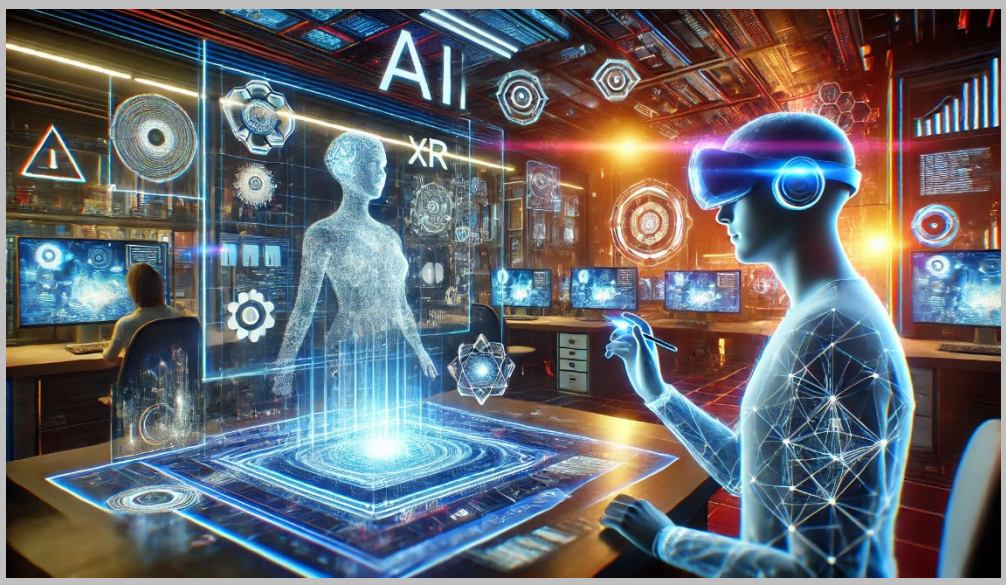
Whitepaper

Creating the Future with AI and XR



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Content

Executive Summary

AI / XR are game changing technologies (like electricity, computers, the Internet, etc.)

…. that deliver **Significant AI / XR Benefits** :

A. Fast track understanding and improve decision making by -

- Utilizing AI - to add intelligence to processes
  - XR for better visualization
- Having Immersive Experiences
- Enabling people to better quantify and visualize outcomes

B. Make Business Innovation more rewarding and change less risky with –

- The creation and deployment of new products and services
- Additional revenue streams
- Higher margins
- Additional ways to attract new Customers and expand relevance with current Customers
- The improved ability to grow current markets and expand into new markets

C. Enable organizations to better –

- Manage change and reduce risk by mitigating issues
- Identify and make good on opportunities

D. Increase organization appeal to attract and retain top talent

E. Better position enterprises to - Do Scenario Planning , Create New Value,
Have Competitive Advantage,
Evolve the Business Model, Grow Opportunities,
Increase Sales and Profits

Introduction

Artificial Intelligence (AI) and eXtended Reality (XR) are complementing and enabling technologies that are converging and transforming enterprises.

As AI-powered analytics and personalization combine with XR visualization and immersive capabilities, industries are unlocking unprecedented efficiencies, engagement, and new revenue opportunities.

This white paper synthesizes the latest research and use cases to illustrate how organizations are leveraging AI and XR to - have strategic advantage, make innovation more rewarding, create new, meaningfully improving outcomes, etc.

AI and XR also represent a technological shift that is creating significant new opportunities and reshaping industries. While AI delivers the intelligence layer - natural language processing, machine learning (ML), predictive analytics - XR provides visualization for a full or partial immersive environment where users engage with simulated or augmented realities.

Together, AI and XR are very synergistic technologies whereby the combination of Large Language Models (AI) and 3D visuals (XR) is greater than the parts - to get more benefits from information services and the associated data. This is very important to have greater insights, look ahead, and make better risk assessments.

Further, since the human brain builds mental models spatially, and XR provides experiences to interact with complexity and information in a more intuitive and engaging way - this fast tracks learning, comprehension, and making good decisions.

The AI / XR Opportunity

- **XR Market Growth Rate** : CAGR of 27 % from 2025 to 2030 (McKinsey, 2024).
- **AI Investment** : Projected to surpass $300B globally by 2026 (IDC, 2025).
- **Funding & Adoption** :
  In 2023, the global AI sector witnessed significant investment, with startups raising approximately $42.5 billion (Statista).

  Concurrently, the Extended Reality (XR) market was valued at around $142.39 billion, with projections indicating robust growth at a CAGR of 32.9 % from 2024 to 2030 (Grand View Research).

  This surge in investment and market expansion reflects a growing enterprise interest in integrating AI with XR technologies, particularly in applications such as training, remote support, and consumer-facing experiences as well as to make innovation more rewarding.

