

Potential and Development of Immersive Technologies in the Field of Simulation

VIRTUAL REALITY AND AUGMENTED REALITY IN THE INDUSTRIAL FIELD FOR DESIGN DEVELOPMENT AND PROCESS APPLICATIONS

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Vection Technologies at Glance









Vection Technologies is a company that bridges the physical and digital worlds, creating powerful extended reality interfaces that help business collaborate and learn delight customers and grow sales.





XR Technologies What Are They?

Process digitalization: **XR technologies** transform information into digital formats.

VR: It uses a computer to create a simulated environment, consisting of realistic images, sounds, and other sensations that make users feel like they are in another place.

AR: It is a technology that allows superimposing digital content in the real world.

MR: It melds real and virtual worlds to produce new environments and visualizations where physical and digital objects co-exist and interact in real-time.



WHAT INTEGRATED \mathcal{R} can do for your value chain

DESIGN



Benefits:

- Reduce **time to market**
- Reduce **physical prototypes**
- Reduce design errors
- Reduce **logistics costs**





OPERATIONS

Benefits:

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- Higher **productivity**
- Increase **safety**
- Reduce **operative errors**
 - Reduce training costs







MARKETING & SALES





Benefits:

- Reduce visual showcase **costs**
- Revitalize **sales**
- New customers attraction
- Reduce **logistics costs**



AFTER SALES

- Improve communication
- Reduce misunderstanding
- Increase engagement







XR Technologies: 6 Top Benefits

Reduced time in creating prototypes, which leads to decreasing energy and production costs	Improved safety and security at the factory	Reduced costs associated with showcasing products
Improved customer experience	Boosted sales and ROI	Enhanced collaboration in the workplace



XR Technologies & Value Chain: INTEGRATED \mathcal{R}









Mindesk: Immersive CAD for BIM

Mindesk is a powerful solution that helps to speed up design review and real-time rendering workflows for Rhino3D, Grasshopper, Solidworks, and Autodesk Revit professionals.

Mindesk also uses AR to automatically generate high-quality renders, saving time, reducing costs, and increasing team collaboration.















- It helps speed up design processes
- It allows designers to create high-quality renders
- It allows designers to save time and costs
- It increases collaboration among design teams





Enworks: The right procedure

EnWorks supports training, manufacturing, and maintenance.

It is powered by **AR visual assistance** to increase workforce output and safety,









- Enhanced problem solving
- Reduced machine downtime
- Minimized costs
- Increased customer satisfaction
- Accelerated knowledge transfer





3DFrame – Professional metaverse

3DFrame, an immersive reality app integrated with Webex, is a powerful tool for creating immersive presentations.

Its easy-to-use interface allows people to create 3D scenes that bring their products to life.







- 3DFrame allows presenting products and content effectively in 3D and VR
- It increases collaboration in virtual worlds
- Reduces distractions and engages audiences
- It creates seamless interactions between attendees and products in virtual worlds





3D Tech Configurator: How do you like?

The **3D Configurator** uses AR to help businesses to manage and create unlimited product variations for their ecommerce stores.







- Reduced product returns
- Increased conversion rates
- Improved customer experience
- Better insights to customize products





XR Kiosk: Virtual reality in one touch

XR Kiosk is the future of in-store sales, delivering an omnichannel experience that blends reality with the virtual world.







- XR Kiosk creates a consistent brand experience
- It allows to create amazing stores to delight customers
- It gives the chance to shoppers to see a product in a virtual world
- Customized products
- Improved customer experience





Blank Canvas – Virtual Photography

Black Canvas uses **AR** and **VR** to create **photorealistic 3D images** in order to support the real estate industry.

www.blankcanvas.studio







- It supports purchasing decisions by delivering fantastic 3D images to prospects, like investors or people wanting to buy a home
- It helps real estate agents to showcase
 better available properties
- It increases customer satisfaction





Benefits of XR in the Field of Simulation

- Revolutionized education and training
- Increased safety
- Better products
- Engaging stores and industries
- Increased collaboration















XR for Health care

Applications:

- XR educational resources for patients and their families.
- Communication between doctors and patients through XR.
- XR-powered diagnosis and customized treatment plans.

Benefits:

- Enhanced visualization and increased engagement.
- Real-world applications of medical knowledge in training activities.
- Improved outcomes in healthcare education and training.

<u>VIDEO</u>

XR for Real Estate

Applications:

- Immersive and engaging visualizations of properties
- XR visits for prospects, including investors or people wanting to buy a property
- Real estate expos and property fairs
- 3D videos for marketing and sales strategies

- Reduced marketing costs
- Reduced logistic costs related to visits and staff
- Improved marketing teams and real estate agents' efficiency and productivity











XR for Manufacturing

Applications:

- Factory floor planning assisted by XR technologies
- Design and engineering
- Safety training at the factory floor supported by XR
- XR-Employee training
- Inspection and maintenance assisted by XR

Benefits:

- More accurate design and products
- More safety at the workplace and enhanced accident
 prevention
- Better training for employees in safety on the factory floor
- Enhanced inspection and maintenance procedures

<u>VIDEO</u>

XR for Workplace - 3DFrame and CISCO Webex

Applications of 3DFrame integration with Webex:

- Remote product and sales meetings
- Employee engagement initiatives in the professional immersive reality
- Employer brand and recruitment marketing assisted by 3DFrame-Webex

- Increased collaboration
- Better teamwork
- Top talent attracted to the company thanks to job interviews and recruitment meetings powered by 3DFrame









New hardware for XR -XR Kiosk

Applications of XR Kiosk:

- Virtual try-on solutions
- Trade fairs focused on Retail

- Increased customer experience
- Reduced returns
- Faster lead generation, customers, and sales
- More loyal clients



XR Technologies & Engineering Simulation Explore new possibilities

VIDEO

2D CAD to Mixed reality

Bringing the model from CAD to the virtual world to analyze data with the help of mixed reality.



Engineering Collaboration

Engineers can collaborate remotely for technical analysis thanks to VR technologies with a 1:1 scale virtual model. Reduce times and costs of prototyping.





Speed up your decision

With a true scale model (1:1) your project with data ready for production, analysis and projections. Ready for approval.

Reduce **time to market** Reduce **risks** Reduce **costs**



More than **Reality**

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