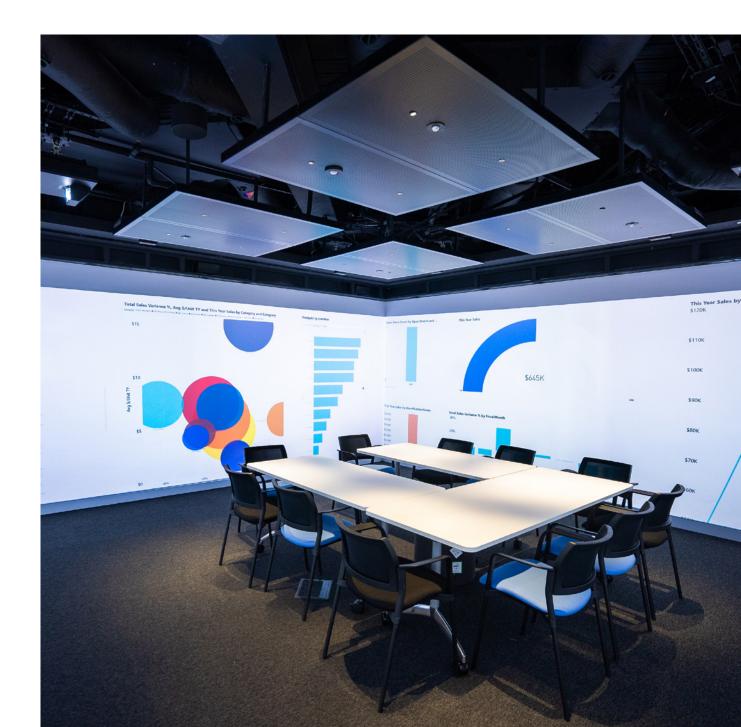


Measuring the return on investment of your shared immersive space





The question of return on investment is a big one

Return on investment, or ROI, is something we frequently get asked about.

It's understandable - an Igloo shared immersive space (or any kind of immersive space) can represent a significant investment for an organisation, from the financial cost, to the time needed for installation, to the floorspace, to the training of its users.

Potential customers often want to know how they can quantify the value an Igloo immersive space will bring to their business.

So, we've put together this document to help.

By measuring not just the return, but the uptake of the technology in your organisation, you'll be able to see if you and your teams are getting the most out of your new Igloo space. And, if you find that the technology isn't being used to its full potential, we want to help you change that. (After all, the last thing we want is for our customers to stop using their Igloos.)

Of course, every organisation is different, with different applications, different priorities, and different metrics. So, the metrics that matter to you will differ. But we hope that you'll find some ideas here that you can take forward.



In this white paper, we cover:

01	How some of our existing clients have evaluated the impact of their Igloo immersive workspace
02	Five methodologies you can use to measure the impact yourself, including:
	1. Adoption within the business
	2. Time or money saved
	3. Impact on learning outcomes
	4. Audience or employee engagement
	5. Overall impact on enhanced workflows
03	How we can support you to optimise the ROI of your immersive space



How our customers have evaluated the ROI on their Igloo immersive spaces

Below we've shared some examples of the value our customers have realised from their investments in Igloo.

5

Lanes Group Making training more effective with Igloo shared immersive spaces

6

Med Learning Group Delivering continued professional healthcare education with Igloo immersive technology

7

Lendlease Using Igloo technology across the project lifecycle

8

Mid Sweden University Simulating crisis scenarios with shared immersive technology

9

Wessex Water and AECOM Using Igloo technology to improve teamwork and save costs

10

SHoP Architects Visualising the unbuilt with Igloo immersive technology

11

Welsh Water Using Igloo technology to work more efficiently

12

Prism Offsite Manufacturing Using Igloo technology across project lifecycles

13

Hudson Pacific Properties Using Igloo Shared VR to preview Hollywood's latest development

14

Crowe

Using Igloo technology to catalyse some blue-sky thinking





Lanes Group

Making training more effective with Igloo shared immersive spaces Lanes Group plc is the UK's largest independent drainage and utilities specialist. It manages an extensive wastewater network for a large water utility – with hundreds of field engineers completing more than 1,000 maintenance jobs every day. The company wanted to fast-track the induction and training of its maintenance teams – by immersing them in life-like scenarios.

Igloo partnered to create a smart training facility based on a custombuilt 7-metre cylinder. In batches of 15-people at a time, new recruits are able to interact with a growing curriculum of training content. Lanes Group's initiatives led to:

Employee engagement

- **57% reduction** in employee attrition
- **9% reduction** in employee feelings of unhappiness

Time and money saved

£1 million reduction in
recruitment and training costs

66

The Igloo acts like a giant virtual reality headset. Up to 15 people can receive sewer maintenance training that's as lifelike as possible, without them getting their feet wet. The Igloo brings a level of innovation and magic to what we do every day."

Andy Brierley, Director, Lanes Group plc

98% of participants

indicate the VR content enhanced the learning experience

Med Learning Group

Delivering continued professional healthcare education with Igloo immersive technology Med Learning Group focuses on developing and implementing continuing education that improves the ability of healthcare professionals (HCPs) to provide optimal care to their patients. It owns three Igloo cylinders that it deploys at medical education events across the US.

Drawing on its scientific background, Med Learning Group employs robust research techniques to judge knowledge acquisition, attitude change, and recall among its audiences. Its educational programmes, in combination with its VR Rooms, have led to:

Impact on learning

- 93% of learners identify a commitment to a practise change based on the education
- A 31% gain in knowledge with 81% answering knowledge-based questions correctly after the activity compared to 62% beforehand
- 98% of participants indicate the VR content enhanced the learning experience
- 90% of participants indicate the VR content would improve recall of lessons learned

Audience engagement

 More than 9 out of 10 participants agreed that they would recommend the programme to their colleagues

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It was a really dynamic experience, it really captured my attention and everything was presented very clearly - it kept me engaged throughout."