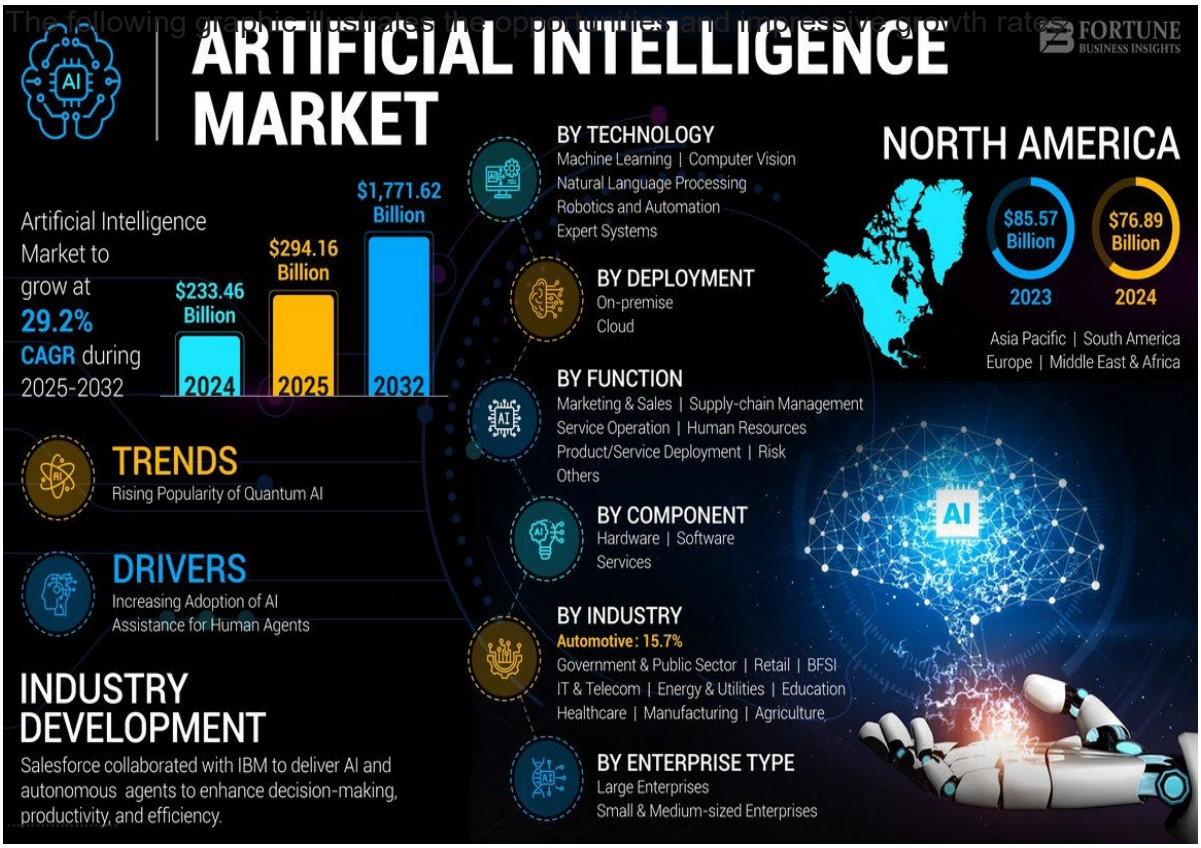


Image courtesy of Fortune Business Insights, Feb. 17, 2025

AI / XR Trends

A. **Increasing AI / XR Adoption in Enterprises :** Over 70 % of Fortune 500 companies plan to pilot AI + XR products / solutions by 2028 (BCG, 2025).

B. **Increasing use of AI & XR for Real-Time Communications and Interactions :** To benefit with AI-driven conversational agents with on-demand feedback, personalized training, and adaptive skill development.

C. **Improving Security & Ethics Frameworks :** Privacy, regulatory compliance (GDPR, HIPAA), AI ethics and safeguarding motion data are evolving to better assure responsible AI / XR deployments.

D. **The Maturing AI & XR Ecosystem :** With the technologies evolving, increasing product interfacing and integrations, growing partnerships in the industry, etc. - it's getting easier and quicker to explore opportunities and have better User experiences as well as deliver new capabilities and value with AI and XR products.

That is enabled by -

1. **Conversation AI** : The success of VictoryXR and Bodyswaps provides impressive immersive, voice-based training.

2. **Contextual AI** : AI-integrated AR / MR that considers cached conversations, physical surroundings, and other-device data to improve the accuracy of answers and experiences

3. **Spatial Computing** : AI-driven digital twins, dynamic NPCs, and enhanced user data for open ecosystems.

4. **Sustainability** : XR-based remote work, telemedicine, and product prototyping reduce carbon footprints and the impact of people on the environment.

5. **AI / XR Accessibility Tools** : The uptick in AI-accessibility aides has reached XR, with companies like From Your Eyes, dotLumins, and Xpanceo leveraging visualization and real-time data analysis to broaden access to virtual worlds and enhance independence in physical spaces.

6. **Personalization** : Adaptive XR experiences that are responsive to the users' state and affect, driven by machine learning.

7. **Ease of use** : With voice enabled AI this dramatically improves the human / machine with spoken interfaces, while removing busy displays or the clutter of UI panels - especially in limited FOV (Field of Vision) or with AR glasses.

