

PORTUGAL XR REPORT 2025



Com o apoio



**The Portugal
XR Report is a
community-driven
effort to map the
portuguese XR and
virtual worlds ecosystem**

Coordination

Luís Bravo Martins
luis@xr.si.org

Design and Publishing

Davi de Paula
davip8788@gmail.com

Text Editing and Revision

Luís Bravo Martins



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Anne Bajart

Deputy Head of Unit @ European Commission

Foreword

Virtual worlds and Web4.0 are no longer a distant vision of the future: they are rapidly becoming a cornerstone of how Europe will innovate, learn, work, and interact in the coming decade.

The European Union has set out a clear and ambitious vision through the EU Strategy on Web 4.0 and Virtual Worlds, launched in July 2023. At its heart lies the conviction that Europe must shape the development of immersive technologies in a way that is open, secure, human-centric, and respectful of European values.

This strategy emphasizes sovereignty in critical technologies, leadership in standards, supporting the development of skills and the promotion of sustainable innovation that empowers both businesses and citizens. It is a call to ensure that immersive environments evolve through a diverse, innovative, and values-driven European ecosystem.

Portugal's efforts in XR will only reach their full potential if they resonate with this European dimension.

Research, companies, and public institutions must connect to European networks and align with shared goals. Participation in European partnerships, access to EU funding instruments, and engagement in cross-border collaborations are not optional; they are essential for critical mass and global impact. As this report shows, Portugal academic expertise to creative industries, from start-ups to testbeds – that can be leveraged to make meaningful contributions at the European level. Looking ahead, one of the most promising vehicles for aligning national and European efforts will be the forthcoming European Partnership on Virtual Worlds, to be launched under Horizon Europe.

This partnership aims to bring together industry, research organisations, public authorities, and civil society to shape the research and innovation agenda for XR and immersive technologies in the EU.

For Portugal, engagement with this partnership is both a necessity and an opportunity. By joining forces with European peers, Portuguese stakeholders can ensure that our national priorities – whether in healthcare, education, tourism, cultural heritage, or industry – are embedded in the broader European R&I agenda. At the same time, Portuguese innovators can gain access to a wider network of partners, markets, and knowledge. The partnership will serve as a platform not only to influence but also to benefit from the collective European push towards leadership in Virtual Worlds. It is therefore crucial that Portuguese stakeholders, both public and private, prepare now to be active participants in this collaborative endeavour.

The European dimension is also about values. Europe has consistently championed a digital transformation that is people-centred, trustworthy, and aligned with fundamental rights, protecting users' data and privacy, ensuring accessibility and inclusiveness. Our cultural diversity, democratic values, and strong traditions in arts and humanities place us in a privileged position to explore the human side of immersive technologies. By doing so, we can enrich the European debate and ensure that Virtual Worlds serve the public good as much as it serves innovation and competitiveness.

This report, XR Portugal, is thus both a national stocktaking exercise and a forward-looking vision document. It maps current assets, identifies gaps, and proposes pathways for growth. But above all, it situates Portugal's trajectory within the larger European strategy. Portugal's future in XR and Virtual Worlds will not be written in isolation, but in partnership with our European peers. The path ahead is challenging, but it is also filled with extraordinary promise.

With commitment, coordination, and a strong European orientation, Portugal can make XR and Virtual Worlds not only a national priority but also a European success story.





Luís Bravo Martins

Senior Advisor, XR and Virtual Worlds
Portugal XR Report Coordinator

Welcome to the Portugal XR Report 2025

Since last year, we've been hearing a lot on the media about unsafety. In spite of all the major metrics pointing against it, the social and political chatterbox is filled with expressions of insecurity, mistrust, and ultimately of fear – which most of the times translates into a fear of the unknown.

As technology continuously increases its pace, the amount of “things we don't know we don't know” grows every day and awkward new tools and behaviors suddenly pop up in our vicinity. Domestic Robots. Flying cars. Of course, we can relate much better if these are brought into our lives by friends, family or colleagues. But the remaining just add up to this feeling of uncertainty.

I see that happening a lot with immersive technologies. In my work as an emerging tech advisor, I deal both with very different kinds of professionals.

On one side, I have the privilege of collaborating with committed enthusiasts who are driving change programs, who have a vision for our future and are trying to make it real. Their energy is inspiring and it's always amazing. However, I seldom find them trapped in technological bubbles, without a clear connection to concrete social and business priorities.

On the other side, I also deal with professionals who think the metaverse is dead and VR never took off, in spite of all the attempts.

They're mostly unaware of the current market drive and of all the on-going B2B projects. Whenever you ask if they wore a headset before, the answer is almost always that VR gives them nausea (and not the headset they tried).

There's a clear need to level the skills ground for everyone. From the depths of hyper-specific tech bubbles to the immense crowd missing the big picture, we can and should build more awareness, upskill and enable all kinds of professionals - and even users - in order to truly demonstrate the public and private uses of these technologies.

But we shouldn't mistake fluent usage with comprehension. Nor scaling with more or better societal and economic progress. As important as building up technical skills in engineering creative and social sciences, we also need to build up skills that allow us to think critically about these platforms and allow us to set our goals.

Enable parents and teachers to leverage these platforms and educate better. Enable decision-makers to know how these technologies can be used to enhance their processes and not the other way around. Enable everyone what are healthy and unhealthy, safe and unsafe usage habits and become vigilant.

This year, the European Commission ramped up its work on human-centered virtual worlds, which have clearly become a part of the European policy and strategy. The creation of an EU vision on XR and Virtual Worlds is a milestone moment, which fundamentally acknowledges the relevance of the sector, its social and economic relevance and already establishes clear goals.

This vision brings together ethics, privacy and security to safeguard public spaces, everyone's physical and mental health, better education at schools and better parenting at homes. In one word, to build up trust. Trust which ultimately enables expectations to be shared across the public and private spaces and more business, more usage, more innovation and growth. And also less fear of the unknown.

This is a fundamentally different vision of virtual worlds and why not say it, for the Internet, when compared to other geographies. A vision that can only be built together and not decreed or imposed - it needs nurturing.

This year, the Portugal XR Report identified 282 organizations developing XR and Virtual Worlds products and services out of Portugal, which means a 30% growth from 2024. The number of convergence technologies are also now much more visible, with Digital Twins and AI seamlessly mixing with XR as an interface and creating more added-value services and products. Besides the technical upskilling needs arising from this movement, other science and business skills are visibly on demand.

And one solid trend remains from last year - the absolute majority of XR and virtual worlds organizations in Portugal are still working for users and customers abroad, mainly in Europe. The sheer nature of XR itself facilitates the export service from professionals that crave quality of life, the European space and share the belief in a more human-centered future.

Portugal can play a role by leveraging XR production infrastructure, upskilling and enabling more quality remote work, making sure that all education in these areas remains meaningful and catalyzes more business and science experts. The Portuguese and European virtual worlds are growing and we can both accelerate and improve it. As always, it's our collective choice if and how to do it.



Partners



XR Safety Intelligence – Europe

XR SI Europe is a SDO (Standards Development Organization) that brings together thought leaders, subject matter experts, and visionaries to help build safe and inclusive experiences using Emerging Technologies. It is focused on the European society, its innovation ecosystem and its network of stakeholders. Its activities include research, upskilling and awareness activities on privacy and safety in XR and Virtual Worlds.

More info at www.xrsi.eu



XR4EUROPE

XR4EUROPE is the Pan-European association dedicated to uniting XR professionals, organizations, and initiatives across the continent. Our mission is clear: to drive the development, promotion, and representation of XR innovation, industry, and creativity proudly originating from Europe. As a member of XR4EUROPE, you gain access to a comprehensive suite of services designed to boost your professional growth, from fostering collaborative opportunities to providing invaluable resources.

More info at www.xr4europe.eu9



EUROMERSIVE

Euromersive is the Pan-European federation that unites the Immersive & Emerging Tech ecosystems across the continent, driving the future of technology. Through our Community as a Service model, we offer a platform where professionals can connect, collaborate, and thrive, all while advocating for ethical and sustainable technological advancements. We are more than a network – we are a dynamic movement dedicated to defending the collective interests of our members.

More info at www.euromersive.eu



UnitedXR

Augmented World Expo (AWE) and Stereopsia unite to launch the most powerful XR event in Europe: UnitedXR Europe. From 8 to 10 December 2025, Brussels will host the #1 hub for XR innovation, industry leadership, and next-gen immersive experiences, to accelerate the European immersive ecosystem towards mainstream adoption.

More info at <https://unitedxr.eu/>



EIT Community Hub Portugal

The EIT Community Hub Portugal is a national coordination platform that brings together multiple Knowledge and Innovation Communities (KICs) to strengthen the country's innovation ecosystem and foster European collaboration. Part of the European Institute of Innovation and Technology (EIT), the Hub supports innovators, entrepreneurs, researchers, and students in addressing global challenges while generating sustainable economic growth and jobs. More info at <https://eit-ris.eu/portugal/>



UNICORN FACTORY LISBON

Unicorn Factory Lisboa is a City Hall flagship initiative aiming to position Lisbon as a leading European innovation centre. It empowers entrepreneurs by providing essential resources and support to bring their groundbreaking ideas to life and scale their businesses. By fostering entrepreneurship skills from a young age, it ensures a continuous pipeline of innovative talent, sustaining Lisbon's vibrant startup ecosystem. More info at www.unicornfactorylisboa.com



Lispolis

Lispolis is the Lisbon Technology Centre (Polo Tecnológico de Lisboa), a private non-profit association in Lisbon, Portugal, established in 1991 to manage the technological park and support resident companies. It provides office spaces, coworking, and virtual offices for startups, SMEs, and large corporations, along with a range of support services such as help with finding investors, securing financing, and establishing strategic partnerships. More info at <https://www.lispolis.pt/>



APDC

APDC – Digital Business Community, a non-profit public-interest association, is proud to be Portugal's largest and most influential national platform for promoting and advancing the digital sector. With a network of over 140 institutional members representing the country's leading and most relevant companies across telecommunications, information technologies and media, the Association plays a central role in driving Portugal's digital transformation. More info at <https://www.apdc.pt/>



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Alexandra Gerard

Co-Director and Co-Founder of UnitedXR Europe

Virtual worlds are no longer science fiction.

They are becoming spaces where people work, learn, create, and connect in ways that feel natural and human. For Europe, this shift is not only about technology—it is about seizing an opportunity to lead, to innovate, and to ensure that immersive futures are built on values of inclusivity, cultural richness, and collaboration.

At the heart of this momentum is **United XR Europe**, a new chapter born from the merger of AWE EU and Stereopsia Europe. Every December in Brussels, United XR brings together the people shaping immersive technologies—researchers, creators, industry leaders, investors, and policymakers. More than an event, it feels like a gathering of Europe's collective imagination. Over three days, ideas, projects, and visions collide, creating the connections that make innovation possible.

Why Virtual Worlds Matter Today

Virtual worlds are stepping beyond entertainment. They are becoming digital infrastructures where industries rethink how they operate, from aerospace to healthcare, from retail to education.

A company can now train its workforce in realistic simulations, a museum can welcome visitors from across the globe, and students can learn in classrooms without walls. These are not futuristic dreams—they are happening now, and Europe has a chance to lead the way.

The European Commission has already recognized the strategic importance of immersive technologies with its Virtual Worlds Strategy. This vision is not about building another platform or chasing trends from Silicon Valley.

It is about creating a European ecosystem that is competitive, interoperable, and rooted in ethics.

Europe's Distinctive Strengths

Europe has a unique voice in this conversation.

Our strength lies in our values, our diversity, and our ability to align innovation with human needs.

Policies like GDPR and upcoming AI regulations show that Europe can set global standards.

Applied to virtual worlds, this means environments where trust, inclusivity, and sustainability are not afterthoughts, but guiding principles.

Diversity is another advantage. Europe's cultural and linguistic richness translates into a variety of stories, use cases, and approaches to technology. Rather than seeing this as fragmentation, we can see it as creativity—a source of resilience and innovation.

United XR reflects this reality. By welcoming participants from more than 30 countries, it creates a stage where no voice is too small, no perspective overlooked. Together, these voices form a European chorus that can resonate globally.

Portugal: Agile, Creative, Ready

For smaller ecosystems like Portugal, the moment is ripe. Portugal is not the biggest player in Europe, but it has all the ingredients to shine: creative industries that thrive on storytelling, universities that nurture talent, and a tech scene that is agile and bold.

