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Company Overview

We Solve Problems with Immersive Tech Solutions

Who are we?

BSD is a Canada-based company with a focus on solving big problems using immersive technologies. We bring innovative solutions to the table.

Our focus on virtual and augmented reality has positioned us as a leader in the XR industry because of our innovative approach to actually solving the problem you face.

Founder

I am Dan Blair

“I founded Bit Space in 2015 to change the way we approach problems in industries that need change the most. An interest in spatial computing and immersive technologies is what lead us to tackle these serious applications for innovation”

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83%

Retain more after training in VR - Oculus Research

93%

Participants enjoyed experience - BSD Surveys

40+

Active deployments to date

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> Immersive technology, also known as extended reality (XR) technology, is a blanket term that covers a variety of mediums that combine the real world with the virtual world in varying degrees.
>
> These technologies can either bring you into the virtual world (ie: virtual reality) or bring the virtual into the real world (ie: augmented reality).

What is the difference between AR and VR?

Virtual reality puts you inside the digital world

Augmented reality brings digital objects into the real world.

What Does The Mixed Reality Device Landscape Look Like?

Smartphone-based VR

PC-Based VR

Standalone VR

Smartphone/Tablet-based AR

Headset-based AR

Smartphone VR Options

Smartphone-based VR headsets were among the first virtual reality systems to be available to consumers and businesses.

- **Advantages**
  - Affordable
  - Accessible
  - 360-visuals
- **Disadvantages**
  - No Spatial Awareness
  - Drains Smartphone Battery
  - Limited Input Options

Mobile AR Options

Smartphone-based AR is the most accessible form of augmented reality. Most people already a compatible device. Most modern smartphones support AR experiences, including Apple iPhone 6S and newer, and Android devices built within the last four years should work. Google and Apple both offer free software to help developers create experiences for these platforms.

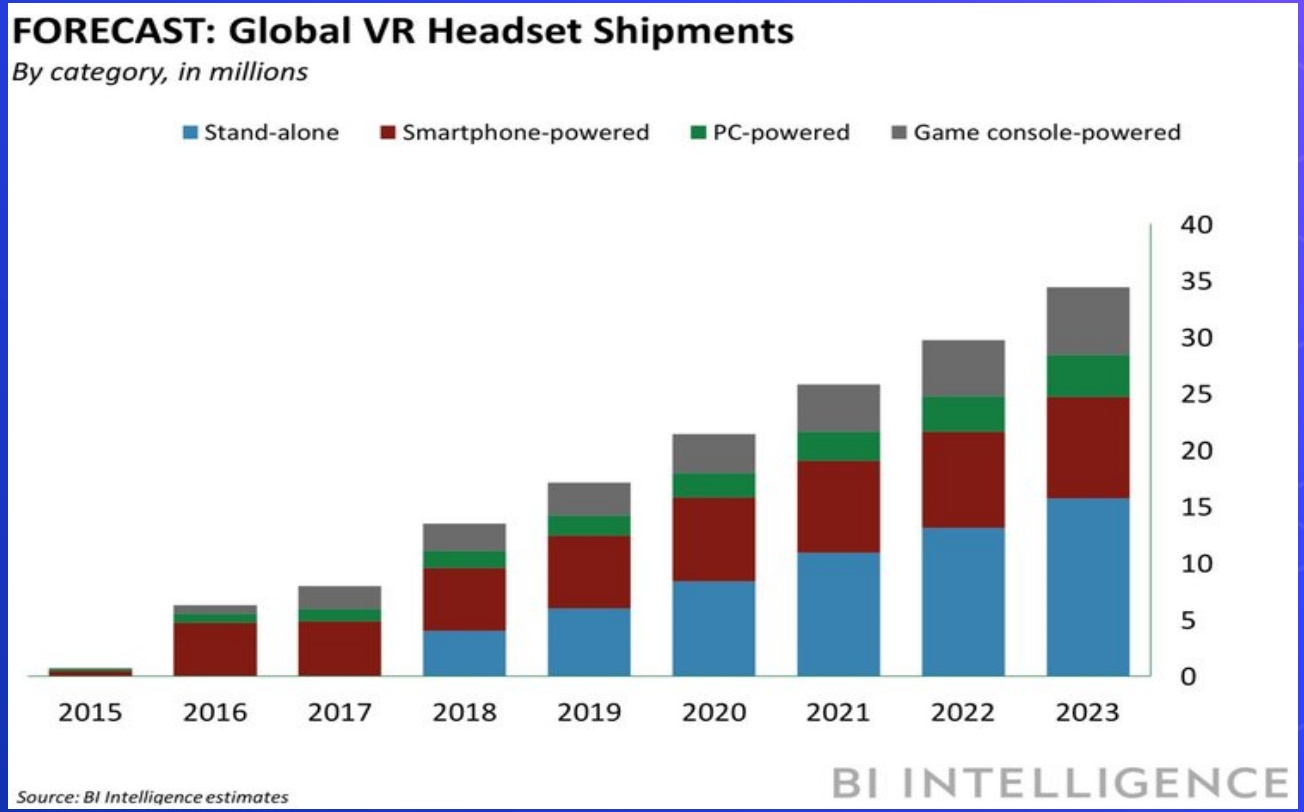
- Advantages
  - Accessible
  - Portable
- Disadvantages
  - Not Hands-free
  - Not fully Immersive