Drivers for AI / XR Solutions

1. The Need for Knowledge and Speed to –
    - identify and make good on opportunities
    - improve the quality and timeliness of decision making
    - have successful rollouts of new products / services
    - be responsive to new needs or changes

2. The high importance of –
    - meaningfully improving outcomes
    - making innovation more rewarding
    - prudently managing change
    - attracting and retaining top talent
    - creating and delivering new value
    - the organization and people having a future ….

3. The unique opportunity to leverage AI and XR technology with human competencies to –

    A. **Improve Operational Efficiencies and Reduce Costs** - with AI based intelligence and processes
    + XR based visualization for more insightful and better real-time rendering of information.

    B. Utilize **Immersive Engagement -** with XR visualization for more effective training, better presentations, and more impactful learning experiences for better operation / process insights
    + AI to add intelligence for personalization, better scenario planning, etc.

    C. Address the increasing need for **Data-Driven Insights** with real-time analytics on user behavior, skill performance, outcomes, etc. as well as for feedback to make timely and continuous operational / product / service improvements.

AI / XR Use Cases

1. Healthcare

Healthcare is benefitting with AI and XR solutions used for immersive surgical training, patient and medical personnel education, advanced diagnostics and imaging, better health assessments, improved logistics, greater mental health support, etc. - that are meaningfully improving outcomes for patients, medical practitioners, and healthcare organizations.

Surgical Training & Logistics

Case Study A : Fundamental Surgery at NHS St George's Hospital

- Challenge : The need for new Orthopedic Surgeons to quickly gain high competency with practical experience for better outcomes - with trainees having a realistic, visual, interactive, data-rich practice environment.

- Solution : HapticVR integrated with AI analytics to measure angles, depths, and skill progression in real time.

- Impact :
  - Reduced learning curve and confidence building for new surgeons
  - Data dashboard fosters targeted feedback, with up to 30 % fewer procedural errors.
  - more cases of better outcomes for Patients and Doctors

Case Study B : eXeX & Apple Vision Pro

- Challenge : Managing OR equipment, implants, and workflows in a sterile environment.

- Solution : Mixed reality logistics software integrated with Vision Pro headsets for hands-free control and AI-based inventory suggestions.

- Impact :
  - Reduced surgical prep time.
  - Lower rates of missing instruments or last-minute reorder scenarios (Behm, 2024).

Patient Education – with VR and Digital Twins

Case Study C : Bonn Hospital

- Challenge : Complex surgeries demand extensive planning and lack of clarity with patients.

- Solution : AI-driven VR models create dynamic digital twins of patient anatomy, enabling surgeons to practice procedures and educate patients interactively.

- Impact :
  - 40 % reduction in prep time.
  - Improved patient understanding and consent rates.