Portugal's strengths align beautifully with immersive technologies. Think of cultural heritage and tourism, both of which can be reimagined through virtual experiences. Think of education and training, where immersive tools can prepare the next generation with engaging, practical learning.

And think of startups, where agility is a superpower—Portugal can test, experiment, and showcase what smaller countries can achieve when they connect to the wider European network.

Why United XR Matters

This is where United XR Europe comes in. It is not just another conference—it is a meeting point where the entire XR ecosystem gathers. The three-day program moves from policy to science and industry, and finally to culture and creative industries.

The EMIC Market fosters curated encounters between creators and investors, broadcasters, museums, and policymakers. The European XR Awards spotlight the most inspiring immersive works, while The Booster program helps emerging projects find their wings.

For Portugal and other smaller countries, United XR is a door to Europe. It offers visibility, credibility, and access to networks that can transform local initiatives into international success stories.

It is also a space to contribute ideas and perspectives, ensuring that Europe's immersive future is not shaped by the few, but by the many.

Looking Ahead

Virtual worlds are not just a technological frontier; they are a cultural one. They invite us to rethink how we work, create, and live together.

Europe has the chance to shape this transformation in a way that reflects its values, and United XR is the stage where this vision takes shape each year. For smaller ecosystems like Portugal, this is not about catching up—it is about stepping forward, using creativity and agility to show what is possible.

The opportunity is here, and it feels urgent but also exciting. United XR is where Europe comes together to imagine, to build, and to lead. The question is no longer if we should embrace virtual worlds. It is how we will do it—and whether we will do it together.



Carolina Sampaio Dinis

EIT Community Officer, Portugal @ EIT

It is an exciting time to be part of the XR ecosystem

In recent years, Europe has been establishing itself as a global hub for responsible and human-centred innovation. The recent creation of the Virtual Worlds Partnership Association (VWPA), promoted by the European Commission, marks a new milestone in how the continent approaches the potential of immersive technologies. This association was born with the goal of aligning the efforts of different actors — public, private, and from the knowledge sector — to shape an ecosystem of Virtual Worlds that is interoperable, inclusive, and European at its core.

In this context, it becomes inevitable to reflect on the role of the European Institute of Innovation and Technology (EIT) within this agenda.

The mission of the EIT is precisely to strengthen Europe's capacity for innovation by activating the integration between education, research, and entrepreneurship — the so-called knowledge triangle. By integrating this vision with the emergence of technologies such as augmented reality, virtual reality, and metaverses, a new field of opportunities opens up for innovators, creators, and entrepreneurs across the European space.

According to the “Portugal XR Report 2024,” the adoption of immersive technologies in Portugal continues to grow, with particular emphasis on areas such as health, education, and culture. These are, in fact, domains already supported by multiple EIT Knowledge and Innovation Communities (KICs), with projects ranging from virtual surgical simulations to immersive experiences in museums or schools.

This thematic convergence shows that Virtual Worlds are not an isolated or futuristic phenomenon.

They are increasingly a cross-cutting tool within the European innovation landscape. The European Commission estimates that, by 2030, Virtual Worlds will have a direct impact on sectors representing more than 20% of the European Union's GDP.

In this context, the “Virtual Worlds Toolbox” was recently launched — a set of resources aimed at citizens and organisations, designed to support conscious, safe, and inclusive use of these technologies. As stated by Henna Virkkunen, Executive Vice-President for Technological Sovereignty, Security and Democracy, “our ‘Virtual Worlds Toolbox’ represents a new step forward in empowering people to navigate, understand, and explore these new digital spaces.”

For the EIT, this is a key moment. Investment in responsible innovation — with local impact and global potential — requires attention to the trends shaping the future. Virtual Worlds and immersive technologies offer a new dimension to the EIT's mission. They can transform the way we learn, collaborate, and innovate, overcoming geographic barriers and creating spaces for experimentation and co-creation.

It is in this spirit that the EIT positions itself as a strategic partner in the development of this European ecosystem. Whether through supporting deep-tech startups, promoting advanced digital skills programmes, or building interdisciplinary networks across art, science, and engineering, the EIT actively contributes to ensuring that Europe leads this transition with purpose and vision.

In Portugal, this dynamic is beginning to take shape. The EIT Community Hub Portugal, rooted in Lisbon and operating nationwide, has been connecting Portuguese innovators with the most relevant European programmes.

Examples include projects exploring the use of augmented reality in medical rehabilitation, immersive platforms for engineering education, or accessible cultural visits in virtual reality.

This positioning becomes even more relevant with the creation of the VWPA, which aims precisely to coordinate efforts and ensure that Europe speaks with one voice in this new technological chapter.

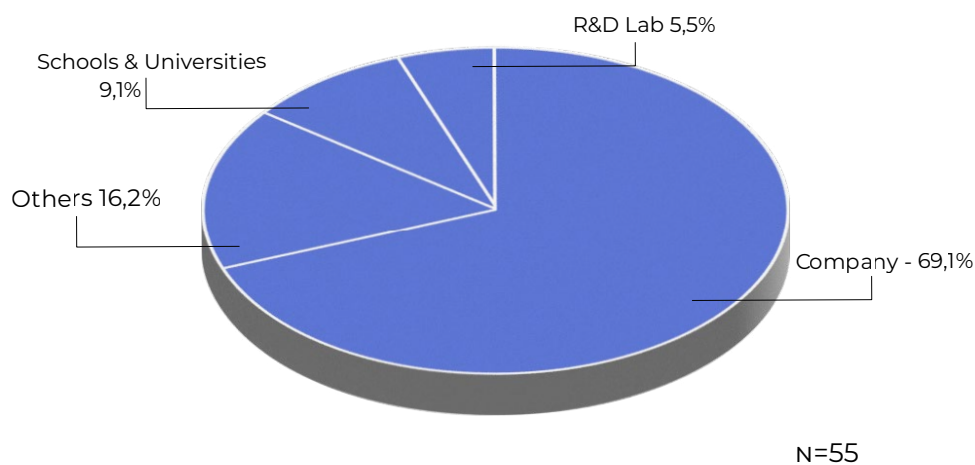
The future of Virtual Worlds is being written now, and Europe has the opportunity to set the tone. The EIT, with its model grounded in the knowledge triangle, represents an essential part of this path. Because innovation is not only about invention. It is about connecting, empowering, and building — with people, with values, and with vision.



Market Snapshot

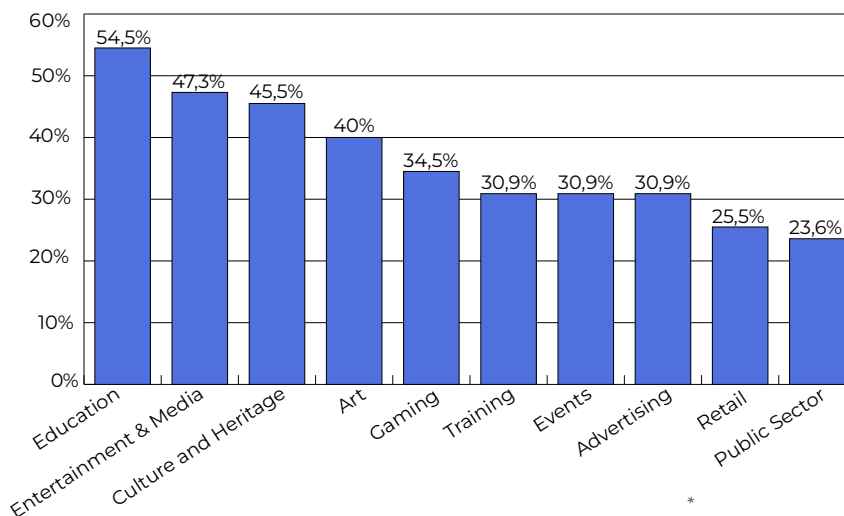
What types of XR and virtual worlds organizations exist in Portugal?

The organizational structure of the Portuguese ecosystem remains practically the same in 2025, with different kinds of private organizations taking the lion's share. Startups maintain their relevance and the convergence of XR solutions with other virtual worlds technologies, such as AI and Digital Twins, along with Portugal's multiple startup hubs justify this. 44% of these organizations have XR as their core business, while the remaining have active XR departments or teams. Other organizations like NGO's, cooperatives and collectives are increasing in relevance.



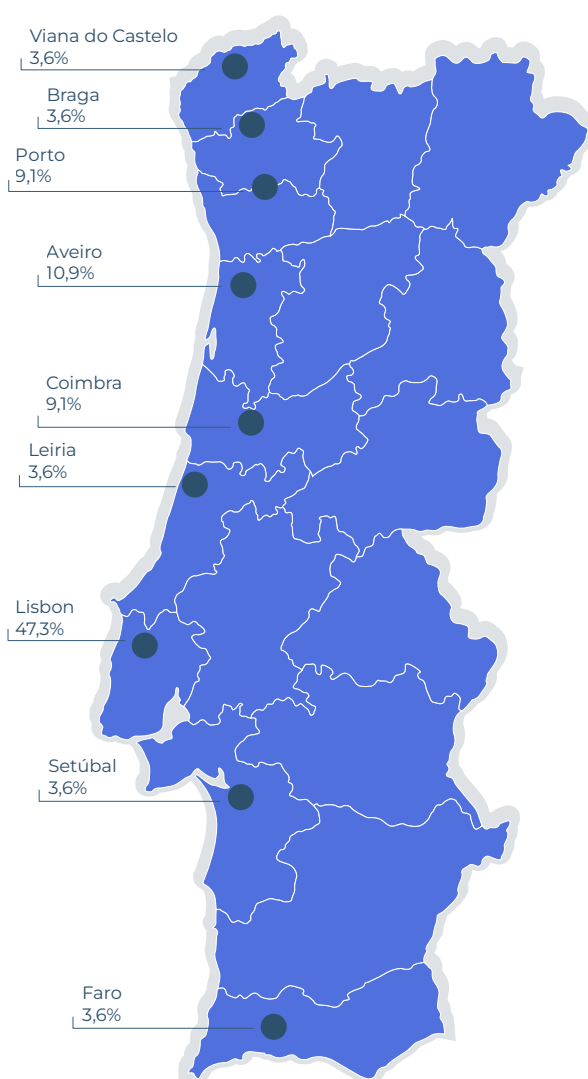
Which vertical markets are being addressed?

Direct-to consumer Market verticals like Art, Gaming and Entertainment took over more B2B applications like industrial and healthcare. Still, Education remains as the key market vertical in the country across the several kinds of organizations.



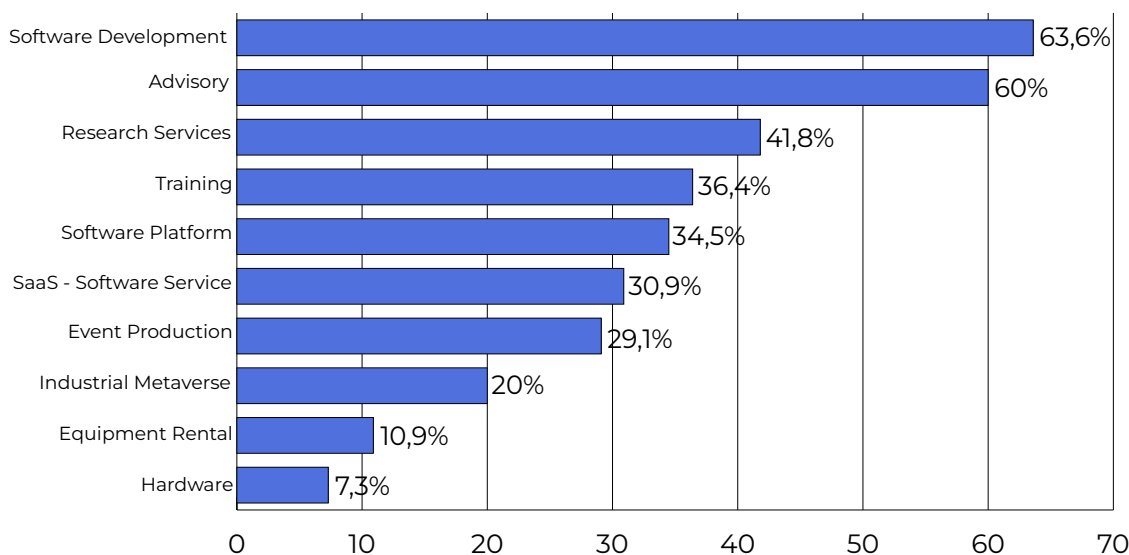
Where in Portugal can we find XR organizations?