Why Should You Care About XR Technology?

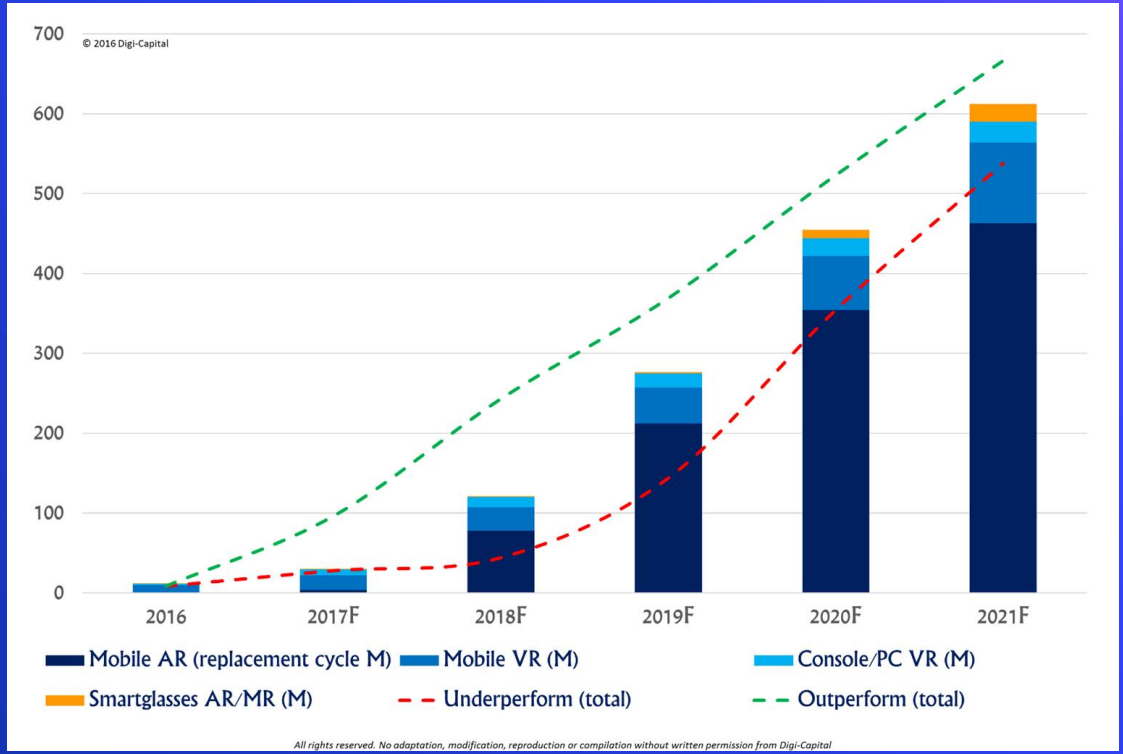
Adoption of immersive technology in the workplace is on the rise and major organizations are taking this technology very seriously.