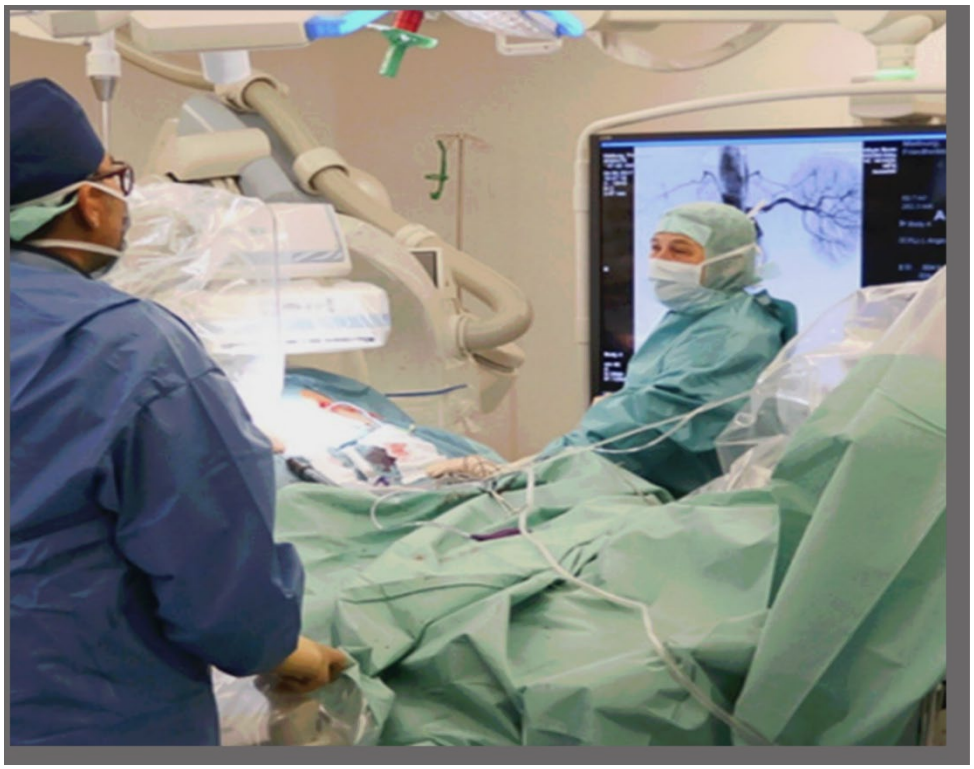
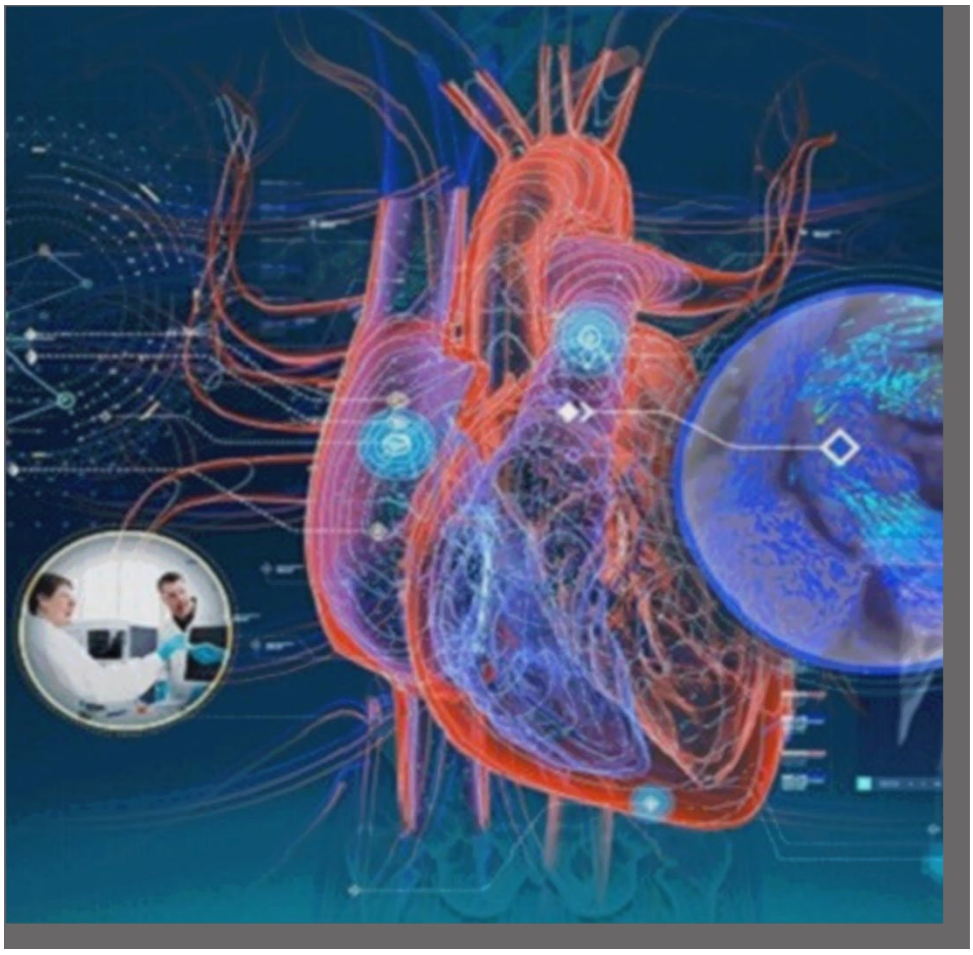


Image credit: University Hospital Bonn Operating Room

AI-Assisted Diagnosis & Imaging

Case Study D : GE Healthcare

- Challenge : The need to parse large volumes of 3D imaging data - quickly and accurately
- Solution : AI-based segmentation and interpretation integrated with XR headsets for interactive visuals.
- Impact :
  - Up to 20 % faster diagnostics.
  - Fewer misdiagnoses in pre-surgical assessments.



GE Healthcare Data Imaging. Image credit: interventionalnews.com

Improved Patient Diagnosis & Assessments – with VR

Case Study E : Bonn Hospital

- Challenge : To address issues with ADHD diagnosis based on subjective patient self-reports and frequent misdiagnosis.

- Solution : AI-driven diagnosis using VR based assessment tasks with eye-tracking, behavioral indices, and actigraphy.

- Impact :
  - Objective classification of ADHD information
  - Approximately 20 % diagnosis improvement

Case Study F : Chinese Academy of Science and Aerospace Center Hospital

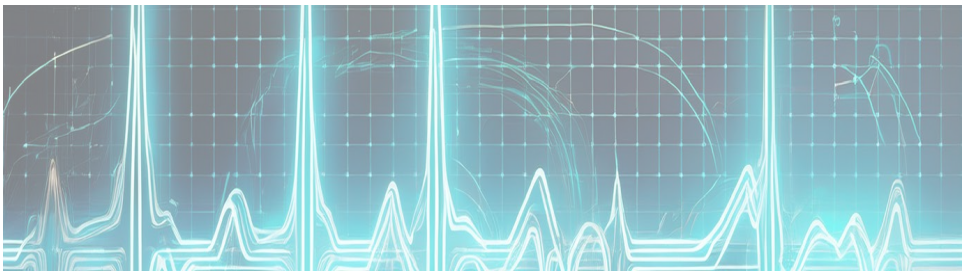
- Challenge : With Parkinson's having no known cure, the need is for early detection to slow disease progression.

- Solution : AI-driven classification making use of pupil measurements in a VR task.