While still number one, Lisbon now hosts less than 50% of the XR ecosystem, which points to a decentralization effect. Faro is also a growing destination for XR organizations working in tourism-oriented markets.



Which vertical markets are being addressed?

XR Advisory and Software development are still the most relevant services provided by the Portuguese XR ecosystem. However, the +400% growth in research services clearly aligns with the increasing number of funded research programs that leverage XR and Virtual Worlds technologies.





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Afonso Duarte

National Contact Point,
ANI



Bruno Teixeira

European Program
Manager, ANI

Challenges and Opportunities for Portugal in the Context of the European Strategy for Virtual Worlds

The development of Virtual Worlds in Europe has gained new momentum in recent years with the adoption of a European strategy for Virtual Worlds and Web 4.0.

This strategy aims to promote an open, safe, trustworthy, and fair digital environment, aligned with the values and fundamental rights of the European Union while simultaneously fostering innovation and the global competitiveness of the sector.

The ambition is that, by 2030, Virtual Worlds will be consolidated as an integral part of everyday life, strengthening competitiveness and acting as catalysts for digital transformation with an impact on sectors such as health, education, security, logistics, engineering, and manufacturing. In the health sector, these technologies are being applied to support and accelerate diagnostics, also enabling

the development of new therapeutic approaches. In education, they allow for more effective and accessible training, supporting the development of interpersonal and language skills. In the industrial and logistics sectors, they stand out by creating safe simulation environments for training and by enabling virtual modeling of production processes, helping reduce errors, costs, and development cycles.

This technological transformation is intended to be transversal across different areas, integrating the technical dimension, the contribution of experts from the social and human sciences, as well as input from end users. From a technological perspective, it encompasses a set of solutions such as augmented reality, virtual reality, and other forms of digital immersion that go beyond devices like VR headsets, incorporating advanced simulations, artificial intelligence, and digital twins.

One of the key pillars of this European strategy is the creation of the European Partnership for Virtual Worlds, an initiative funded by Horizon Europe that brings together industry, academia, the public sector, and other stakeholders to coordinate research, innovation, and development efforts in these areas.

In this context, the Virtual and Augmented Reality Industrial Coalition is being developed, involving companies, research institutes, startups, and public entities. In cooperation with Member States and the Commission, a Strategic Research and Innovation Agenda will be prepared to support research, innovation, the adoption of open technologies, interoperability, and sustainable social models that respect the fundamental values of the European Union.

At the national level, the National Innovation Agency (ANI) is responsible for promoting these European initiatives. Through its team of National Contact Points (NCPs), ANI disseminates opportunities and supports Portuguese organizations in participating in European research and innovation programs, namely Horizon Europe and the Digital Europe Programme.

Among the support instruments available are the provision of information and guidance in preparing applications, the organization of networking events and partner-matching activities, and assistance in the management and implementation of projects.

Within the Horizon Europe Programme, Portugal has established a strong presence in this domain with solid participation in research and development (R&D) projects. National organizations are currently involved in 46 projects related to virtual worlds, representing a total investment of 33 million euros for Portuguese entities over the last three years. These organizations include companies, research institutes, universities, and public bodies, reflecting growing territorial and sectoral diversity.

This landscape reinforces Portugal's position as a relevant hub within the European Virtual Worlds ecosystem, highlighting the expansion of its technological and innovative capacity, supported by dynamic international collaboration.

The development of a national Virtual Worlds ecosystem, fully aligned with the European vision and combining technological excellence with a human-centered approach, represents a unique strategic opportunity to generate sustained social and economic value.





Michael Barngrover

Managing Director, XR4Europe

Seeing Beyond Borders: How Portugal's XR Report Reflects Europe's Immersive Future

Across Europe, extended reality (XR) continues to be driven by small, highly adaptable enterprises.

The Portuguese XR Report captures this dynamic vividly: most companies working with immersive technologies in Portugal are micro-enterprises, often serving clients across borders.

This mirrors the wider European landscape, where innovation is global in reach but local in scale, and where small teams shape much of the creative and technical progress in the sector.

These microenterprises embody the entrepreneurial spirit at the heart of Europe's creative technology industries. They are typically built through personal initiative and perseverance, relying on independence rather than large investments.

They benefit most from open standards, accessible markets, and clear regulatory environments, yet their adaptability also allows them to survive and grow despite uncertainty.

Supporting these very small enterprises at the European level has proven difficult, and they are too often overlooked in favour of larger firms. But XR and virtual worlds represent an economy for the 21st century, distributed, digital, and human-centred.

The Portuguese data also reveal that many companies do not depend entirely on XR for their income.

Instead, XR forms part of a broader portfolio that may include work in manufacturing, automotive, healthcare, education, or creative production. This should not be seen as a weakness of the market, but as a sign of its maturity.

XR is increasingly not a single, self-contained market selling its products and services to others but a set of enabling technologies embedded within products and services across many sectors.

For consumers, the core technology still dominates the offerings (think Meta Raybans or Apple's Vision Pro), but in enterprise and industrial contexts, where Europe is particularly advanced, XR is just a component of larger solutions. It enhances training, design, maintenance, and communication and when it succeeds then the technology begins to fade into the background even while users use them.

This integration demonstrates an organic and healthy evolution of the industry, where immersive technologies quietly power innovation across multiple domains.

This evolution defines much of Europe's XR ecosystem today.

As these technologies become more accessible and more naturally embedded, we will see growing numbers of companies using XR in their operations without ever calling themselves "XR companies." That is not a loss of focus but a reflection of progress.

The Portuguese XR Report captures this transition well, showing how immersive technologies are becoming essential tools within wider business activities.

For future European support actions, it will be crucial to recognise XR as a cross-sectoral enabler of innovation and productivity, one that thrives precisely because it integrates so effectively across industries rather than standing apart from them.

Such insight is precisely what Europe needs. Continental-scale reports, like those produced or supported by XR4Europe, can identify broad patterns, but only national studies can uncover the subtler, human stories within the data.

Reports like the Portuguese XR Report make visible the local networks, hybrid studios, and entrepreneurial resilience that collectively form Europe's immersive ecosystem.

At XR4Europe, we see national research efforts as indispensable to understanding and supporting the European XR industry. They reveal the realities behind the statistics, inform policy, and ensure that innovation remains connected to people and places.

Portugal's contribution through this report is a valuable example of how local research strengthens the European picture—one grounded in diversity, creativity, and the shared ambition to make immersive technologies truly serve humanity.





Pedro Rebordão

Manager for Promotion and Innovation, LISPOLIS

XR and Business ride together

At [LISPOLIS](#) we host technology companies that use their technology to create new business models (a business model is how you make money) that support the development of startups – that's the case of scalable businesses that go for rounds of investment or Small and Medium Enterprises (SMEs) – in the case of service providers that assure their revenue by targeting their clients' specific needs and working on a close relationship with them.

I may say that at LISPOLIS we have been in contact with different technologies and sectors for more than 30 years. We have been in close contact with Virtual Reality (VR) and Augmented Reality (AR) technologies through startups that LISPOLIS hosts and support – the most known projects are probably [GLARTEK](#) that was supported by LISPOLIS at Incubation Voucher Project while named Glarevision, and [KIT-AR](#), which is still today

hosted at LISPOLIS, with the collaboration with Virtual Reality and Augmented Reality Association ([VRARA](#)) and also with [Portuguese Digital Business Community](#).

For those that are not so close to this kind of technologies, and we cannot say that VR and AR are the newest technologies in the market, we can say that Virtual Reality (VR) is a technology that generates digital immersive environments that allow entrepreneurs and companies to create experiments, that might be real or not real, but that deliver sensorial and visual interaction using devices, like VR glasses; and Augmented Reality has a technology that adds digital elements to the physical world, for example, adding data that can be used in real time to enrich the user experience.

The possibility of interaction, replication, enrichment with data are strong arguments for entrepreneurs keep on

investing their time developing solutions supported with these technologies.

I would say that, sometimes, these same entrepreneurs tend to valorize more the technology itself than the value of proposition to the final user or client – this is not unusual in the technology world, and this is one of the moments that a entity like LISPOLIS can really support the entrepreneurs, by remembering them that they need to build a strong use case, they need to be in permanent contact with potential clients, so that the solution is something that can be use by them, and paid!

Supporting startups and companies is much more than helping them fundraising, which only is possible when startups have a strong team, a good Minimum Viable Product (MVP) or early adopters, generate value to someone and their “do” is not so easy to copy by others. Or, at least, it will cost a lot of time and money to do it.

GLARTEK first success was being invested by EDP Ventures, KIT AR is working with companies like AIRBUS and was recently invested in numbers over 6 0's, which make this startups cases that entrepreneurs using VR and AR should get to know.

Regardless of the sector, and however “developed” VR and AR technologies may be, they must continue their development always creating value for their users and in proximity to Artificial Intelligence (AI) technologies, technologies that have been attracting massive investment from investors and large technology companies.

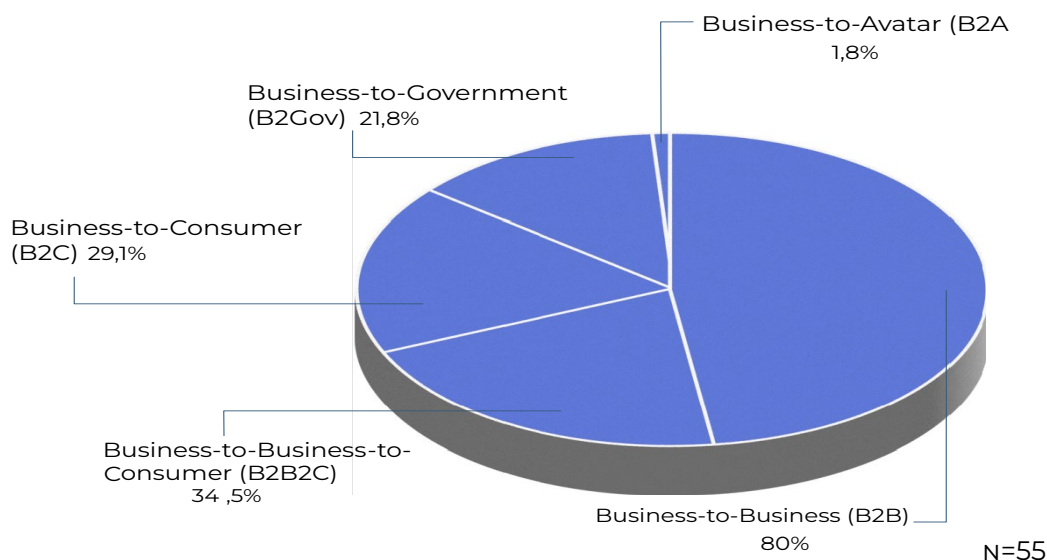
GLARTEK and KIT AR are two cases that shows that the technology, in this case VR and AR, was just a starting point to create a new business proposition



Business Insights

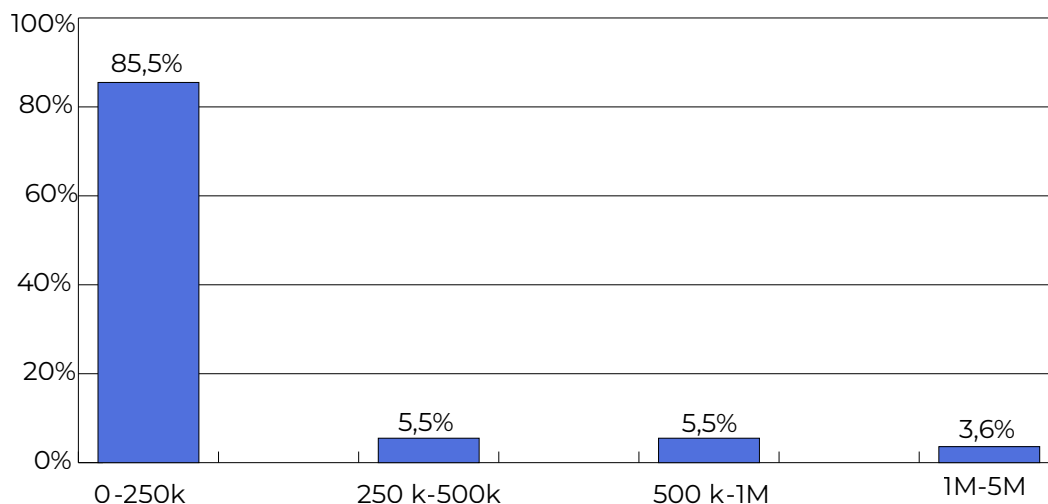
What are the main Business Models?

