CGSImmersive

Extended Reality (XR):
Getting Started Guide

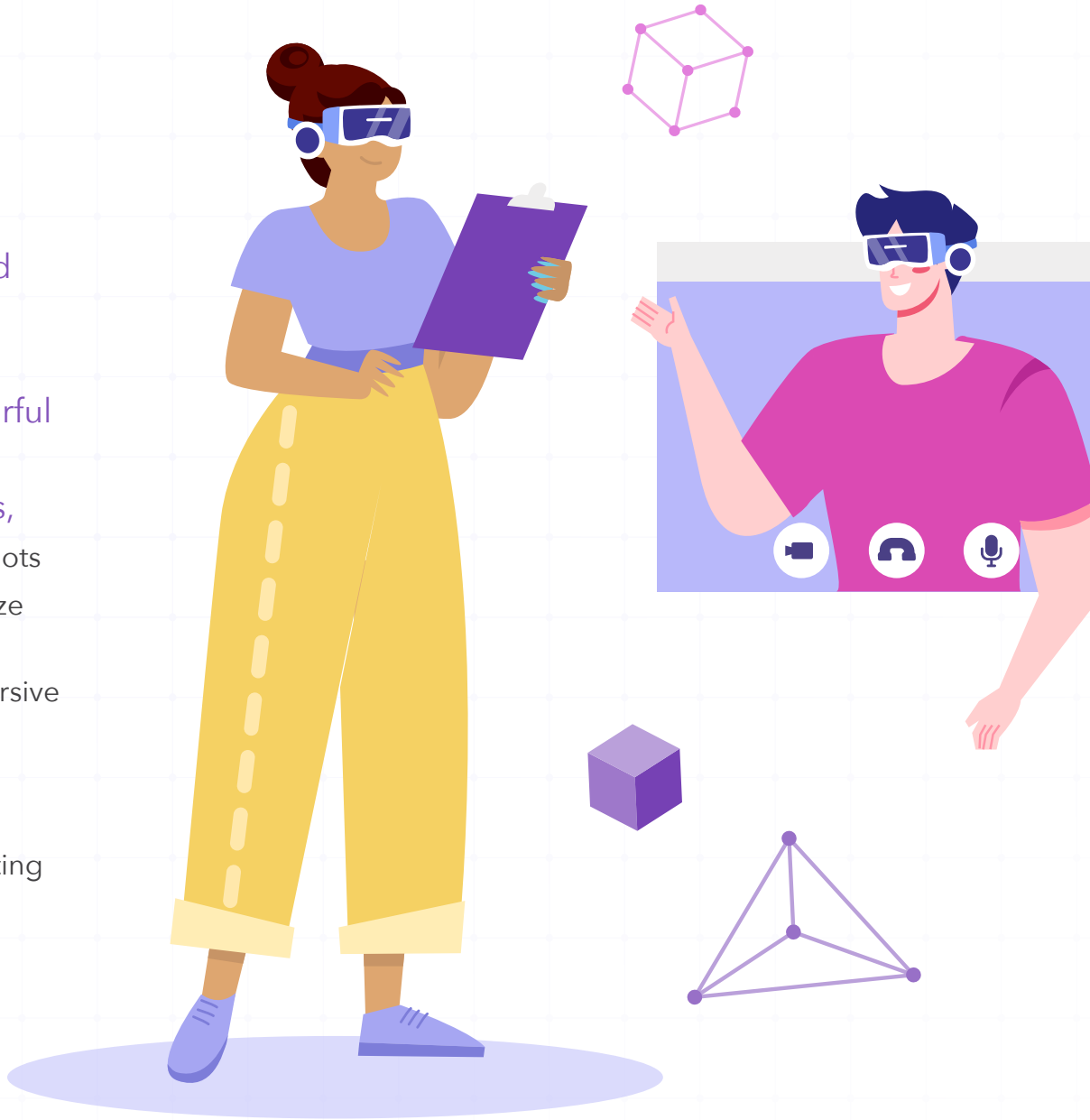
Summary

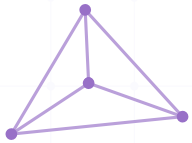
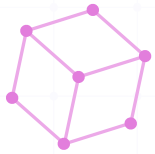
This guide outlines key workstreams and provides tips for organizations to structure their XR technology exploration initiatives:

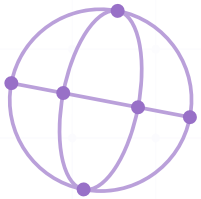
1. **XR Stocktake:** Evaluate current XR initiatives, alignment with organizational goals, and identify opportunities.
2. **XR Orientation/Education:** Focus on hands-on experiences and understanding XR's capabilities beyond the basics.
3. **Identify Use Cases:** Uncover business pain points and prioritize use cases based on impact, alignment, and feasibility.
4. **Stakeholder Engagement:** Involve cross-functional teams, gain management support, and facilitate collaboration.
5. **Pilot Testing and Iteration:** Conduct pilot testing and iteration to refine the user experience.

