTS

Why pay for big meeting spaces or fly people around the world when you can come together virtually?

## **REMOTE TOWN HALL & EVENTS**

The first use case for VR is remote town halls and events. When it's not practical to bring your entire company together in a physical space, VR offers an engaging way to build community, share important information and boost morale.



"[People] really
have the feeling
they are connected
to each other"

NICK BOTTER, CHIEF INNOVATION OFFICER AT SALESFORCE



Glue, Mesmerise and Remio VR are just three of the companies seeing success building bespoke solutions for all-hands and offsite meetings. They offer everything from formal presentation spaces and customisable avatars to teambuilding events like virtual escape rooms or, even, paintball.

For a great example of the technology in action look no further than software giant Salesforce. When it came to reimagining its Dreamforce expo for a post-pandemic world, Salesforce turned to VR to create a totally different experience. As Chief Innovation Officer Nick Botter explained: "We thought it should be fun,

but that it should also be useful and bring value to us and our customers."

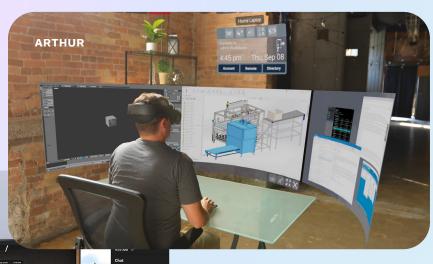
Innovations included a forest setting with wild flowers, a campfire area where avatars could toast marshmallows and a mindfulness corner. But the client discussions, the networking opportunities and the connections that were made in these spaces were all very real.

"We've been able to create moments for small groups, bigger groups and one-on-one interactions," said Botter. "[People] really have the feeling they are connected to each other but without the travel."

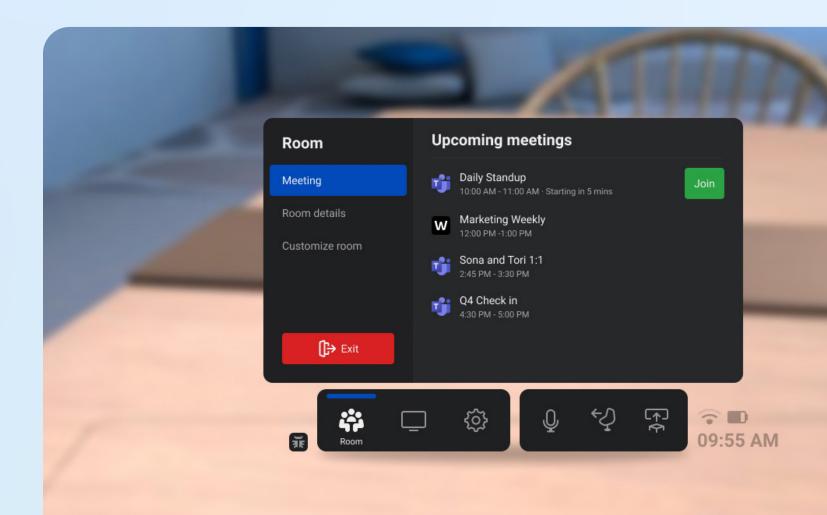
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### **IMMERSIVE MEETINGS**

Where company meetings are for building community and sharing critical information, team meetings are often where the real collaboration gets done. But that's been harder than ever when fewer people are physically in the office.







VR helps you get your best people in the same room even when they're not in the same place, so they can work together with immersive collaboration and productivity tools.

Team collaboration is already one of the most popular use cases for VR, supported by apps like **Arthur**, **Flow Immersive**, **meetingRoom**, **Noda** and **vSpatial**. Meta also has its own solution, Horizon Workrooms, which is an immersive way to meet teammates, generate ideas, share presentations and just get stuff done in VR.

Workrooms includes collaboration features like a persistent whiteboard and customisable rooms, as well as the ability to create up to three larger-than-life virtual monitors. Coming soon, you'll even be able to join a Workrooms call from Zoom or Microsoft Teams (which means you won't need a headset to join in).

One of our favourite examples of team collaboration in VR comes from BCG Platinion, a division of the Boston Consulting Group. During lockdown, a team of 50 designers, developers and engineers came together in VR for an annual hackathon, where they sprinted on projects, played games and got to know each other.

"To work on things in a physical space is quite amazing, and something you don't get from a Zoom conference or WebEx," <u>said one of the team</u>, while another marvelled at how connected she felt to her colleagues: "It really feels like you're actually with them."

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## **PUTTING VR TO WORK WITH META QUEST**

At Meta, we're imagining a whole new way to work - one in which you don't have to travel to an office to feel connected to your teammates or your company. Our cutting edge VR solutions can help to bring your business to life so you can learn, create and collaborate like never before.

Our range of headsets includes Meta Quest 3S, our most accessible headset and the perfect way to discover the magic of VR. We also offer Meta Quest 3, built for performance with a 4K+ Infinite Display and pancake lenses for enhanced visual clarity. Both devices feature full-color passthrough, letting you seamlessly blend your physical environment with virtual spaces without removing your headset.

Meta Horizon managed services is a subscription service that includes essential features such as user device and customised app management as well as customer support so companies of any size can embrace the power of VR for work with confidence.



## **Meta**