

Augmented & Virtual Reality for Enterprise

From cloud enablement to cutting-edge, Valence engages with businesses to increase value, decrease costs, and improve user experience.





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Augmented and virtual reality (AR and VR) are powered by technology that merges the physical world with virtual worlds through devices like VR headsets, AR headsets, or smart phones. In the case of virtual reality, users are fully immersed in a simulated universe. Whereas augmented reality lets users see holographic information layered onto real-world environments.

Global Augmented and Virtual Reality Market is expected to reach \$571.42 Billion by 2025.1

Growing at a CAGR of 63.3% (2018-2025).

This revolutionary technology has advanced in large part thanks to game development, but AR and VR offer immeasurable real-time benefits that go well beyond entertainment value. At Valence, we help our clients capture business value by strategically incorporating AR and VR technology in ways that enhance existing workflows, provide intelligent insights, and open new revenue streams.



¹Allied Market Research

Here's a small sample of the many different types of enterprise AR and VR applications Valence can design and develop for customers today:



Real-time data analytics for manufacturing facilities



Virtual tours for prospective home buyers or museum visitors



PEOPLE

Immersive training modules for factory workers or sales associates interior design for consumers

Visualization of furniture, art, or



AR wayfinding for office buildings, museums, or other indoor facilities

We are Platform Agnostic

We treat every client engagement as a unique opportunity to define the best tools and platforms for the project needs. We work with you to understand your business requirements and recommend the best platform for the project and its intended audience whether it's Oculus, HoloLens, HTC Vive, Mobile AR, or something else altogether.







HTC Vive





HP Windows Mixed Reality



HoloLens



partner aws network



O oculus business partner



Getting Started with Valence: Enterprise AR/VR Ideation Workshop

The Challenge

Virtual reality creates an entirely new set of possibilities for the enterprise, both internally in spaces such as collaboration, training, and operations, to customer facing capabilities like retail experience, product exploration, and immersive environments. However, because VR as a medium involves many new concepts and user interfaces, it can be a difficult space to begin exploring, especially for enterprise customers. VR can often seem like a significant investment, including both software and hardware components, and articulating the real value can seem like a confusing and complex task.

The Solution

Valence's Enterprise AR/VR Ideation Workshop is designed to introduce enterprise customers to the world of AR/VR, and to focus that discovery on real life scenarios and best practices that apply to their own industries and customers. The result is exposure to the value of AR/VR as well as a greater understanding of how to begin innovating in the space through proof of concept projects.

Key Workshop Activities

- Industry overviews to help understand how AR/VR is being use in your industry today and in the future.
- > Hands on learning to introduce key concepts and components of virtual reality through real examples.
- User-driven design sessions to creatively explore potential VR applications.

Example Scenarios

Customer Experience

Retail teams can use virtual reality to put customers into exciting, immersive environments to showcase their products or services in an impactful new way. Using VRcombines entertainment, self-discovery, and learning in a way that leaves customers thinking about the experience long after they take the headset off.

Training

Immersive training is one of the most mature and proven applications of virtual reality and has been applied in nearly any industry. By putting your team members into virtual situations, you can simulate real world scenarios that can otherwise not be experience in an office setting, improving the quality of training as well as retention and understanding.

Operations

Virtual reality offers a completely new way to explore data, processes, and physical spaces. By streaming real-time, connected data to virtual experiences users can quickly access the information they need and explore that data by utilizing the virtual 3D space, virtual assistants, and Al-driven recommendation tools.



Using Oculus Quest virtual reality tours to improve training protocols and retention

Problem

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Solution

Valence partnered with Nestlé Purina to design and build a mobile virtual reality application, enabling sales staff to experience virtual tours of factories, immersing them in the environment with 360° views and taking them step-by-step through the manufacturing process. By utilizing virtual reality, Valence was able to help Nestlé Purina train their staff on the latest manufacturing processes at scale.

Results

By providing a VR factory tour at new staff orientations, Nestlé Purina was able to asynchronously train employees, maintain the manufacturing staff's focus on production and dramatically save on travel costs.

\$100K per year saved on travel and lost-productivity costs by training 10 sales people per month in VR.

VR training delivers improvements in accordance with OSHA safety standards

"The Oculus Quest was phenomenal in getting us to move faster. Now we don't have the wires, and we have a mobile package that works for us."

Gene Feldman Sales Training Manager, Nestlé Purina





Educating and engaging customers with mobile augmented reality

Problem

With a new rocket in development, United Launch Alliance (ULA) was looking for a fun and immersive way to engage its target audience at the largest "must attend" space industry event and beyond.

Solution

The physical size of a rocket prevents it from being transported and shared for marketing and sales opportunities, but much like a car there's a certain impressiveness to a rocket's physicality. Valence worked with ULA, the industry leader in satellite deployment, to design and build a mobile augmented reality application that created life-size rockets in virtual showrooms, viral social media photo sharing, and a missionbased game employing light simulation-based physics to demonstrate the complexity of rocket trajectories and satellite orbits. By utilizing augmented reality on mobile devices, we were able to help ULA engage a diverse target audience for both sales opportunities and brand recognition.

Results

By deploying ULA Anywhere AR to the iOS and Android app stores, we enabled ULA to engage with industry professionals and space enthusiasts to build brand and technology awareness with fun photo sharing across all social media channels. #ULAAnywhere

"A fantastically designed UI that truly takes advantage of advances in on-phone augmented reality." *App review on Google Play*







Using virtual reality and haptics to generate excitement around future experiences

Problem

The Space Needle – one of Seattle's biggest landmarks and tourist attractions – recently underwent a \$100M renovation to make visits even more awe-inspiring for the next generation of guests. In order to drive media and influencer excitement around updates like the thrilling all-glass rotating floor, the Space Needle wanted a way to show the experience while it was being built.

Solution

Valence created a 4D Virtual Reality Immersive Experience that blends drone footage, 360-degree panoramas, beautifully detailed models, and digitally-triggered physical elements into a custom-built stage. The experience incorporated advanced VR locomotion techniques to give users the illusion of walking through large-scale spaces, and physical queues such as haptics and wind pipes to give users the sensation of standing on a rotating floor or sitting out in the open air.

Results

Leveraging our 4D Virtual Reality experience, the Space Needle was able to meet their pre-launch press and influencer goals, driving multiple articles in technology, tourism, and local publications.







Capabilities Statement

Core Competencies

Valence is a digital transformation technology solution provider operating at the forefront of today's transformational technologies. We focus on helping enterprise customers worldwide understand and apply next-generation technologies in a smart and innovative way to advance their business goals.



Engineering

Our team combines cloud fundamentals with emergent technology across all phases of software development from migration, visualization, and innovation, to managed services.



Consulting

Our practice focuses on helping enterprises define and advance their goals while gaining operational efficiency through scalable teams emphasizing strategy, process improvement, and analysis.



Creative

Our creative process discovers, defines, and delivers opportunities in your business with a focus on intuitive user experience and inclusive design.



Cloud Enablement

Our expertise in cloud fundamentals helps clients migrate their data and IT infrastructure, with an architectural focus on scalability, high availability, and cost-reduction.



Data Insights

From data warehousing to advanced business intelligence and analytics, our team builds modern data management solutions and decision support tools, enabling new opportunities.

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