VR facilitates:

- Making Workplaces Safer
- Improving Onboarding Procedures
- Making international collaboration easier and cheaper
- Helping product designers iterate faster
- And much more!



VR Growth year over year 2019 - 2021



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Virtual Reality: Enhancing Training & Education

So Who's Using XR at Work?

- Retail Companies
- Trucking/Courier Businesses
- Military
- Medical Professionals
- Product Designers
- Manufacturing Companies
- Construction Companies
- Aerospace Companies
- Agriculture Companies
- Engineering Firms
- Scientific Researchers

Real Examples

Walmart uses VR for Training

Walmart uses VR to prepare new employee to do their jobs. The company uses VR to teach people how to interact with customers handle escalated issues, and use company equipment. Walmart also uses VR to evaluate management candidates with grea success.

“When you watch a module through the headset, your brain feels like you actually experienced a situation. We’ve also seen that VR training boosts confidence and retention while improving test scores 10 to 15 percent – even those associates who simply watched others experience the training saw the same retention boosts.” - Andy Trainor, Senior Director of Walmart U.S. Academies.

Try on the Trades (TradeUp Manitoba)

Virtual Reality for Safety

Source: https://sacramento.cbslocal.com/2019/12/12/cosumnes-firefighters-training-virtual-reality/

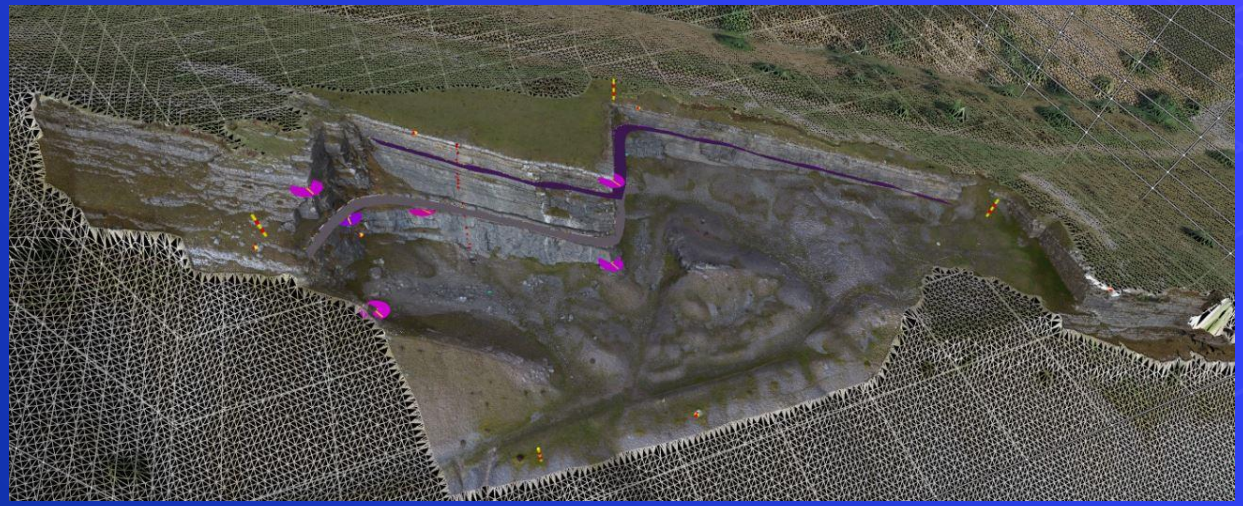
UPS Drivers Learn in VR

UPS employs thousands of delivery drivers across North America. In 2017, the company launched a virtual reality training process that helps new drivers learn how to avoid road hazards without putting them and others in danger.