Introduction

In today's rapidly evolving world, Extended Reality (XR) technologies, including Virtual Reality (VR), Augmented Reality (AR), and Mixed Reality (MR) have emerged as powerful tools for businesses to enhance their operations, improve customer experiences, and stay ahead of the competition. There's lots written and said about it's potential to revolutionize various industries by enhancing productivity, improving training programs, and enabling immersive experiences. Whether you are already familiar with XR or just starting to explore its potential, this comprehensive guide will equip you with the knowledge and strategies to navigate the fascinating realm of XR in your organization.





XR Stocktake

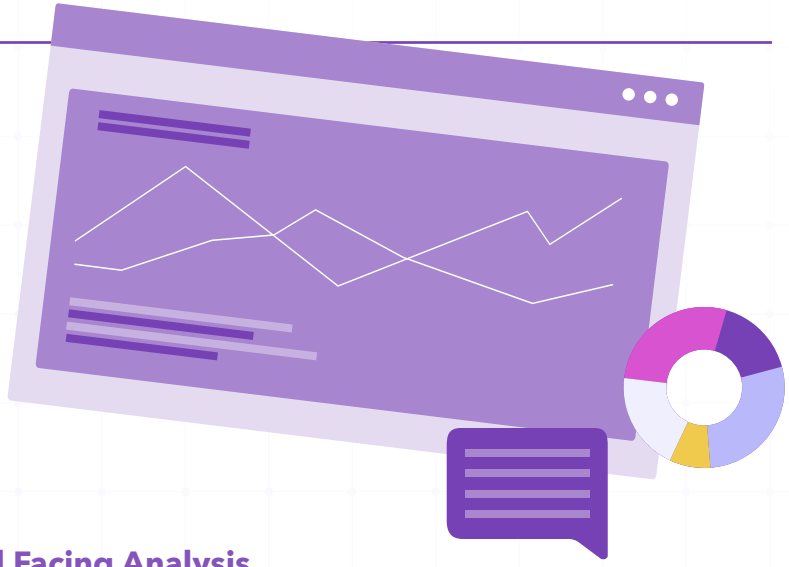
Conducting an XR Stocktake is a crucial step before embarking on any XR initiative within an organization. This exercise involves assessing the current state of XR initiatives within the organization and identifying areas of alignment, dis-alignment, and opportunities. Here's a breakdown of the XR Stocktake process:

- **Assess Current XR Initiatives:** Begin by gathering information about all ongoing XR initiatives within the organization. This includes identifying teams or side-projects that are working on XR-related projects or exploring XR technologies in any capacity.
- **Evaluate Alignment:** Analyze each XR initiative to determine its alignment with the organization's overall goals and objectives. Assess how well each initiative aligns with the strategic direction, mission, and values of the organization.
- **Identify Dis-Alignment:** Identify any areas where the current XR initiatives may not align with the organization's goals or may be redundant or overlapping. This helps identify potential inefficiencies or areas for improvement.
- **Identify Stakeholders:** Determine the key stakeholders involved in each XR initiative. This includes identifying teams, individuals, or departments responsible for driving these initiatives forward. Understanding the stakeholders helps ensure effective communication and collaboration throughout the deployment process.
- **Identify Internal Expertise:** Assess the internal expertise available within the organization related to XR technologies. Identify individuals or teams with relevant knowledge and skills who can contribute to driving the XR initiatives forward. This includes both technical and non-technical individuals.
- **Map External Parties and Stakeholders:** Identify external parties and stakeholders that may have an interest in the XR. This includes hardware/software vendors, service integrators and professional service providers.

XR Orientation/Education

XR Orientation/Education is all about exploring what XR can achieve and envisioning its potential applications. Here organizations should focus on understanding the capabilities of XR through research, hands-on experience, and demos. It's important to keep an open mind and take note of the capabilities that businesses can leverage to drive benefits. A 360 degrees video or a digital twin is part of what XR offers but that's not all. Try to understand what the technology can do by looking at resources like hardware specifications, SDKs, APIs, etc.

- **Provide hands-on experiences with XR technology whenever possible.** Allow participants to interact with VR headsets, AR applications, or other XR tools. Practical experience often leads to better understanding.
- **Encourage participation from diverse teams and departments within your organization.** XR has applications across various domains, so involving a cross-functional group can lead to creative ideas and insights.
- **Invite guest speakers or experts in the XR field to share their knowledge and experiences.** They can provide valuable insights and inspire your team with real-world examples.