- Impact :
  - Detection of early disease onset with 89 % accuracy
  - Increased detection accuracy compared to standard methods

- Use Case : VR tasks to predict ADHD (Nature, 2024) or measure affect and cognitive load via hand motions (ArXiv: 2409.12921).

- Impact :
  - Approximately 20 % improvement in identifying ADHD.
  - Potential for new, noninvasive mental health monitoring techniques.



Other Examples of AI & XR in Healthcare

Compliance & Risk Management : AI bolstering auditing, compliance (HIPAA, GDPR) by scanning more cases in less time (KPMG).

Sustainability : VR-based training and remote consultations helping meet net-zero goals through reduced travel and resource usage (Rapid News Group, 2024).

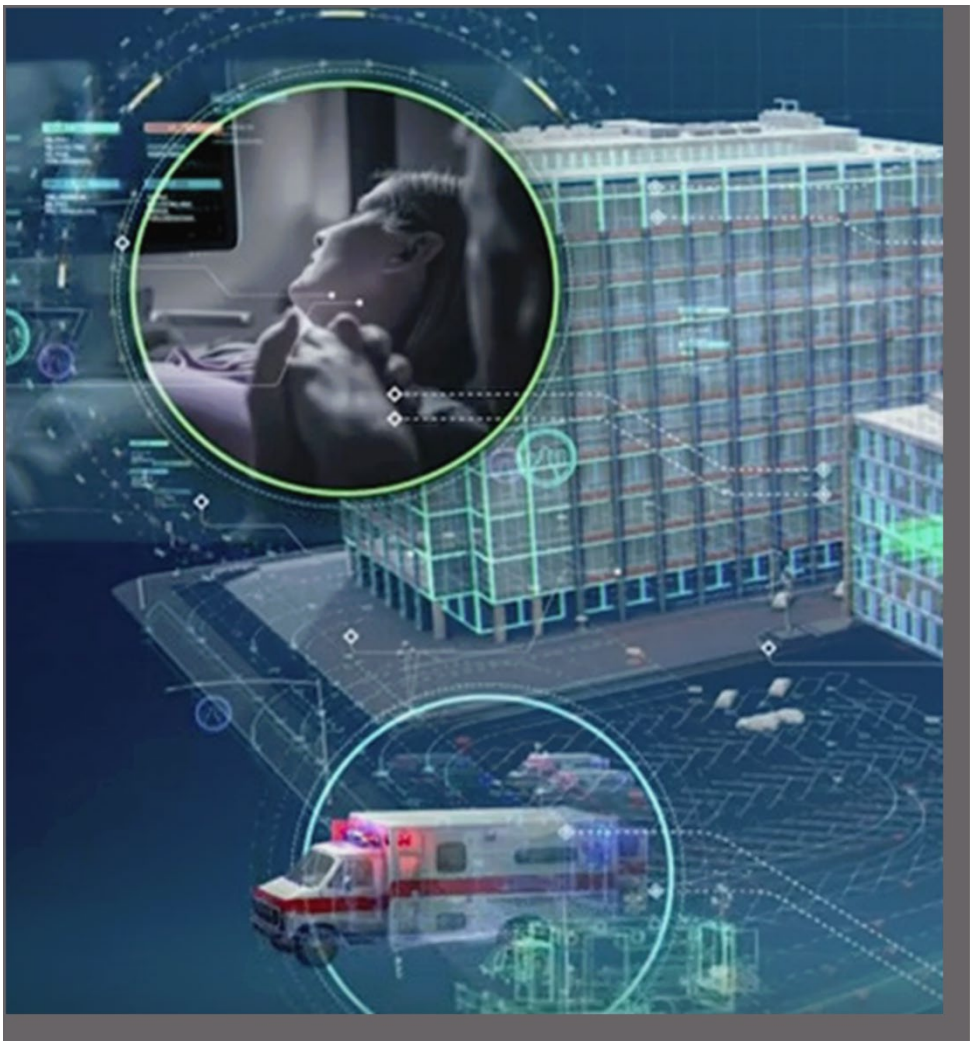


Image credit: Seeking Alpha

2. Education & Training

Education is another fast-growing sector for AI + XR, combining immersive experiences with AI-driven coaching, assessments, and dynamic content generation. The case studies here are a few examples of utilizing agents, improving tasks, and doing corporate training.

Immersive Conversational Agents

Case Study G : AI-driven Avatars

- Challenge : With traditional e-learning typically not providing real-time, adaptive feedback - soft-skill development can be limited and inconsistent.
- Solution : AI-driven avatars engage learners in natural language conversation, providing context-relevant feedback (VictoryXR, Bodyswaps).
- Impact :
  - Reduces training time and Increases learner confidence with a new competency.
  - Scalable to large cohorts with consistent quality.