The graph is very similar to last year's, which is curious, given the rise in relevance of the entertainment and art verticals. The persistence of Direct-to-Avatar models clearly demonstrates it's not a fad.



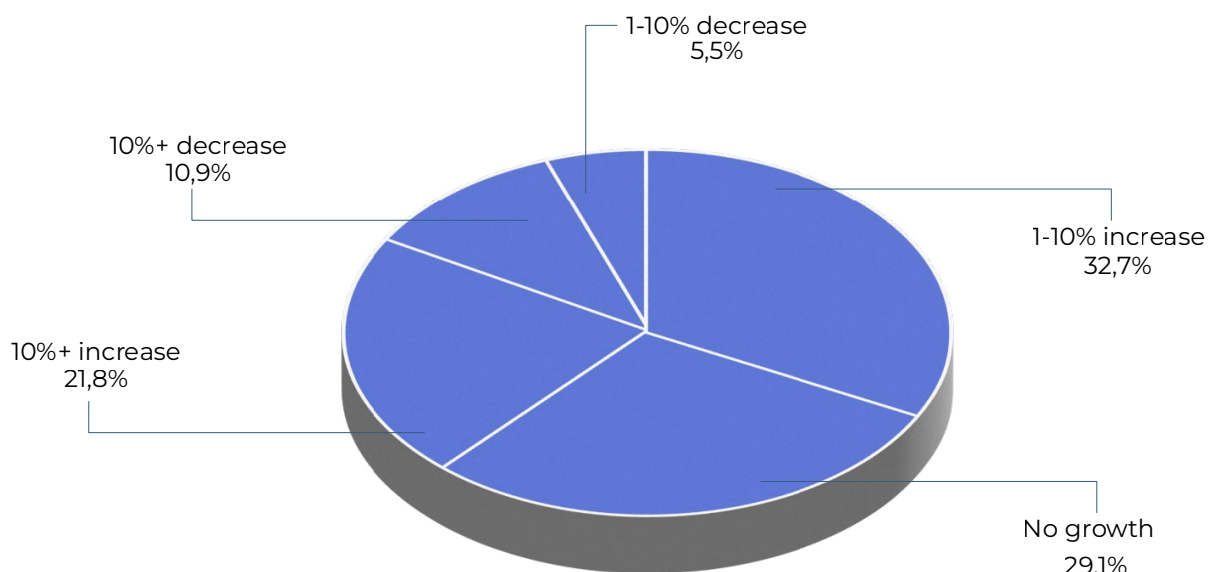
What are the revenue ranges of XR organizations in Portugal?

Low-revenue organizations took over most of the market, as many corporate innovation departments moved focus to AI and seldom merge XR into AI teams.



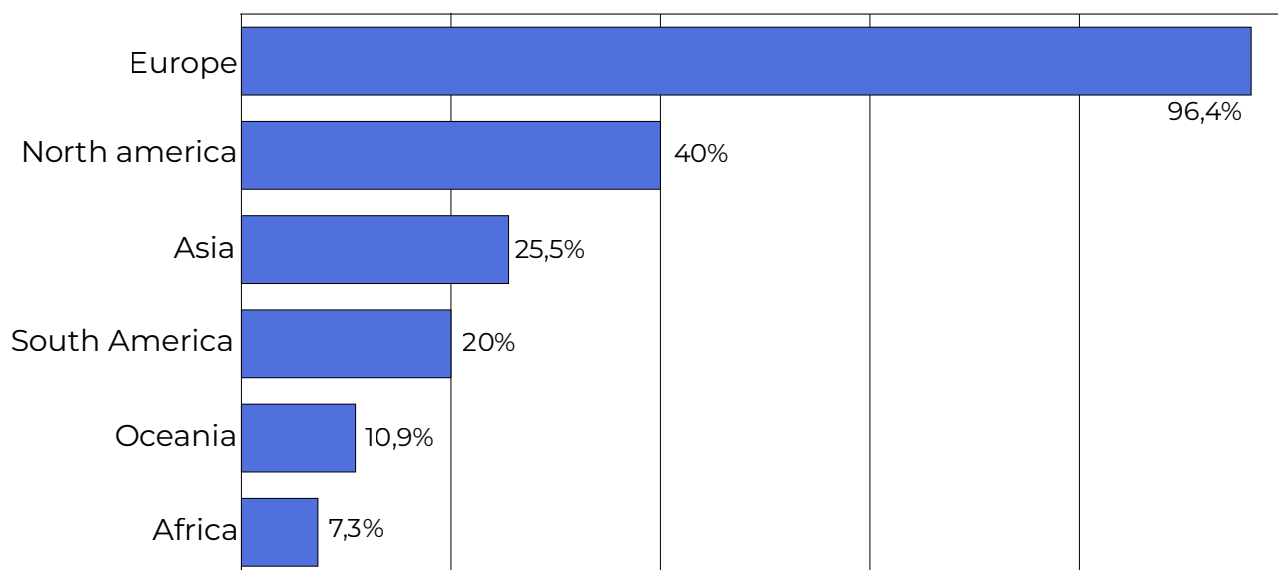
What is the expected Growth for 2025?

The slow growth expectation persists this year as the most relevant, seconded by a feeling of no growth. This translates a positive but cautious outlook, which seems justified by the presently complex socio-economic context and on-going technological convergence.



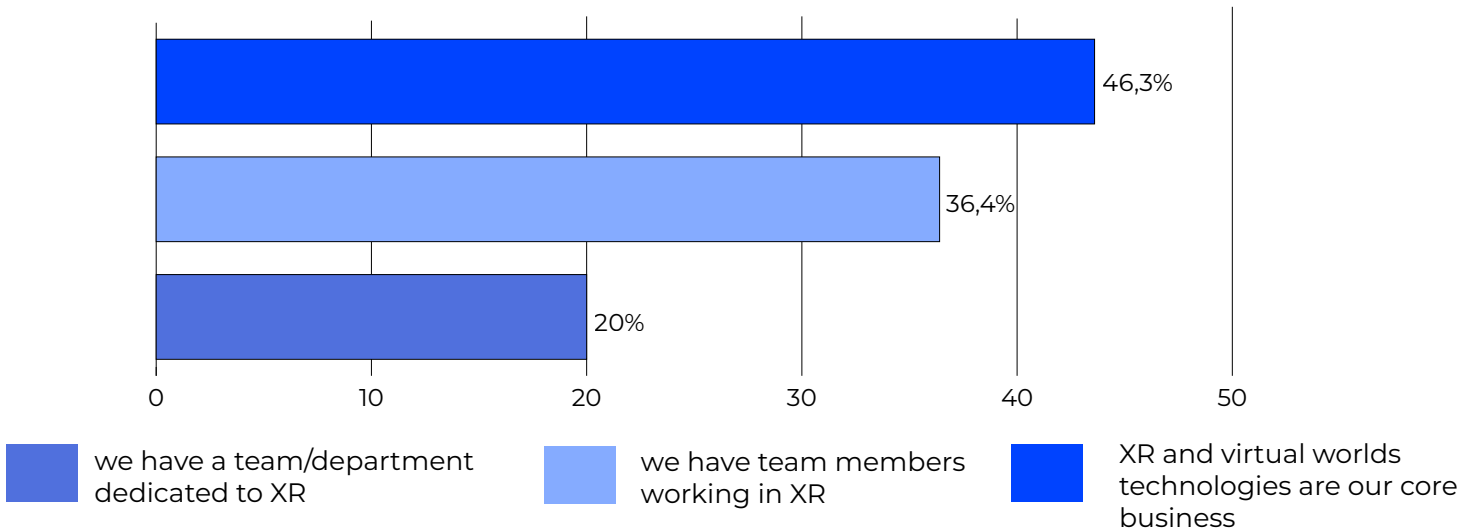
Where are Portugal's XR customers?

Europe is absolutely and without a doubt the most important market for Portugal's XR and this trend is bound to persist with the new EU programs for Virtual Worlds rolling out in 2025. The fact that even Oceania takes over Africa as a customer market shows a missed opportunity in leveraging Portuguese-speaking markets in the continent.



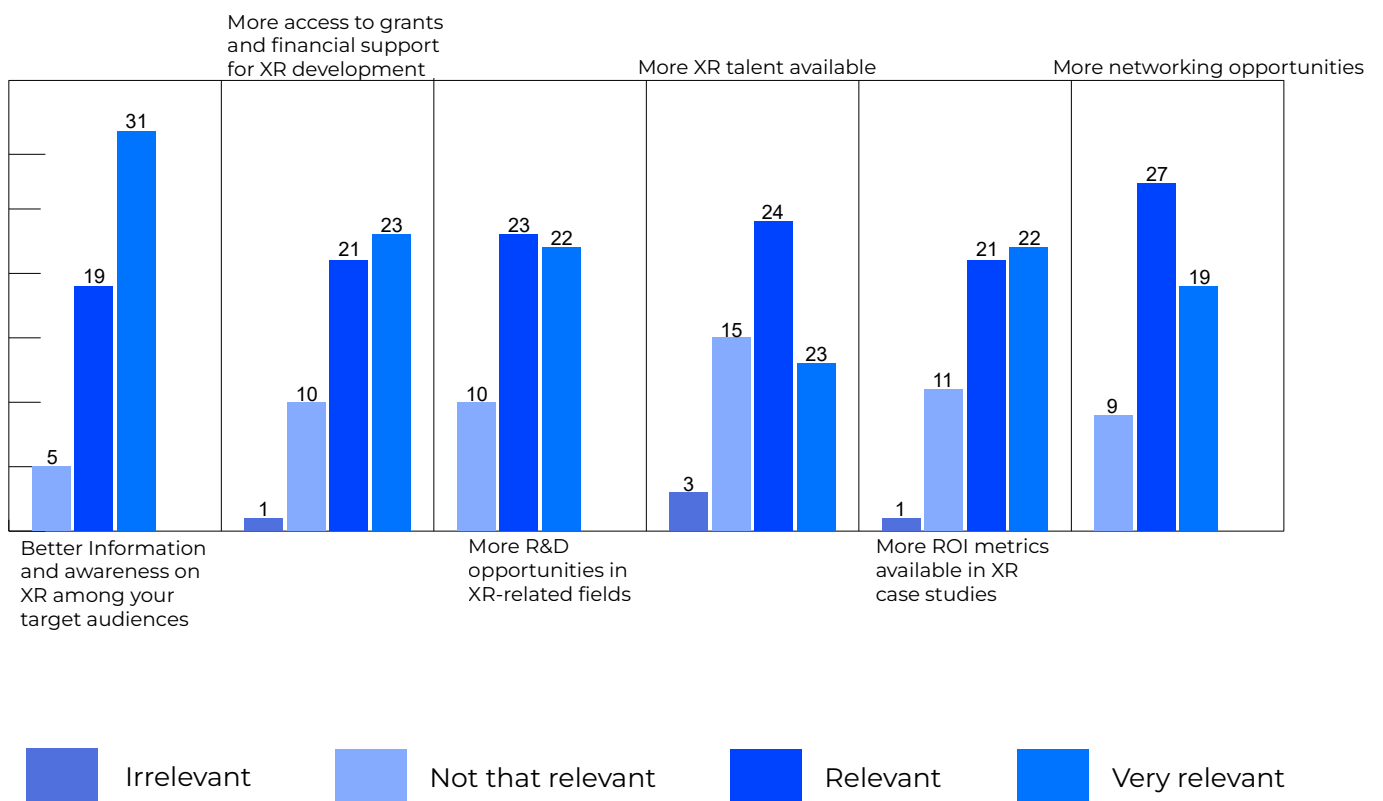
How central are XR technologies in your organization?

Almost half of participants indicate XR and virtual worlds technologies have a central role in their organization, which demonstrates the current technological reliance they have on them.



In your view, what are the most important elements for XR technologies to become mass-market?

The increase in information and awareness on immersive technologies is still seen as the number one reason that prevents market uptake. Access to funding and to qualified talento fill in the remaining TOP3 positions.



Portugal XR Insights

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Maria da Luz Pessoa e Costa

Professional Training Department
Director, IEFP,

The Adoption of Virtual and Augmented Reality Technologies in Pedagogical Practices

The Institute for Employment and Vocational Training (IEFP, I.P.) is the public body responsible for promoting job creation and quality employment, as well as addressing unemployment through the implementation of active labour market policies.