Use Case and XR-Based Solutions Identification

Armed with a good understanding of your current state and XR capabilities, you are now ready to identify and prioritize key use cases.

Inward Facing Analysis

Your first set of use cases can come from an **inward facing analysis**. You can do that by asking questions like:

- **What pain points and challenges do we face in business that could XR could solve?** E.g. reducing costs associated with traditional training methods or creating immersive customer experiences to drive engagement.
- **What business opportunities could VR unlock for us?** E.g. new revenue streams or business models, such as creating virtual showrooms or developing VR-based products.
- **Which existing initiatives (from stocktake) can be leveraged or expanded upon to create additional value for the organization?** This could involve identifying synergies between different projects, or finding ways to enhance existing initiatives.

External Facing Analysis

The second set of use-cases can be inspired by **external real-world examples**. Looking at real-world examples of how XR has worked for other organizations will provide valuable insights into the benefits and potential drawbacks of the technology. Customer stories can be a great source of inspiration for businesses looking to leverage XR in innovative ways. It's also through these stories and case studies you will find service and solution providers whom you may want to work with.

Apart from customer stories from solution providers websites and social media channels, you can also find inspiration from speaking with industry peers. Here's a good collection of XR use-cases which you can also use:

Click for Case Studies

Use-Case Prioritization

After identifying potential use cases, it is important to prioritize them based on their potential impact and feasibility. This will help determine which use cases should be pursued first and which ones can be addressed later. By prioritizing the use cases, you will ensure that you are focusing your efforts and resources on the most promising opportunities and maximize the benefits of XR technology.

- **Consider both short-term and long-term impacts.** Some XR applications may yield immediate benefits, while others could be more transformative in the future.
- **Prioritize projects that have strong support from relevant stakeholders.** It is important to involve all relevant stakeholders.
- **Consider implementing XR use cases in phases.** Prioritize those that can serve as foundational elements for more complex applications in the future. This phased approach allows you to build expertise and infrastructure gradually.
- **Consider conducting small-scale experiments or prototyping for high-potential XR use cases.** This can provide valuable insights into feasibility and user acceptance.

Engaging Stakeholders

Engaging stakeholders is crucial for successful VR implementation. Identify key stakeholders who will be involved in the execution and decision-making process and ensure their buy-in and support. This includes champions, executives, department heads, IT teams, and end-users who will directly interact with the VR solutions.

- **Gain buy-in and support from upper management.** When leadership understands the potential of XR, it becomes easier to allocate resources and prioritize XR initiatives.
- **Facilitate discussions and collaboration among participants to foster the exchange of ideas.** Encourage teams to share their XR visions and explore potential cross-functional projects.

Developing a Strategy

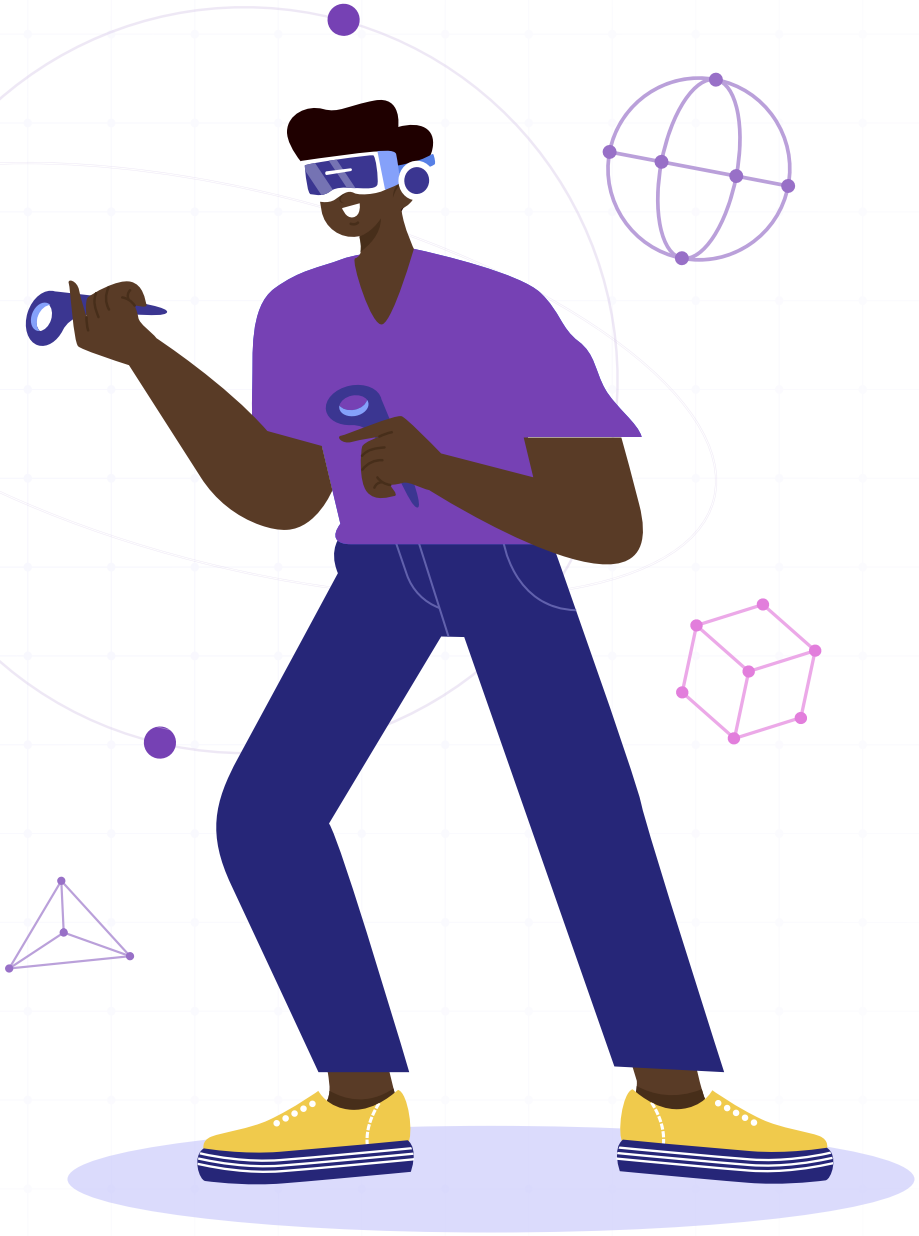
With a clear understanding of VR capabilities and identified use cases, develop a comprehensive strategy for VR implementation. Define the scope of the deployment, timeline, budget considerations, and resource allocation. Consider factors such as hardware requirements, software platforms, content creation, and integration with existing systems.