AI / XR Virtual Classrooms

Case Study H : AI / XR Based Experiences

- Challenge : Traditional language learning lacks opportunities for practice and interaction.
- Solution : AI-driven interactions using new language in XR- based scenarios.
- Impact :
  - 9 times faster learning than traditional learning methods
  - 98.8 % reduction in anxiety associated with developing a new competency

Adaptive Narration & Personalized Tasks

Case Study I : Technical University of Munich

- Challenge : General VR learning can overwhelm users and lead to reduced engagement.
- Solution : Personalized AI-driven interactions in a virtual learning environment.
- Impact :
  - 64 % increased engagement
  - Increased attentiveness and retention of subject matter

University & Corporate Training

Case Study J : University of the National Education Committee (Poland)

- Challenge : While teachers learn to manage classrooms with experience - teacher training offers limited opportunities for real interactions and confidence building in conveying knowledge.
- Solution : AI-driven XR classrooms for teachers to practice pedagogical skills.
- Impact :
  - Faster teacher understanding and Increased confidence
  - Enhanced classroom awareness and content knowledge

Case Study K : Purdue Global Nursing Program

- Challenge : Need to address the nursing shortage, limited clinical sites, and nurse training high dropout rates.
- Solution : AI-based VR simulations (PCS Spark) for realistic patient interactions, automated speech recognition, and skill scoring.
- Impact :
  - 4,000 nurses trained with a 10 - 15 % rise in national exam pass rates.
  - significantly higher confidence in medical knowledge and skills (Gilmore et al., n.d.).

Case Study L : IMD Executive Education

- Challenge : Scaling personalized training to large cohorts of Business Executives.
- Solution : AI + XR “expert systems” that adapt to scenario difficulty and deliver real-time feedback.
- Impact :
  - Accelerated the development of new competencies
  - Many people progress simultaneously through the training program
  - No lengthy wait times for instructor feedback (Toms, 2023).

Beyond the Classroom

Corporate Up-Skilling : AI + XR training modules for workforce development.

BCG (2024) notes that top-performing enterprises use immersive training not just for productivity plays but to rethink core processes and invent new revenue.

This is important for people to increase their awareness, look ahead abilities, expand their competencies, etc. …. to enable the organization - make innovation more rewarding, better manage change, create new value, reduce risk, increase relevance and revenue, etc. to meaningfully improve outcomes.

3. Banking & Financial Services

Financial institutions leverage AI + XR to optimize employee and client on-boarding, compliance training, and customer engagement - for faster and better employee development and improved customer experiences.

AI-Powered On-boarding

Case Study M : Bank of America's VR Training Program

- Challenge : The need to on-board thousands of new people quickly while ensuring compliance with corporate policies.
- Solution : AI-powered modules with role-playing scenarios with iCoach providing informative and unbiased feedback.
- Impact :
  - 97 % of employees report greater confidence in their ability to perform tasks.
  - Trained 200,000 people.

Virtual Customer Assistants

Case Study N : Wells Fargo

- Challenge : The need to better manage high call volumes, operational inconsistencies, and limited financial literacy resources.
- Solution : Providing AI-driven XR experiences to simulate financial planning scenarios and the ability to guide people in making financial decisions.
- Impact :
  - 45 % reduction in average wait times for assistance.
  - Increased customer satisfaction scores.

Fraud Detection & Compliance

- Use Case : AI-based behavioral biometrics in immersive banking apps for anomaly detection.
- Impact : Reduced fraudulent transactions, and improved KYC/AML compliance.

4. Retail & E-Commerce

Retailers use AI + XR for virtual product try-ons, immersive store experiences, and dynamic inventory management to personalize the customer journey and deliver a great UX (User eXperience) to increase their appeal, revenue, margins.

AI-Driven Virtual Try-Ons

Case Study O : Lowe's AI & AR Shopping App

- Challenge : Avoid frequent returns due to mismatched expectations.
- Solution : AR with AI-based product recommendations.
- Impact :
  - 90 % higher conversion rates.
  - 25 % fewer returns.

Immersive Customer Engagement

Case Study P : Sephora's Virtual Artist

- Challenge : The need to get past limited in-store trials and variable makeup matching.
- Solution : AI-driven facial recognition and AR overlays for virtual makeup tests.
- Impact :
  - 70 % greater engagement than with traditional promotion campaigns.
  - 20 % increase in average purchases / basket size.

Future of Customer Engagement

- **Omni-channel Integrations** : AI tracks user behavior across channels, XR layers dynamic in-store or at-home experiences (CustomerThink, 2025).

- **Personalized Avatars** : AI-driven avatars in spatial or virtual marketplaces (ie: Highstreet) to assist with product selection, etc.

5. Manufacturing & Logistics

AI / XR helps manufacturers reduce errors, optimize complex supply chains, streamline operations, better manage labor shortages, improve workforce safety, etc.

Quality Control & Assembly

Case Study Q : BMW AI + AR Assembly Line

- Challenge : To reduce human error with complex vehicle assembly steps.
- Solution: AI overlays in AR glasses for real-time alerts and instructions.
- Impact :
  - 90 % drop in assembly errors.
  - 25 % improvement in production efficiency.

Workforce Training & Knowledge Retention

Case Study R : ExxonMobil VR Simulations

- Challenge : The need for knowledge from retiring personnel in hazardous training environments.
- Solution : AI-based VR modules that adapt to task requirements and learner difficulty based on user performance.
- Impact :
  - 30 % lower training costs
  - 45 % better retention with VR vs. classroom training.