It therefore plays a central role in advancing these policies, particularly in the field of vocational training.

In this context, pedagogical innovation is a strategic priority, especially at a time when digital transformation is redefining learning models and the professional profiles demanded by the labour market.

The adoption of new methods and tools, particularly Virtual Reality (VR) and Augmented Reality (AR) technologies, thus represents a major opportunity to enhance the quality and relevance of vocational training.

Transforming Learning Through Immersion

These technologies make it possible to create immersive and interactive environments that closely replicate real work situations. VR provides simulations in which trainees operate within a fully controlled digital environment, allowing them to practice skills in complex or high-risk scenarios without compromising safety.

AR, in turn, overlays digital elements onto the physical world, enabling hybrid experiences that enhance content understanding and support real-time practical application.

Together, these technologies have the potential to significantly transform traditional learning, making it more engaging, personalized and effective. By allowing direct experimentation and problem-solving in simulated environments, they accelerate the acquisition of technical skills, foster critical thinking, and strengthen learners' motivation.

Responding to Labour Market Challenges and Needs

IEFP, I.P. recognizes that the integration of VR and AR can have a significant impact on strategic sectors of the economy. In areas such as industry, healthcare, construction, renewable energy and others, these technologies allow trainees to prepare for specific operations at lower cost and with controlled levels of risk. The simulation of complex industrial procedures in VR avoids material waste and increases the efficiency of learning processes—as demonstrated, for example, with VR equipment acquired by IEFP, I.P. with PRR funding, in the context of a welding training course

Investment in Modernization

Within the framework of the PRR, IEFP, I.P. is making a significant investment in modernizing its vocational training facilities. This effort includes the integration of innovative equipment, including VR and AR technologies, with the aim of creating learning environments that are more immersive and more closely aligned with the productive and technological reality of companies.

This investment strengthens IEFP, I.P.'s network of training centers as spaces of excellence for vocational education, fully prepared to meet the demands of a rapidly changing labour market.

Promoting Inclusion and Equity

One of the core missions of IEFP, I.P. is to ensure that vocational training is both accessible and inclusive. VR and AR offer important advantages in this regard. On the one hand, they make it easier to adapt content to different learning profiles, promoting greater personalization of the training experience.

On the other hand, they help reduce physical or geographical barriers, creating learning opportunities in virtual learning contexts that can be accessed from different locations.

When thoughtfully designed, these tools can also support learners with specific needs—such as people with disabilities or sensory limitations—thereby contributing to the development of more equitable and participatory learning pathways.

Strengthening Pedagogical Quality and the Role of Trainers

At the same time, IEFP, I.P. has made a consistent effort to strengthen the technical and pedagogical skills of its trainers, equipping them with the digital and methodological competencies needed to fully explore the potential of these technologies. In addition to targeted training initiatives, technical innovation workshops have been promoted as privileged spaces for sharing, experimentation, and dissemination of good practices.

In this regard, it is worth highlighting the 2nd edition of the IEFP Training Summit, held on October 3 at the Vocational Training Service of Tomar, which was entirely dedicated to the theme of immersive environments in vocational training.

The adoption of VR and AR does not replace the role of the trainer—it redefines it. The trainer takes on the role of facilitator, guide, and curator of immersive experiences as tools for content transmission, thereby enhancing the overall quality of training.

Key Points

Virtual Reality and Augmented Reality represent more than just technological tools: they are instruments of transformation for vocational training, making it more relevant, inclusive, and aligned with the future of work. IEFP, I.P. sees in these technologies an opportunity to strengthen pedagogical quality, enhance the role of trainers, and bring learning closer to the demands of the labour market.

By adopting VR and AR, IEFP, I.P. reaffirms its commitment to innovation, employability, and the development of a more skilled and better-prepared society, ready to face the challenges of the digital economy and fully aligned with European and national qualification frameworks.



Maria Vilar

Euromersive Portuguese Representative and Board Member

Portugal's XR Ecosystem Is Awakening

Last year, the Portugal XR Report 2024 set out to map the landscape. For the first time, we had a structured overview of who was working in XR across research, industry and creative fields. It helped us see each other and validated that XR in Portugal exists, even if scattered.

One year later, we are starting to see what comes after mapping. Momentum is building. The ecosystem is no longer just a loose network of individuals. We are seeing the first signs of structure, of collective energy, and of shared ambition. This moment matters. Because without a connected community, there is no foundation. And without a foundation, there is no long-term future.

Portugal's XR Community Is Starting to Connect

This year, we saw real progress in bringing people together. In March, we co-organised the XR North Meetup in Porto with INESC TEC and XRSI Europe, uniting researchers, companies and creatives around a common goal.

And we are not stopping there. During Web Summit 2025, we're partnering again with XRSI Europe to host another meetup, connecting local innovators with global voices and show that Portugal is not on the sidelines.

The Portugal XR Report 2024 laid the foundation. In 2025, we are building on it. What was once invisible is becoming a visible and growing community.

Portugal's Unique Role in Europe's XR Landscape

Portugal has a strategic opportunity in Europe's XR future, not by copying others but by leading where our scale, creativity and agility give us an edge. We are small enough to move fast, yet large enough to test meaningful use cases. That makes Portugal ideal for piloting immersive innovation, especially in sectors like defense, education, culture and health, where XR can solve real problems and deliver value quickly.

Our foundation is solid. Universities are producing talent in design, engineering and computer science. Creative industries are early adopters. Public and private interest is growing. But talent alone is not enough. We need long-term vision.

XR is not a trend. It is infrastructure for the next digital economy. It is the interface where AI, spatial computing and human interaction meet.

Talent alone is not enough. We need long-term vision

What's Changing in Europe and Why It Matters

Across Europe, new frameworks are emerging that could finally unlock cross-border growth.

One of the most promising developments is the 28th Regime, an EU initiative to give startups a unified legal framework to operate across member states.

This could be a turning point for immersive startups, which have struggled to scale due to fragmented regulations, inconsistent IP rules and complex funding processes.

The 28th Regime offers a simplified legal path for startups to grow across borders without reinventing their structure in every country.

Meanwhile, Europe is beginning to recognize the value of regulatory sandboxes, allowing technologies like XR and AI to be tested in real-world conditions before being subjected to full regulation. This is critical, as regulating XR without practical understanding risks slowing down innovation before it has a chance to thrive.

Together with the AI Act, fully applicable from summer 2026, these tools offer a smarter regulation path. The opportunity now is to ensure XR is included early in the process.

To stay globally competitive, Europe must move faster and smarter. We are starting to see that shift. The challenge now is to keep building.

The Work Ahead

Despite the progress, many of the challenges I highlighted in last year's report remain. The most urgent is the need for fair compensation and support for professionals in XR.

Too many XR professionals are still expected to work for visibility, not value. This weakens the entire industry. If we want XR to be taken seriously, we must treat it like any other professional sector.

That means paying people for their work, funding pilot projects and creating clear standards for public and private partnerships.

We also need institutions and corporations to go beyond surface-level interest. It is not enough to attend panels or share reports. We need procurement, experimentation and real integration of XR in education, culture, tourism and public services. Portugal has shown it can build great ideas.

Now we must show we can back them up.

Choosing to Lead

The XR community in Portugal is no longer asking for permission. We are building something real, and the movement is growing.

What we need now is to sustain it, with coordinated support. From government, from industry and from European partners. That means developing talent, funding innovation and giving our creators the chance to grow without needing to leave. Portugal has what it takes to lead in XR.

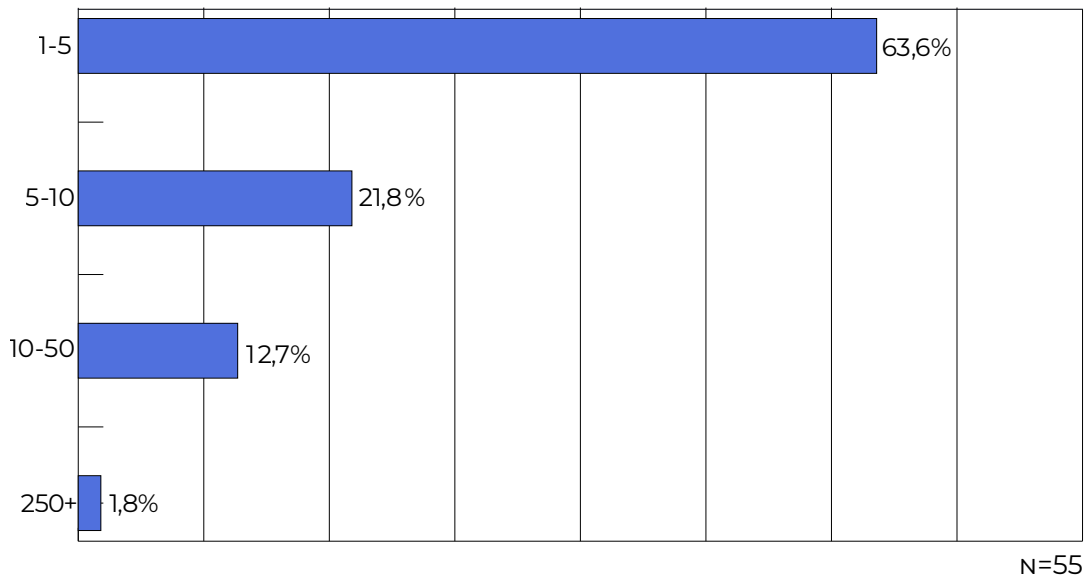
But leadership is a choice to invest, collaborate and believe in immersive technologies that shape more meaningful ways of learning, working and connecting.

If we make that choice together, Portugal will not just participate, but help lead the way in Europe's immersive future.

Talent Insights

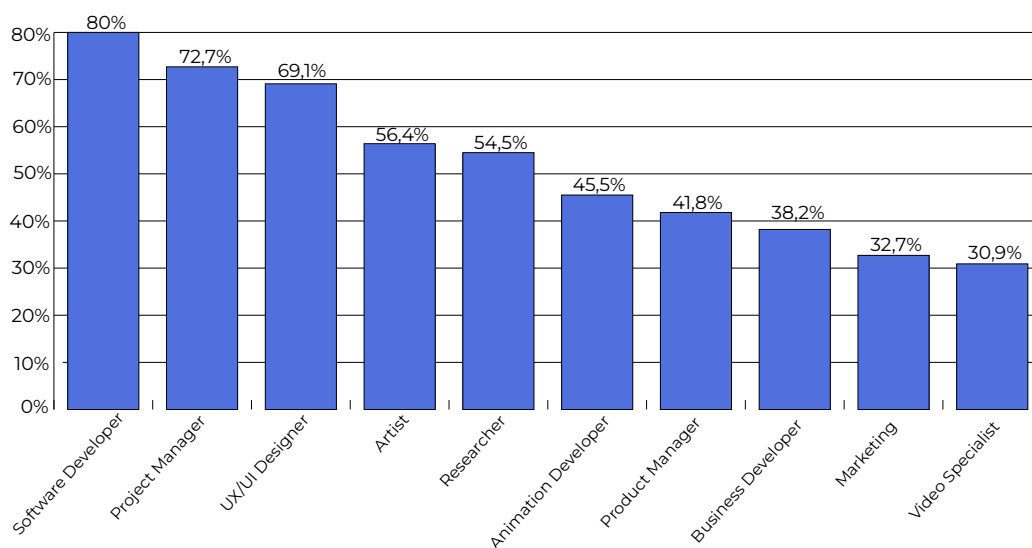
How many employees do XR organizations have?

Organizations with less than 5 employees grew more than 50% since last year which, connected with the drop in corporate innovation engagement, brings forward a more entrepreneurial and independent talent base.