“Virtual Reality offers a technological leap in the realm of driver safety training,” said Juan Perez, UPS chief information and engineering officer. “VR creates a realistic streetscape that will impress even the youngest of our drivers, whose previous exposure to the technology may have been through video games.”

Data Visualization

Dr. David Hodgetts at the School of Earth and Environmental Sciences at the University of Manchester created a tool called Virtual Reality Geological Studio, which is a 3D visualization tool for field based geology and geophysics using point cloud data.



Virtual Geology Field Trips

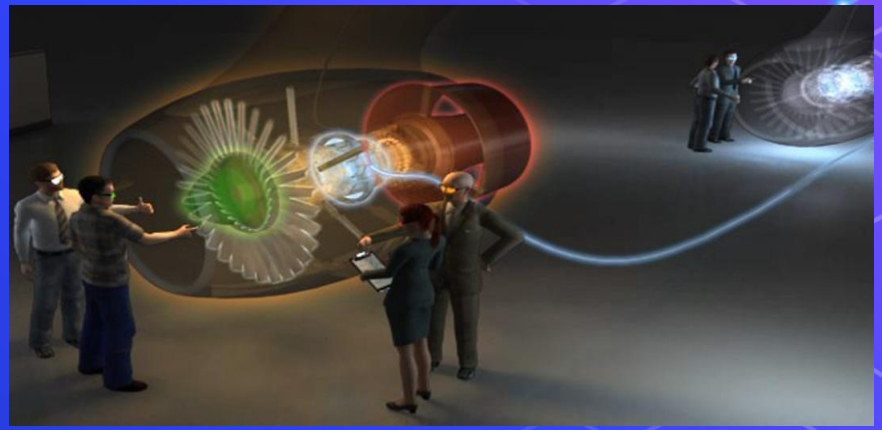
Geo Education Europe’s Virtual Reality Geology Field Trips app enables you to visit geological sites without the expense of travelling around the world. You can visit any location with the use of a VR simulation, which reduces the costs for geoscience education.

Skills Training

“Virtual Reality offers many advantages in the Oil and Gas marketplace. By creating a Virtual representation of several Rock Outcroppings, students can hone their skills and learn advanced competencies regardless of where they’re located,” said Mats W. Johansson, CEO and President of EON Reality. “Applications like these are a testament to Virtual Reality’s ability to transfer knowledge efficiently and effectively while reducing risk and costs, in this case travel costs.”

Product Designers Use VR and AR to Iterate Faster

Automobile designers, heavy equipment producers, tool makers, clothing designers, toy makers, and many other companies use XR technology to view full-scale virtual mockups of the products they make, which enables rapid iteration and collaborative decision making at a fraction of the cost of creating physical mockups.



XR Technology Can Bring Remote Teams Together

XR technology offers amazing collaborative potential. You can bring remote teams together without sending people across the country or around the world. No matter where you teammates are, you can all join the same virtual environment.

Level Up VR

An immersive VR experience focused on taking youth onto job sites for the first time and exploring the hazards they may encounter.

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“ Bit Space developed a VR training app for iOS and Android devices that immerses users into different environments to teach them about workplace health and safety.

Community Liaison - Torin Proulx

What Did We Learn?

This project challenged us to really focus on optimization and the scalability of the environment. This tool was built for the Oculus Quest standalone hardware.

Because this tool was geared towards events deployments and the target audience is younger we had to consider the physical location more than average.


Total Triangles: 338420
Selected Triangles: 0
Selected Triangles (+Children): 0


BellMTS Place
GAME SPONSOR
SAFE WORK MANITOBA
MB 1 5:47 3 IA
17 SOG 24
LEVEL UP YOUR WORKPLACE
VISIT LEVELUPMB.CA
LEVEL UP YOUR WORKPLACE SAFETY KNOWLEDGE AND WIN!
NISSAN
SAFEWAY
MR. LUBE
Payworks
pizza pizza

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Power Tools

A complex virtual reality tool for simulating power tools and safe work practices on the job.