Logistics Optimization

- **AR for Warehousing** : XR headsets with AI-driven route optimization that resulted in 20 –30 % faster picking times (KPMG).

- **Sustainability** : Replacing physical prototypes with digital twins reduces material waste and carbon footprint (Digital Realty, 2023).

6. Urban Planning & Construction

To accelerate smart city initiatives, urban centers are leveraging AI and XR for infrastructure design, stakeholder collaboration, construction, safety and other projects.

AI-Driven Infrastructure Design

Case Study S : Smart Cities Project in Singapore

- Challenge : Aligning multiple agencies on large-scale urban projects.
- Solution : XR simulations with AI for traffic optimization, and environmental impact.
- Impact :
  - Resulted in 22 % less time for project completions.
  - Enabled progress on sustainability initiatives.

Construction Safety & Collaboration

Case Study T : Skanska VR Safety Training

- Challenge : Reduce the high accident rates at construction sites
- Solution : AI-monitored VR modules teaching hazard recognition
- Impact :
  - 30 % fewer site accidents
  - Better stakeholder alignment on project designs and construction.

7. Defense & Security

Mission-critical training and simulation by military and security entities use AI and XR to replicate high-risk scenarios and improve mission readiness.

VR Combat & Disaster Simulations

Case Study U : U.S. DoD Pilot Program

- Challenge : Reduce accidents and costs of field training exercises.
- Solution : AI-driven VR providing various scenarios / drills and adapts to user behavior.
- Impact :
  - 25 % fewer training injuries, and increased situational readiness (DoD, 2024).

AI-Enhanced Situational Awareness

Case Study V : Skanska VR Safety Training

- Use Case : Using XR headsets with real-time object recognition threat detection and real-time secure communications.
- Impact : Faster, more accurate responses in critical or dangerous situations.

Maintenance Error-Reduction & Efficiency Improvement - US Air Force

Case Study W : Deploys Taqtile's Manifest for Jet Engine Maintenance & Technician Training

- Challenges : To address issues associated with -
  1. Maintenance of jet engines where expert technicians are not readily available
  2. Errors by experienced technician when performing complex or infrequent repairs
- Solution : Provide a system with step instructions for a range of complex repairs, and provide context-aware video, audio, and text overlays to head-mounted display devices.
- Impact :
  - Technicians using Manifest completed 100 % of the 28 tasks with 0 errors
    …. versus, those technicians using traditional methods could not finish 29 % of the tasks
    …. and of those tasks completed, they had a 60 % rate of error.

Maintenance Error-Reduction & Efficiency Improvement - US Navy

Case Study X : Deploy Taqtile's Manifest for Remote Submarine Maintenance

- Challenge : Need to improve the resiliency of maintenance and training in resource-constrained, remote locations, such as Guam.
- Solution : Mobilize maintenance workflows by downloading step instructions to head-mounted devices, using 'offline' mode for effective assistance in submerged or remote locales.
- Impact :
  - 100 % of sailors reported the value of Manifest for 30 % of maintenance tasks (specifically, those deemed complex, infrequent, lengthy, or error-prone).
  - Senior leaders indicated that Manifest provided unexpected value in the consistent performance of 'routine' tasks, and provided important maintenance audit and evaluation capabilities.
  - Senior leaders noted there was a high ROI by reducing complex task errors and less need for 'fly away' team deployments to remote locations with Manifest.

8. Marketing & Customer Engagement

Marketing initiatives are increasingly utilizing AI and XR for promotion campaigns, brand storytelling, event showcases, etc. where interactively engaging resonates with people. This is occurring because of the growing recognition that immersive experiences significantly increase brand awareness, appeal and differentiation.

Brand Activations & Real-Time Rendering

Case Study Y : Samsung at CES

- Challenge : Differentiating among hundreds of tech exhibitors.
- Solution : AI-based XR booths with interactive product demos, and real-time Q&A chatbots.
- Impact :
  - 60 % rise in booth engagement.
  - Higher lead generation (BCG, 2025).

AI-Driven Marketplaces & Avatars

- Use Case : Virtual / Spatial storefronts with AI agents acting as brand representatives (Highstreet).
- Impact :
  - More personalized shopper interactions.
  - New revenue channels for digital goods.

XR + AI with Spatial Computing

While XR and NPCs (Non-Player Characters) are common in gaming, AI-driven NPCs with XR visualization capabilities are increasingly being utilized in enterprises in Spatial Computing initiatives or Immersive Virtual Environments for education and community building where it's important to provide an experience that adapts to Users with dynamic, real-time rendering and is interactive - for more effective training, onboarding, marketing, operations, etc.

AI-Powered NPCs & Avatars

Galaxy Digital (2025) Outlook

- Key Insight : AI lowers production timelines, enabling more realistic, adaptive NPCs that react to player or user behavior.
- Enterprise Relevance : Faster 3D asset generation, improved real-time animations, and new forms of User engagement to increase service appeal

In Enterprises

- Use Case : Corporate VR campuses for on-boarding, events, product demos, etc.
- Impact : Can augment or potentially supplant physical offices or training centers to reduce overhead costs.