- **Choose appropriate VR hardware based on your use cases and objectives.** Consider factors like headset compatibility, tracking technology, and computing power.
- **Select the software platforms or development tools that best suit your needs.** Evaluate available VR software solutions and determine whether custom development is required.
- **Plan for content creation or acquisition.** Determine whether you'll develop VR content in-house or partner with external content creators. Content quality is crucial for user engagement.
- **Assess how VR technology will integrate with your existing systems and workflows.** Ensure compatibility with your current IT infrastructure and data sources.
- **Establish a process for ongoing evaluation and optimization of your XR strategy.** Technology evolves, and user needs change, so be prepared to adapt and improve.
- **Develop a change management and communication plan to keep stakeholders informed about the progress and benefits of your XR implementation.** Address any resistance to change through effective change management strategies.

Pilot Test and Iteration

Before fully deploying XR solutions, conduct pilots to evaluate performance, identify issues, and make adjustments.

- **Choose a user group that represents the intended audience for your XR solution.** This group should provide valuable feedback and insights based on their real-world needs and expectations.
- **Encourage users to provide detailed feedback on their experiences with the XR solution.** Use surveys, interviews, and feedback forms to gather their insights on usability, functionality, and performance.
- **Prioritize user safety and comfort, especially in VR applications.** Ensure that users are not experiencing discomfort, motion sickness, or any adverse physical effects.
- **Consider an incremental approach to iteration.** Rather than making sweeping changes, implement improvements step by step to evaluate their impact on the solution's performance.



Conclusion

Whether you're familiar with XR or just beginning to explore its potential, this guide equips you to navigate this exciting realm within your organization.

The journey begins with a critical XR Stocktake, evaluating your current XR initiatives, alignment with organizational goals, and identifying opportunities. XR Orientation/Education is next, focusing on hands-on experiences and understanding XR's capabilities beyond the basics.

Identifying use cases is pivotal. Internal assessments uncover business pain points, while external examples and industry insights provide inspiration. Prioritization follows, considering impact, alignment, and feasibility.

Stakeholder engagement is crucial. Involve cross-functional teams, gain management support, and facilitate collaboration. Develop a comprehensive strategy, considering hardware, software, content, and integration.

Before full deployment, conduct pilot testing and iteration, refining the user experience incrementally. This holistic approach positions your organization to harness XR's transformative potential in today's ever-evolving digital landscape.

About the Author

Adam Shah is a former member of Meta's Reality Labs Enterprise Solutions team and is now working with CGS Immersive. Adam has over 25 years of experience in Enterprise Consulting and Project/Program Management, having worked with industry leaders such as Google and Accenture.

Throughout his career, Adam has designed and successfully delivered digital transformation initiatives, leveraging emerging technologies for some of the world's largest global brands.

Most recently, Adam co-founded BloomXR with another former Meta employee. BloomXR is a professional service provider dedicated to helping organizations embark on their XR journey.