

Lenovo AR & VR: Imagine a new reality for your workflows

Extreme performance for demanding tasks

Technologies like Augmented Reality (AR) and Virtual Reality (VR) are no longer simply the novelties or toys they once were. There's a skills gap emerging in the UK, and employers are turning to AR and VR to help them solve it.

By 2030, every baby boomer (over **14m** people) will have reached the age of 65 or over, and made way for the next generation¹. In just five years, millennials will make up **75%** of the workforce².

¹www.census.gov/library/stories/2019/12/by-2030-all-baby-boomers-will-be-age-65-or-older.html
²www.forbes.com/sites/markhall/2017/11/08/what-the-ideal-workplace-of-the-future-looks-like-according-to-millennials/#1c8e55c14228



Workflows before Workstations

That's going to cause an issue for employers, for the simple reason that there are fewer millennials than baby boomers. And as the average population age rises, the talent pool grows smaller. Plus, not only are fewer people entering employment, their career choices and aspirations are leaving key jobs unfilled. Young employees are increasingly declining the chance to take on hands-on roles, choosing instead to move into the knowledge worker space and answer the call of the UK's growing service sector.

And while AR and VR can't solve these challenges alone, they're already playing a vital role in helping organisations to correct the imbalance in the nation's workforce. They allow users to quickly upskill by training in immersive computer-generated environments and carry out their roles **more efficiently**.

In short, AR and VR are helping us to rethink the very way in which we learn and work.



Mixed Reality technology can solve the skills shortage

50%

of companies are struggling to meet service demands due the skilled worker shortage, according to the Pew Research Center

70%

of field service organisations face knowledge losses due to retiring workers in the next 5-10 years³

By 2025,

the projected global manufacturing deficit is set to be around 3.9m people, with a projected unrealised output of **\$325.1bn**⁴

³info.servicecouncil.com/hubfs/Content_Documents/2017%20Reports/TSCRI-W-2017-FSTalent.pdf?t=1499365293971
⁴www.kornferry.com/content/dam/kornferry/docs/article-migration/FOWTalentCrunchFinal_Spring2018.pdf



So why are so many companies and industries failing to attract millennials?

This is a generation that grew up in the digital age. Technology is a fundamental part of their lives, and they're far more likely to consider a career which gives them access to it. Nearly **two-thirds** cite access to state-of-the-art technology as a key factor when considering a job,⁵ and they don't associate workplaces like construction sites and manufacturing plants with the latest digital tech.

This is where emerging technologies like AR and VR can help. By creating **virtual hands-free environments**, businesses can solve their skills shortage, while at the same time attracting fresh talent eager to work with the latest innovations.

Industries like manufacturing, engineering and construction are already using AR and VR to optimise operations, increase throughput, **simplify complex work processes**, improve safety and minimise errors.

⁵https://www.pwc.com/co/es/publicaciones/assets/millennials-at-work.pdf

Using lightweight AR and VR headsets, employee training can be delivered using real-time, interactive 3D digital content. **Expert guidance** and step-by-step instructions for assembly and maintenance work can be accessed remotely.

Out in the field, architects and engineers can view their three-dimensional designs at scale, overlaid on top of real-world locations, and demonstrate how different design elements might look using digital modelling.



Workplaces are already feeling the benefit of AR and VR technology:

- Warehouse environments have seen productivity rises of **15-35%**⁶
- In manufacturing, implementing hands-free environments have led to error rates falling to nearly **zero**
- Field services have reduced resolution times by **30-40%**

AR commercial applications:

- Product assembly
- Equipment maintenance
- Expert real-time support
- Quality assurance

VR commercial applications:

- Engineering
- Training
- Design collaboration



Empower your workforces with ThinkReality

ThinkReality is a scalable platform that allows businesses to adopt, implement and manage commercial **AR and VR** solutions, and to fully harness the potential that Mixed Reality offers.

Combining powerful hardware with innovative software, ThinkReality makes building, deploying, managing and scaling a Mixed Reality solution simple on any device, operating system or app.

The ThinkReality platform also allows organisations to inject today's leading content creation software development kits, such as Unity, directly into the developer console. This allows them to develop their own Extended Reality content and deploy it on any device. Administrators can access deployment dashboards, use third-party apps, and manage multiple ThinkReality A6 AR Glasses and S3 VR headsets, as well third-party solutions like Microsoft HoloLens 2.

Alongside our innovative ThinkReality platform, we've also partnered with a number of complementary Extended Reality ISVs in order to create a trusted ecosystem of suppliers that our customers are already taking advantage of, including:

- **HTC**
- **Varjo**
- **Autodesk**
- **Enscape 3D**
- **Theorem**
- **Render Media**

Why Lenovo?

- Build, deploy and manage custom **AR and VR** applications and workflows
- Our ThinkReality platform is device, cloud and market agnostic
- We manufacture over **100m** devices every year, with the lowest failure rates three years in a row compared to other market leaders
- Lenovo is the world's **#1** commercial PC manufacturer, with operations in over **160 markets**, serving over 1bn customers globally

Get in touch

Could our ThinkReality platform or Extended Reality ecosystem help you to bridge the skills gap or build and scale an AR/VR environment?

To get the conversation going, email lhelstrom@lenovo.com