Immersive Virtual Environment Opportunities with AI / XR

- Use Case : To better connect and engage with people utilize Immersive Virtual Environments with real-time interactions, context-aware assistance, and advanced personalization.
- Impact : Immersive Virtual Environments meaningfully improve outcomes in healthcare, education, gaming, enterprise training and innovation (Lucid Reality Labs, 2024).

Security, Compliance, & Ethical Considerations

As the appeal of AI and XR grow and the technologies mature, concerns about user privacy, data security, and ethical deployment are being better addressed to respect –

Biometric Privacy

- Motion Disguise : A technique to mask the user's unique motion signatures while preserving functional inputs (ArXiv: 2501.07149).
- Broader Security Issues : ArXiv 2411.12766 outlines potential vulnerabilities and calls for stronger data governance in XR.

Regulatory Frameworks

- Healthcare (HIPAA) : Strict rules on patient data. AI-based XR solutions must anonymize or encrypt sensor data.
- Financial Services (KYC/AML) : XR experiences that gather behavioral data must comply with identity verification laws.
- GDPR : Covers EU user data and extends to XR-based biometric tracking.

Ethical AI Deployment

- Fairness & Bias : AI must avoid discriminatory decisions - particularly with learning or healthcare apps.
- Informer Consent : Users should know what personal data is collected and how it's used or stored

Strategic Recommendations

To realize the significant benefits with AI and XR, next steps include –

1. **Expand the Use Cases** : In addition to improving productivity, explore using AI / XR to re-imagine business processes, make innovation more rewarding, collaborate more with Partners / Customers, etc. to-
    A. grow current revenues / markets
    B. create new value
    C. expand revenue streams
    D. reduce business risk by better managing change
    E. better position the organization to evolve the business model

2. **Use Biometric Security** : Implement anonymization or disguise mechanisms for motion and eye-tracking data.

3. **Pilot AI-Powered XR Initiatives** : Start small, assess benefits, and measure ROI with metrics from error reduction, training outcomes, sales conversions, etc.

4. **Utilize Motion Data** : Analyze the large quantities of motion data that are collected to gain valuable insights on User behavior, tendencies, preferences, mindset, cognition, etc. – to guide service / product personalization, optimization, development / direction, etc.

5. **Leverage open technologies and platforms as well as the AI / XR ecosystems** : for more tool and solution options, faster deployment, etc. plus, be good at partnering and integrating technologies.

6. **Respect Regulatory & Ethical Standards** : Adopt " Privacy by Design " principles, as indicated in the GDPR, be pro-active in building data protection protocols into new products and technologies (rather than trying to address issues after there is harm.

7. **Collaborate with those having Vision, AI / XR knowledge, and the Mindset to Innovate for Impact** : To benefit from their experiences and insights to – fast track learning, how to think about the future, better understand what's needed to deliver a great User eXperience (human / machine interactions), set aggressive yet realistic goals, establish metrics, improve the probability of success, etc.

Glossary of Terms

- **AI (Artificial Intelligence)** : Machine-based systems that perform tasks requiring human intelligence, such as learning, reasoning, and self-correction.
- **AR (Augmented Reality**) : Overlay of digital objects in the real world, often via smartphones or AR glasses.
- **XR (Extended Reality**) : A collective term for VR, AR, MR, and other immersive technologies.
- **VR (Virtual Reality)** : Fully immersive simulated environments, typically experienced via headsets.
- **Conversational Agents** : AI-driven bots or avatars that communicate in natural language, often integrated into XR training and simulations.
- **NPC (Non-Player Character)** : AI-driven “characters” in a virtual world, capable of dynamic interaction with users.
- **Digital Twins** : Virtual replicas of physical systems, enabling simulation and predictive analytics.
- **Biometric Data** : Unique identifiers like eye tracking, gesture tracking, or motion signatures used for personalization or security.
- **HIPAA** : U.S. regulation protecting personal health information; relevant to healthcare XR solutions.
- **KYC/AML** : Compliance measures in finance to verify customer identity and prevent illicit activities.
- **HIPAA, GDPR** : Regulatory frameworks requiring data security, privacy-by-design, and transparent data usage.
- **Spatial Computing** : Computing paradigm that merges physical and virtual spaces, heavily associated with devices like Apple Vision Pro.
- **HapticVR** : VR systems that incorporate haptic feedback for tactile realism.
- **Adaptive Learning** : AI-driven approach that tailors educational content based on user performance, often used in XR training modules.

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42. U.S. Air Force Deploys Taqtile's Manifest for Jet Engine Maintenance & Technician Training Taqtile

43. U.S. Navy Pilots Taqtile's Manifest Remote Submarine

* Note: This is an updated report based on the following documents –

A. The Strategic Importance of AI & XR by CAIL published in Dec 2024 –

https://www.cail.com/wp-content/uploads/2024/12/CAIL-AI-XR-Whitepaper.pdf

B. The VRARA AI / XR Whitepaper published in Mar 2025 –

https://www.thevrara.com/blog2/2025/3/19/vrara-releases-new-whitepaper-on-ai-xr-the-future-of-enterprise-innovation