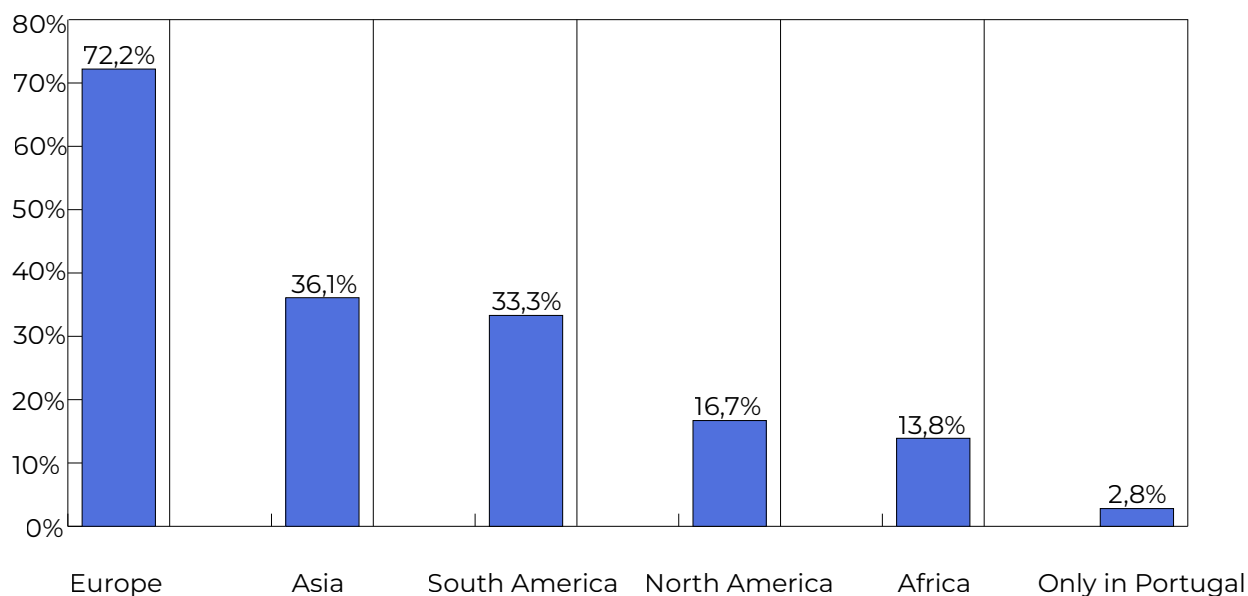
Which roles are most needed in XR organizations in Portugal?

Software developers took over Project Managers this year to become the most sought-after XR and Virtual Worlds profile. Business profiles in Marketing and Business development, on the other hand, dropped in relevance – however, the rise of smaller, more entrepreneurial organizations, drives the number of multi-role professionals upwards. This can ultimately reduce the need for more specialized business profiles until market consolidation occurs.



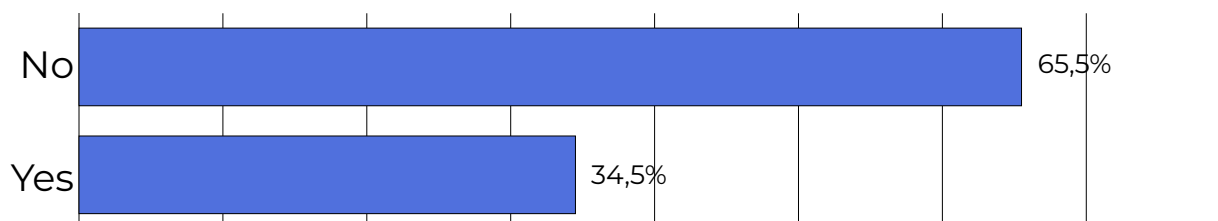
Where in the world are Portuguese XR organizations hiring?

Asia stands now as the second recruitment source, trailing behind Europe but with tech talent powerhouses like India, Japan and South Korea becoming more relevant. The very small number of organizations hiring exclusively in Portugal highlights the international and remote work market prevalent in XR and virtual worlds.



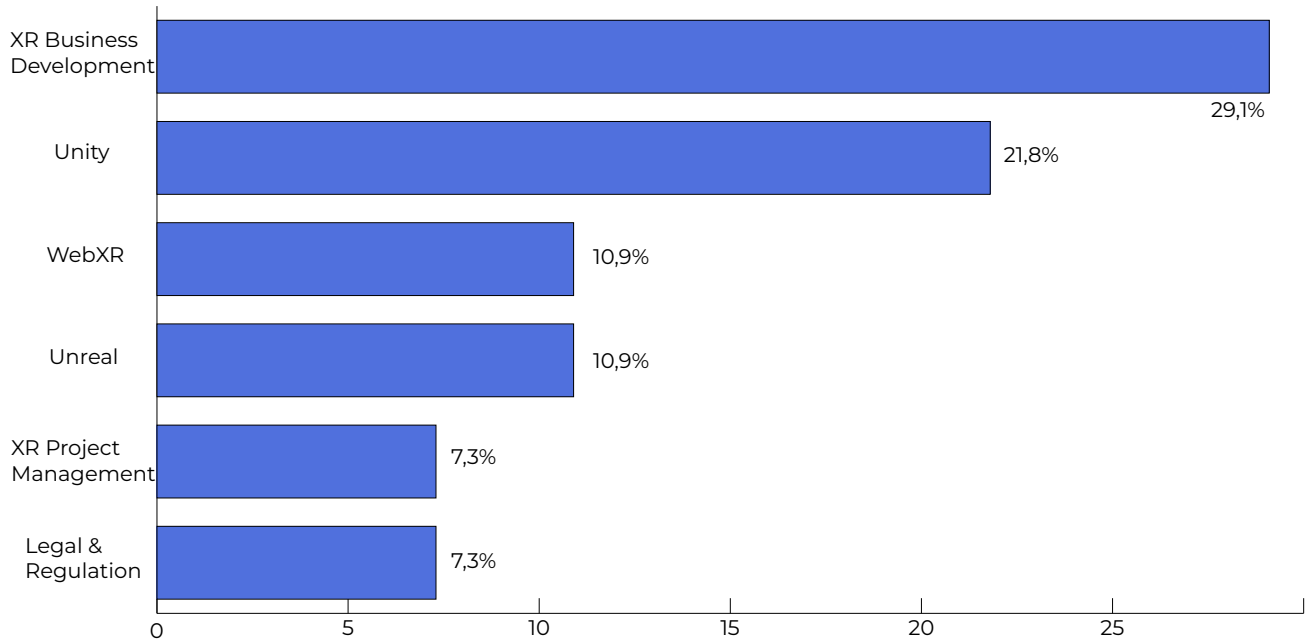
Are organizations hiring?

The hiring level is pretty much the same as in 2024, where talents are able to move between organizations and keep on learning.



Which are the most important upskilling needs?

XR Business development stands in the front, clearly showing the market's need for more qualification in this area. Legal & regulation skills in virtual worlds are also on the rise, given the diverse number of implementation challenges arising from these technologies.





Want to feature in the Portugal XR Report?
Please contact us at luis@xrsl.org



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Tiago Bessa

Partner in the Communications, Data Protection & Technology and Transactional IP practices @ VdA - Vieira de Almeida

Redefining Reality: The Rise of Digital Twins and Their Legal Implications

In Greek mythology, Pygmalion was a gifted sculptor who, disillusioned by the imperfections of the world, set out to create the perfect statue.

His creation, Galatea, was so lifelike that Pygmalion fell deeply in love with it. Moved by his devotion, Aphrodite brought the statue to life, blurring the line between dream and reality.

This ancient story finds a modern echo in the rise of digital twins. Like Pygmalion's statue, a Digital Twin is a dynamic, virtual representation of a physical asset, system, or process, continuously updated with real-time and historical data. By integrating information from sensors, enterprise systems, and other sources, digital twins enable organizations to monitor, simulate, and optimize the performance of their real-world twin.

Digital Twins Across Industries: Current Uses and Future Horizons

Digital twins are rapidly transforming a wide range of industries. In manufacturing, they are used to optimize production lines, predict equipment failures, and reduce downtime through predictive maintenance. The automotive and aerospace sectors employ digital twins to simulate and test new designs, monitor the health of engines and components, and streamline the lifecycle of vehicles. In healthcare, digital twins are emerging to model organs or entire bodies, enabling personalized treatment planning and risk assessment. Smart cities leverage digital twins to simulate traffic flows, manage energy consumption, and plan urban

infrastructure.

The energy sector uses them to monitor and optimize grids, wind turbines, and oil rigs, while logistics and supply chain operators benefit from real-time visibility and scenario planning.

The market for digital twins is experiencing explosive growth. Recent reports estimate the global digital twin market was valued at around \$16–18 billion in 2025, with projections suggesting it could reach \$180–240 billion by 2032. This surge is driven by advances in IoT, artificial intelligence, and cloud computing, as well as the increasing need for real-time data.

Decoding Digital Twins: How They Differ from Related Technologies

While digital twins are often mentioned alongside other digital representations, they are distinct in several ways. Avatars, for example, are digital personas used in virtual environments to represent users—expressive and interactive, but (for the time being) are not grounded in real-world data or used to control physical assets. Simulations and digital models are virtual replicas used to test scenarios or predict outcomes, but they are typically static or run for a limited period.

Digital twins stand out for their continuous, operational connection to a specific physical entity, enabling ongoing monitoring, optimization, and even autonomous control.

Navigating the Legal Maze: Regulatory Challenges of Digital Twins

The real-time connection that empowers digital twins also brings legal and regulatory

1. Data protection and privacy.

Digital twins often rely on granular operational data, which may include personal information such as employee location, health metrics, or behavioral patterns. This raises significant privacy concerns and requires compliance with data protection laws like the GDPR. As such, organizations must manage consent, data minimization, transparency, and cross-border data flows.

2. Intellectual property and trade secrets.

The ownership of digital twins, their parameters, and the behavior derived from customer data can be complex. Contracts should clarify who owns the base model, fine-tuned versions and address the use of confidential data to prevent leakage of trade secrets.

3. Safety, product liability, and software assurance.

When digital twins inform or control physical operations, they may fall under product liability or safety regulations. In the EU, the Product Liability Directive may extend strict liability or due diligence obligations to developers of digital twins.

4. Cybersecurity and resilience. The real-time, bidirectional link between digital and physical assets increases the attack surface. Regulatory frameworks (e.g., NIS2 in the EU, sectoral critical infrastructure rules) may impose incident reporting and minimum controls on digital twin providers and operators.

5. Transparency, explainability, and audit.

How a digital twin reached a recommendation, what data were used, and whether bias or error affected outcomes must be evidenced to meet the legal requirements.

Dream to Reality: The Future of Digital Twins
The future of digital twins is not just about mirroring reality. It is about shaping a smarter, more efficient, and sustainable world — as in the myth, the creation may ultimately surpass the creator's dreams. As adoption accelerates and the technology matures, organizations must address the unique and complex legal and regulatory challenges that come with this persistent, data-driven connection between the digital and physical worlds.



Valentino Megale

President @ XR Safety Intelligence - Europe

Bridging Innovation and Ethics in the Age of Invisible Technology

The European Commission's adoption of the "Web 4.0 and Virtual Worlds" strategy, the launch of the European Partnership for Virtual Worlds, and the expansion of the VR/AR Industrial Coalition mark a significant moment for immersive technologies across Europe.

With projections of up to 800,000 direct jobs in the XR sector by the end of 2025 and targeted funding through Horizon Europe, Europe is positioning itself as a global player in this space.

Yet as XR technologies accelerate toward mass-market adoption, the challenges we identified previously (privacy concerns, safety in virtual environments, ethical dilemmas, and regulatory gaps) have intensified.

Organisations like XRSI Europe are essential as the critical social and cultural connective tissue binding diverse European perspectives, values, and national contexts into a unified conversation about our digital future.

The most significant development since our last contribution is the acceleration of convergence between XR and AI through new consumer products like advanced smartglasses.

These AI-powered devices blend digital information with physical reality while appearing as ordinary eyewear, representing a paradigm shift: once conspicuous technology, they now become less and less noticeable.

This decreased visibility creates a profound privacy challenge. Human behaviour is fundamentally shaped by awareness of observation.

When we see a smartphone camera or a security camera, we instinctively adjust our behaviour. Smartglasses with integrated cameras, sensors, and AI capabilities eliminate these visual cues. The person across from us may be recording video, capturing biometric data, analysing emotional expressions, or feeding conversations into AI models, all while appearing to wear fashionable eyewear.

This imperceptibility undermines our ability to exercise informed consent and behavioural self-protection.

When users don't recognise devices as data collection tools, they behave more authentically and reveal more of their intimate selves. This creates double exposure: others cannot protect themselves from being captured, and users themselves expose more vulnerability to systems they don't consciously register as surveillance mechanisms.

These devices collect not just audiovisual data, but gaze patterns, attention metrics, micro-expressions, and contextual information about environments, relationships, and routines, data revealing cognitive and emotional states we might not consciously choose to share.