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“ Bit Space Development Ltd. developed five virtual reality modules to promote hazard awareness in the construction industry.

Executive Director - Carol Paul

What Did We Learn?

In this application we had a heavy focus on interacting with power tools in a VR experience. We needed to understand the dangers and know what PPE was required.

We worked with experts in the field to create the learning objects and a process that learners would go through that mimicked safe work practices on a real job site.


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Switch SDK setup
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34
Development Build

IBEW 2085 - Safety VR

A 360 degree photo-driven virtual reality course exposing new entrants to hazards and safe work practices on various construction sites

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“ Bit Space Development Ltd. built VR learning modules to virtually train electricians from remote areas. Bringing the job site to classrooms, electricians could get safety certificates without traveling.

Director of Apprenticeship & Training - Chris Taran

What Did We Learn?

This application challenged us to think about how a high quality experience can be delivered to remote locations. Both from the software and hardware components.

The entire experience does not need a network connection once installed. All 5 modules can run from a stand alone VR headset or your smartphone with a VR viewer.

intro

Hotspots: 1/1

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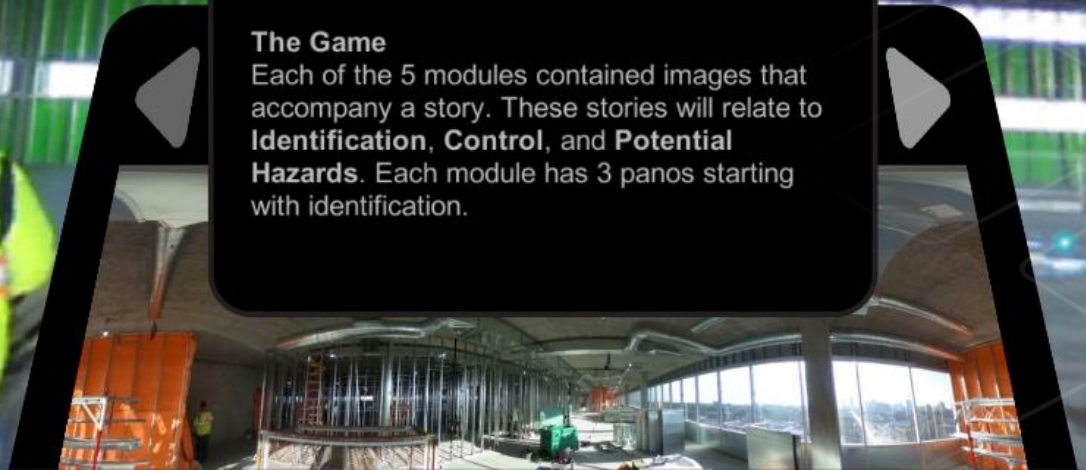
Sips Trips and Falls

Produced at Bit Space Development in cooperation with the Manitoba Construction Sector Council for the IBEW and funded by the Workers Compensation Board.

Instructions
As you look around you will see real job sites. We have embedded interactive hotspots like this one which are activated when you look at them.

The Game
Each of the 5 modules contained images that accompany a story. These stories will relate to **Identification**, **Control**, and **Potential Hazards**. Each module has 3 panos starting with identification.



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Measuring Success

How do we measure success?

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Determine Success Early

Performance Metrics

Engagement:

How are users interacting with your software? Are people enjoying the experience? Are users able to complete the tasks?

Retention:

Are people retaining the content which was delivered? Are we able to quiz the users and show an increase in knowledge which has been shown to them?

Performance:

Are users working faster or more accurately after augmenting their workflow? Has the process been improved?

Thanks!

Any questions?

You can find us at:

@bitspacedevelop

info@bitspacedevelopment.com

Credits

- Try The Trades - 93% engagement
- BSD Portfolio - 40+ engagements
- Venturebeat - 83% better retention


VIVE