While Europe's GDPR provides crucial protections, it was conceived when data collection devices were largely visible and stationary.

The challenge now is extending these protections to ubiquitous, wearable, AI-enhanced systems operating continuously and imperceptibly.

The unobtrusiveness of modern XR and AI technologies reveals a fundamental aspect: we must shift focus from regulating devices to governing data flows themselves across multiple degrees of technical adoption and knowledge. Understanding how data is collected, stored, accessed, retained, and processed is the foundation of meaningful governance.

Making this knowledge accessible and actionable to European citizens is the necessary follow-up.

XRSI's recently launched Responsible Data Governance (RDG) Standards offer a comprehensive approach, providing methodologies for mapping data flows, assessing privacy risks, implementing safeguards, and demonstrating ethical data practices.

When smartglasses capture footage, that data may flow through edge computing systems, cloud servers, machine learning models, third-party services, and distributed data centres across multiple jurisdictions. Each point represents a potential vulnerability and regulatory touchpoint.

The RDG framework emphasises transparency, data minimisation, purpose limitation, secure handling, accountability, and respect for individual rights throughout the data lifecycle.

As the European Commission develops its Web 4.0 strategy, establishing common data governance standards across member states becomes crucial to prevent fragmentation and facilitate the single digital market.

Data-centric frameworks like RDG can serve as a common language and shared practices, enabling interoperability while protecting fundamental rights.

The European Union comprises 27 member states with distinct languages, cultural norms, legal traditions, and technological ecosystems.

What constitutes acceptable data practices varies significantly across European cultures. XRSI Europe's role transcends technical standard-setting, we aim to serve as essential connective tissue binding diverse perspectives into coherent transnational dialogue, facilitating conversations that respect cultural specificity while identifying shared European values.

Our work in countries like Portugal, Germany and Bulgaria exemplifies this approach: engaging with local XR communities, understanding specific challenges, and helping them contribute voices to broader European conversations.

The convergence of XR, AI, and virtual worlds also occurs against a profound crisis in societal sense-making.

Disinformation, deepfakes, synthetic media, and algorithmic manipulation undermine our collective ability to agree on basic facts. When smart glasses can generate photorealistic virtual humans, and when social interactions occur in privately controlled virtual spaces, the fragile consensus around reality becomes more vulnerable.

This demands cultivating “agile knowledge, the capacity to rapidly adapt understanding, critically evaluate information sources, recognise manipulation techniques, and rebuild consensus through transparent processes. Meta-learning (learning how to learn) becomes a survival skill.

For policymakers, this means frameworks accommodating rapid technological change without constant revision. For educators, teaching critical thinking and digital literacy as core competencies.

For organisations like XRSI Europe, creating spaces where stakeholders collectively develop adaptive governance strategies rather than rigid rules.

Digital literacy in the age of invisible XR and AI convergence requires understanding how technologies shape perception, influence cognition, and mediate relationships, the ability to recognise manipulation, question information provenance, and maintain epistemic humility amid increasing uncertainty.

Meta-learning must be embedded in governance processes themselves, designing them as learning systems that generate knowledge about what works and evolve accordingly. Europe’s next XR phase will be defined by our choices about governance, ethics, and inclusion.

The European Commission’s investments provide unprecedented opportunities but also carry risks of regulatory capture, fragmentation, technological solutionism, and serving narrow interests.

XRSI Europe is committed to navigating these challenges through: promoting data-centric governance via frameworks like RDC; facilitating transnational dialogue respecting cultural diversity while identifying shared values; building capacity in underrepresented communities; advocating for human rights-centred policies; and fostering meta-learning approaches adapting to rapid change and disinformation.

As technology becomes increasingly invisible, our commitment to visible, transparent, and accountable governance must strengthen.

The work ahead is complex but necessary, and together, we can ensure Europe’s XR future reflects the best of European values: human dignity, democratic participation, cultural diversity, and technological excellence in service of the common good.



XR Directory



Type of Company



Website



Region (Headquarters)

Source: Open Call - Portugal XR Report (2025)

AdPriva

Startup
<https://adpriva.com>
 Lisboa
[linkedin.com/in/cemsel](https://www.linkedin.com/in/cemsel)

ADPRIVA

Target Markets

Advertising, Entertainment & Media, Events, Gaming, Retail Sports

Services provided

SaaS - Software as a Service, Software Development Software Platform, Privacy-preserving adtech for XR & virtual worlds



Company
<https://alfglobal.co>
 Lisboa
<https://www.linkedin.com/in/themichaelalf>

ALF GLOBAL SERVICES

Target Markets

Academia / Education, Events

Services provided

Advisory / Consultancy, Event Production



Company
<https://www.alticelabs.com/>
 Aveiro
<https://www.linkedin.com/company/altice-labs/>
<https://www.instagram.com/alticelabs/>
<https://www.youtube.com/alticelabsofficial>

ALTICE LABS

Target Markets

Telecommunications, Entertainment & Media

Services provided

Software Development



Company
<https://www.anitya.space/>
 Lisboa
<https://www.linkedin.com/company/anityaspace/>
https://www.instagram.com/anitya_space
https://www.youtube.com/@anitya_space
https://x.com/anitya_space

ANITYA

Target Markets

Academia / Education, AEC (Architecture, Engineering and Construction), Art, Culture and Heritage, Events, Gaming, Healthcare & Life Sciences, Industrial & Manufacturing Public Sector Real Estate, Retail, Training

Services provided

SaaS - Software as a Service, Software Platform



Company
<https://apolloxr.space/>
Lisboa
<https://www.linkedin.com/company/apollo-digital-solutions-and-architecture>
<https://www.instagram.com/apollobasexr>

APOLLO XR

Target Markets

Academia / Education, Advertising, AEC (Architecture, Engineering and Construction) Aerospace, Art, Culture and Heritage, Entertainment & Media, Events, Gaming, Location-Based Entertainment, Public Sector, Travel & Hospitality

Services provided

Advisory / Consultancy, Event Production, Research Services, Software Development, Software Platform, Training



Other
www.arnote.pt
Porto
www.linkedin.com/in/gustavomacaes

ARNOTE

Target Markets

AEC (Architecture, Engineering and Construction), Art, Culture and Heritage, Events, Location-Based Entertainment, Retail

Services provided

Advisory / Consultancy, Software Development



Company
<https://www.axians.pt/>
Lisboa
<https://www.linkedin.com/in/jpdomingues/>

AXIANS DIGITAL CONSULTING

Target Markets

Advertising, Healthcare & Life Sciences, Industrial & Manufacturing, Logistics & Warehousing, Retail, Training

Services provided

Advisory / Consultancy, Industrial Metaverse, Software Development, Training



Company
www.byar.pt
Lisboa
<https://www.linkedin.com/company/byar-augmenting-your-reality>
youtube.com/@byar <https://youtube.com/@byar>

BYAR

Target Markets

Academia / Education, Culture and Heritage, Travel & Hospitality

Services provided

Software Development, Content



R&D Lab
<https://www.ccg.pt/>
Braga
<https://www.linkedin.com/company/ccg-zgdv-institute>
instagram.com/ccg.pt
facebook.com/ccg.pt
x.com/CCG_ZGDV
youtube.com/@CCG-ZGDV-institute

CCG/ZGDV INSTITUTE

Target Markets

Academia / Education, AEC (Architecture, Engineering and Construction), Aerospace, Agriculture, Art, Automotive / Transportation, Culture and Heritage, Energy, Entertainment & Media, Financial & Banking, Gaming, Healthcare & Life Sciences, Industrial & Manufacturing, Location-Based Entertainment, Logistics & Warehousing, Military & Defense, Public Sector, Retail, Sports, Training, Telecommunications, Travel & Hospitality

Services provided

Advisory / Consultancy, Research Services, Software Development, Training



Company
www.cibersur.pt
 Setúbal
<https://www.linkedin.com/in/vitor-dinis-75065b74/>

CIBERSUR PESQUISA E DESENVOLVIMENTO DE SISTEMAS UNIP. LDA.

Target Markets

Automotive / Transportation, Healthcare & Life Sciences, Industrial & Manufacturing, Logistics & Warehousing, Container ports

Services provided

Advisory / Consultancy, Industrial Metaverse, SaaS - Software as a Service, Software Development, Software Platform, Training



Other
<https://cooperativatecnologica.pt>
 Viana do Castelo
<https://www.linkedin.com/company/cooperativa-tecnologica/>
<https://www.instagram.com/cooperativa.tecnologica>
https://www.youtube.com/@cpds_cr

COOPERATIVA TECNOLÓGICA DE VIANA DO CASTELO (CTVC), CRL

Target Markets

Academia / Education, Events

Services provided

Event Production, Equipment Rental, Research Services, Training, Educational XR workshops for young audiences



Company
<https://www.deloitte.com>
 Lisboa
<https://www.linkedin.com/in/david-berto/>

DELOITTE PORTUGAL

Target Markets

Academia / Education, Automotive / Transportation, Retail, Travel & Hospitality

Services provided

Software Development



Company
<https://dorier-group.com/>
 Aveiro
www.linkedin.com/company/doriergroup/

DORIER GROUP

Target Markets

Advertising, Art, Culture and Heritage, Entertainment & Media, Events, Gaming, Location-Based Entertainment, Training

Services provided

Event Production, Software Development



R&D Lab
<https://emrsve.com>
Lisboa

<https://www.linkedin.com/in/thealimaster/>

EMRSVE LDA

Target Markets

Academia / Education, Advertising, Travel & Hospitality

Services provided

Advisory / Consultancy, Event Production, Research Services, Software



R&D Lab
Lisboa

EQUIPA DE INVESTIGAÇÃO AR CINAMIL (EXÉRCITO PORTUGUÊS)

Target Markets

Academia / Education, Logistics & Warehousing, Military & Defense

Services provided

Software Platform



Company
www.xyr.pt
Lisboa

https://youtube.com/@extendyourreality?si=Q_SayJxVDAJvf0qF

EXTEND YOUR REALITY - XYR

Target Markets

Automotive / Transportation, Gaming, Industrial & Manufacturing, Logistics & Warehousing
Military & Defense, Real Estate, Retail, Training

Services provided

Industrial Metaverse, Research Services Platform, Software Development, Software Platform, Training



Company
<https://futureinnovationlabs.com/>
Funchal (Madeira)

<https://www.linkedin.com/company/futureinnovationlabs/>

<https://www.instagram.com/fil.futureinnovationlabs>

FUTURE INNOVATION LABS

Target Markets

Academia / Education, Advertising, Art, Culture and Heritage, Entertainment & Media, Events, Training

Services provided

Advisory / Consultancy, Event Production, Research Services, Software Development, Training



HEDGE

Target Markets

Academia / Education, Art, Culture and Heritage, Public Sector

Services provided

Advisory / Consultancy, Research Services, Software Development

🏠 College / University
 🌐 <https://hedge-project.org/portal/>
 📍 Lisboa
 📷 <https://www.instagram.com/hedge.project>



HIDROMOD

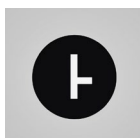
Target Markets

Agriculture, Energy, Industrial & Manufacturing, Public Sector, Training

Services provided

Advisory / Consultancy, Research Services, SaaS - Software as a Service, Software Platform

🏠 Company
 🌐 aquafarm.hidromod.com
 📍 Porto
 📷 <https://www.linkedin.com/showcase/aquafarmportugal>



HUMANOS

Target Markets

Academia / Education, Advertising, AEC (Architecture, Engineering and Construction), Art, Culture and Heritage, Entertainment & Media, Events, Location-Based Entertainment, Public Sector, Retail, Training

Services provided

Advisory / Consultancy, Research Services, Software Development, Reserach, Interaction Design and User Experience

🏠 Company
 🌐 www.humanos.xyz
 📍 Lisboa
 📷 <https://www.linkedin.com/company/humanos-xyz/>
 📷 <https://www.threads.com/@humanosxyz>



HORA XR

Target Markets

Academia / Education, AEC (Architecture, Engineering and Construction), Art, Culture and Heritage, Entertainment & Media, Industrial & Manufacturing, Logistics & Warehousing, Training

Services provided

Advisory / Consultancy, SaaS - Software as a Service, Software Development

🏠 Other
 🌐 <https://horaxr.com/>
 📍 Porto
 📷 <https://www.linkedin.com/in/fidgetik/>



ILIAD

Target Markets

Advertising, Entertainment & Media, Gaming

Services provided

SaaS - Software as a Service, Software Development, Software Platform

🏠 Company
 🌐 <https://www.ili-ad.com>
 📍 Lisboa
 📷 <https://www.linkedin.com/in/tiagoloureiro/>



IMMERSIV STUDIOS

Target Markets

Academia / Education, Advertising, Entertainment & Media, Events, Retail

Services provided

Advisory / Consultancy, SaaS - Software as a Service, Software Development, Software Platform

Company
 <https://immersivstudios.com/>
 Lisboa
 <https://www.linkedin.com/in/mariainesvilar/>



IMMERSIVE LIVES

IMMERSIVE LIVES

Target Markets

Aerospace, Healthcare & Life Sciences, Industrial & Manufacturing

Services provided

Research Services, Software Platform

Company
 [Immersivelives..pt](https://immersivelives.pt)
 Lisboa
 [linkedin.com/company/immersivelivesconsulting](https://www.linkedin.com/company/immersivelivesconsulting)



INEGI - INSTITUTE OF SCIENCE AND INNOVATION IN MECHANICAL AND INDUSTRIAL ENGINEERING

Target Markets

Industrial & Manufacturing

Services provided

Industrial Metaverse, Research Services

Other
 www.inegi.pt/en
 Porto
 <https://www.linkedin.com/company/inegi/>
 https://www.youtube.com/@INEGI_portugal



INESC TEC

Target Markets

Academia / Education, Energy, Industrial & Manufacturing

Services provided

Advisory / Consultancy, Industrial Metaverse, Research Services, Software Development, Training

R&D Lab
 [Inesctec.pt](https://inesctec.pt)
 Coimbra
 <https://linktr.ee/INESCTEC>



College / University
<https://www.ipleiria.pt/estg/>
 Leiria

<https://www.linkedin.com/school/politecnicodeleiria/>

INSTITUTO POLITÉCNICO DE LEIRIA (POLYTECHNIC UNIVERSITY OF LEIRIA)

Target Markets

Academia / Education, Art, Entertainment & Media, Gaming, Healthcare & Life Sciences, Industrial & Manufacturing, Training

Services provided

Advisory / Consultancy, Research Services



Company
larm.pt
 Lisboa

<https://www.linkedin.com/company/larm-publicidade-sa/>

LARM PUBLICIDADE, SA

Target Markets

Culture and Heritage, Events

Services provided

Advisory / Consultancy, Event Production, Software Development



Company
<http://madalia.world>
 Funchal (Madeira)

<https://www.linkedin.com/in/iamcandyflores/>

MADALIA WORLD

Target Markets

Academia / Education, AEC (Architecture, Engineering and Construction), Aerospace, Art, Culture and Heritage, Entertainment & Media, Gaming, Healthcare & Life Sciences, Industrial & Manufacturing, Military & Defense, Public Sector, Real Estate, Retail, Sports, Training, Telecommunications, Travel & Hospitality

Services provided

Advisory / Consultancy, Research Services, Software Platform, Training



Company
 Lisboa

<https://www.linkedin.com/in/marcodelvai/>

MDXR

Target Markets

Advertising, Entertainment & Media, Sports

Services provided

Advisory / Consultancy, SaaS - Software as a Service



METAENGA

Target Markets

Academia / Education, Energy, Military & Defense

Services provided

Industrial Metaverse, SaaS - Software as a Service, Software Development, Training, , Software Platform



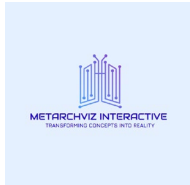
<https://metaenga.com/>



Lisboa



<https://www.linkedin.com/company/metaenga-xr>



METARCHVIZ INTERACTIVE

Target Markets

Academia / Education, Advertising, AEC (Architecture, Engineering and Construction, Aerospace, Agriculture, Art, Automotive / Transportation, Culture and Heritage, Energy

Entertainment & Media, Events, Gaming, Healthcare & Life Sciences, Industrial & Manufacturing, Logistics & Warehousing, Military & Defense, Public Sector, Real Estate, Retail, Sports, Training, Telecommunications, Travel & Hospitality

Services provided

Advisory / Consultancy, Startup Incubation, Startup Acceleration, Event Production, Industrial Metaverse, Research Services, SaaS - Software as a Service, Software Development, Software Platform, Training



<https://metarchviz-interactive.com>



Lisboa



<https://www.linkedin.com/company/metarchviz-interactive/about/>



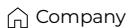
MUZEA

Target Markets

Advertising, Art, Culture and Heritage, Entertainment & Media, Events, Location-Based Entertainment, Travel & Hospitality

Services provided

SaaS - Software as a Service, Software Platform



<https://muzea.io/>



Lisboa



<https://linktr.ee/muzea.io>



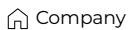
NARSUN STUDIOS

Target Markets

Advertising, Culture and Heritage, Entertainment & Media, Events, Gaming, Healthcare & Life Sciences, Industrial & Manufacturing, Military & Defense, Public Sector, Real Estate, Sports, Training, Travel & Hospitality

Services provided

Advisory / Consultancy, Startup Incubation, Startup Acceleration, Event Production, Equipment Rental, Hardware, Industrial Metaverse, Research Services, SaaS - Software as Service, Software Development, Software Platform, Training



<https://narsunstudios.com/en>



Aveiro



<https://www.linkedin.com/company/narsunstudios/>



PIXBIT - 3D DESIGN

Target Markets

AEC (Architecture, Engineering and Construction), Culture and Heritage, Gaming

Services provided

Advisory / Consultancy, Event Production, Research Services, Software Development



<https://www.pixbit.art/>



Faro



<https://www.linkedin.com/company/pixbit-art>



[art/www.youtube.com/@PIXBIT-art](https://www.youtube.com/@PIXBIT-art)



<https://www.instagram.com/pixbit.3d/>



PLUX - WIRELESS BIOSIGNALS, SA

Target Markets

Academia / Education, Research

Services provided

Hardware, Software Development



<https://www.pluxbiosignals.com/>



Lisboa



<https://www.linkedin.com/company/pluxbiosignals/>



PSICÓLOGA MÔNICA OLIVEIRA OPP 21123

Target Markets

Other

Services provided

Advisory / Consultancy



www.psicologamonicaoliveira.com



Porto



RETRAI

Target Markets

Academia / Education, Entertainment & Media, Gaming, Location-Based Entertainment

Services provided

Advisory / Consultancy, Software Development



<https://retrai.co/>



Setúbal



RVER

Target Markets

Healthcare & Life Sciences

Services provided

Advisory / Consultancy, Equipment Rental, SaaS - Software as a Service, Training



<https://rver.pt>



Leiria



<https://www.linkedin.com/company/rver-vr/>



SATORE STUDIO

Target Markets

Art, Culture and Heritage, Entertainment & Media, Gaming, Performance

Services provided

Advisory / Consultancy, Event Production, Software Development, LBE



www.satorestudio.com



Lisboa



<https://www.linkedin.com/company/satore-studio/>



Other
Selmaeduarda.pt
Faro

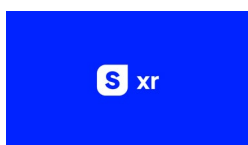
SELMA EDUARDA

Target Markets

Academia / Education, Art, Culture and Heritage, Entertainment & Media,

Services provided

Training, Art practice



Company
<https://spotside.com/>
Coimbra

<https://www.linkedin.com/company/spotside/>

SPOTSIDE XR

Target Markets

Art, Culture and Heritage, Entertainment & Media, Public Sector, Real Estate, Retail, Training, Travel & Hospitality

Services provided

SaaS - Software as a Service, Software Platform



Company
www.teamviewer.com
Porto

<https://www.linkedin.com/company/teamviewer/>

TEAMVIEWER

Target Markets

Industrial & Manufacturing, Logistics & Warehousing

Services provided

Software Platform



Company
www.thoriumlabs.tech
Lisboa

<https://www.linkedin.com/in/jesallay/>

https://x.com/Thorium_Labs

THORIUM LABS

Target Markets

Academia / Education, Art, Entertainment & Media, Events, Public Sector

Services provided

Advisory / Consultancy, Event Production, SaaS - Software as a Service



Company
www.unloop.agency
Braga

<https://www.linkedin.com/company/unloopcreativeagency>

<https://www.youtube.com/channel/UC9fjiPIWPGXjCVKMOqK2dIA>

https://www.instagram.com/unloop_creative_agency/

UNLOOP - REAL EXPERIENCES, LDA

Target Markets

Academia / Education, Art, Culture and Heritage, Entertainment & Media, Public Sector

Services provided

Event Production, Hardware, Industrial Metaverse, Software Development,



College
<https://www.lis.ulusiada.pt>
 Lisboa
<https://www.linkedin.com/school/universidade-lusiada>
<https://www.instagram.com/ulusiadalisboa/>

UNIVERSIDADE LUSÍADA

Target Markets

Academia / Education, Advertising, Art, Culture and Heritage, Entertainment & Media, Gaming

Services provided

Advisory / Consultancy, Event Production, Research Services, Software Development, Training



College
<https://sites.google.com/view/varlab/>
 Aveiro
<https://www.linkedin.com/company/var-lab-virtual-and-augmented-reality-group/>

VAR LAB - VIRTUAL AND AUGMENTED REALITY @ IEETA

Target Markets

Academia / Education, Healthcare & Life Sciences, Industrial & Manufacturing, Training

Services provided

Advisory / Consultancy, Research Services, Training



Company
vertigostudio.pt
 Lisboa

VERTIGO STUDIO

Target Markets

Advertising, AEC (Architecture, Engineering and Construction), Art, Gaming, Real Estate

Services provided

Advisory / Consultancy, 3D Visualization



Company
<https://www.visiononset.pt>
 Coimbra
<https://www.linkedin.com/company/visiononset/>

VISIONONSET

Target Markets

Academia / Education, Advertising, Art, Culture and Heritage, Entertainment & Media, Events

Services provided

Event Production, Equipment Rental, Research Services



Company
<https://virtuall.me>
 Coimbra
<https://www.linkedin.com/company/virtuallme>

VIRTUALL.ME | VERDADE D'IMAGINAÇÃO LDA

Target Markets

Academia / Education, Agriculture, Art, Culture and Heritage, Energy, Entertainment & Media, Events, Financial & Banking, Healthcare & Life Sciences, Industrial & Manufacturing, Logistics & Warehousing, Public Sector, Retail, Sports, Training

Services provided

Advisory / Consultancy, Startup Acceleration, Event Production, Equipment Rental, Research Services, SaaS - Software as a Service, Software Development, Software Platform, Training, White Label



🏠 Company
🌐 <https://mobilesolutions.pt>
📍 Funchal (Madeira)
🌐 <https://www.linkedin.com/in/ligiaefgoncalves/>

WALKME MOBILE SOLUTIONS, LDA.

Target Markets

Academia / Education, Culture and Heritage, Gaming

Services provided

Software Development, Game development



🏠 Company
🌐 xarp.ai
📍 Viana do Castelo
🌐 <https://pt.linkedin.com/company/xarp-reality-labs>
📷 <https://www.instagram.com/xarp.xr/>

XARP REALITY LABS

Target Markets

Advertising, Gaming, Retail

Services provided

Hardware, Research Services, SaaS - Software as a Service, Software Development, Software Platform, Retail-focused AI Smart Mirrors, Digital Wardrobe Solutions



🏠 Company
🌐 <https://zeentech.pt/>
📍 Aveiro
🌐 <https://www.linkedin.com/in/fabioandreosi>

ZEENTECH

Target Markets

Aerospace, Agriculture, Automotive / Transportation, Energy, Industrial & Manufacturing, Logistics & Warehousing

Services provided

Advisory / Consultancy, Industrial Metaverse, Software Development

Research Methodology

An initial research was done with the purpose of listing organizations publicly working in Extended Reality technologies and/or Virtual Worlds and 265 Organizations were found. This research was conducted using digital means (directories, search engines, social media). Only organizations with offices in Portugal and a team dedicated to XR and/or Virtual Worlds were considered.

Aftewards, an enquiry form was established with 35 questions that help characterize these organizations and the ecosystems as a whole and all listed organizations were invited to participate in this Open Call. After a data quality check, a sample of 55 organizations was used for the research report purposes.

Aggregated results presented in this report derive from that sample. All answers subtotals below 1% were deemed irrelevant and not included.





Want to feature in the Portugal XR Report?
Please contact us at luis@xrsl.org