"It really brings everything to life, it's not just something you see on a page. You can get inside what you're learning about and it makes things stick better in your mind when you can physically see the content."

Healthcare practitioner testimonials





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Lendlease

Using Igloo technology across the project lifecycle

A leading international property and infrastructure group, Lendlease worked with Southwark Council to deliver a £2 billion regeneration programme on 28 acres of land in the centre of London's Elephant & Castle. It installed a 6-metre Igloo cylinder that became its VRoom - a shared immersive space used by all departments, including projects, sales, safety and design.

Time and money saved

- It could save weeks in making decisions - where a decision previously took six-to-eight weeks, using the VRoom meant an agreement could be made in five minutes
- When carrying out design reviews, clashes were detected much more quickly and changes or corrections could be made with a five-minute phone call

Audience engagement

 Lendlease has used its Igloo to engage with the local community, particularly with school children who normally wouldn't be exposed to a construction site but can experience this type of situation without and health or safety risks

Enhancing workflows

• Using the VRoom is a collective experience that supports collaboration and fosters enhanced design outcomes

Saving time

and creating scenarios that would otherwise be too costly or dangerous

Mid Sweden University

Simulating crisis scenarios with shared immersive technology

Mid Sweden University's Risk and Crisis Research Centre (RCR) studies risk communication and risk mitigation and crises such as forest fires, disease outbreaks and violence with civil unrest. It retro-fitted an existing room with Igloo technology to create its Simulation Lab, where researchers can study scenarios they would be unable to in the field. By using an Igloo shared immersive space, Mid Sweden University has noted:

Time and money saved

- The University can recreate crisis scenarios that are too dangerous or costly to observe in the field
- The University has also been able to deliver training to groups to train several times in a more cost-effective way

We seldom do things where there is only one participant in the RCR Simulation Lab, and as we're a majority of sociologists, we're mainly interested in seeing the human interaction, and that would be lost if we focused too much on VR headsets. There's a risk of people acting like isolated planets, just floating around in a VR environment."

Jörgen Sparf, Associate Professor of Sociology at Mid Sweden University

Potential savings of £300,000

by using the BIM models to rationalise layouts in the wastewater treatment and low-lift pumping station

Wessex Water and AECOM

Using Igloo technology to improve teamwork and save costs

Wessex Water and AECOM used an Igloo cylinder in their £50 million project to refurbish the Durleigh Water Treatment Centre. AECOM created 3D BIM models containing data from ground-penetrating radar, drone surveys, and laser scans, that can be interacted with inside the Igloo. The Igloo could accommodate teams of up to 12 people at a time, with AECOM noting that design reviews carried out from within the Igloo helped with design coordination, stakeholder buy-in, and plant operability reviews. The use of the Igloo in combination with the BIM models led to:

Time and money saved

• Potential savings of £300,000 by using the BIM models to rationalise layouts in the wastewater treatment and low-lift pumping station

Enhanced workflows

More than 100 structure
 clashes eliminated during the
 design process with automated
 clash detection

With Igloo you can look someone in the eye when you're talking to them and quickly understand that you're talking about the same thing, you can gauge their interest and see if they understand what you're saying."

James Leverton, Digital Solutions Lead, AECOM



SHoP Architects

Visualising the unbuilt with Igloo immersive technology

The firm of architects based in New York created a standout immersive facility for its headquarters, comprising a custom Igloo cylinder. It uses the Igloo to accelerate the planning and decision-making process, work with collaborative digital whiteboard apps, and to use Zoom for remote team working. SHoP Architects has seen:

Audience engagement

 By immersing a client in an interactive 3D model of a proposed open-office design, SHoP Architects was able to demonstrate how a combination of shading and planting within the space would bring privacy without compromising the design

Significant savings

 the Igloo paid for itself on the first large scheme, with 50 more to follow

Welsh Water

Using Igloo technology to work more efficiently Welsh Water used an Igloo cylinder to show computer-aided design (CAD) and building information modelling (BIM) data in 360°, allowing its engineers to step inside and finetune design concepts. By displaying Google Street View data, it helped construction teams to get better acquainted with the details of the environments in which they would be working. And, by projecting panoramic imagery of faraway locations, it reduced the need for multiple site visits. Through its Igloo, Welsh Water achieved:

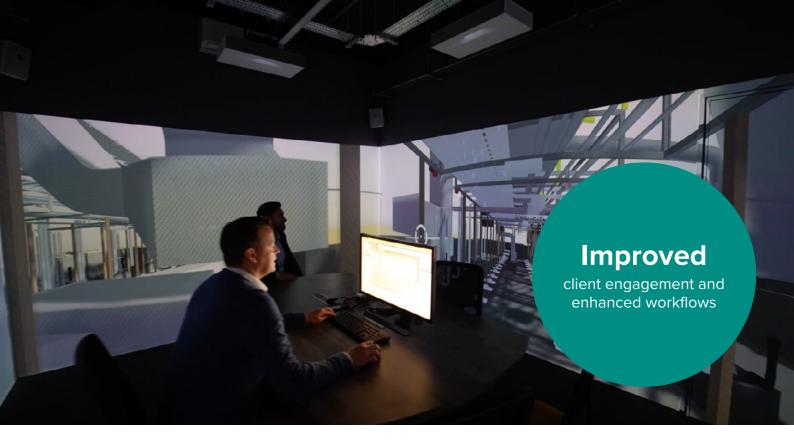
Time and money saved

- Significant savings from using the technology - the Igloo paid for itself on the first large scheme, with 50 more to follow
- Fewer site visits needed by using Google Street View and imagery of far-off locations

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"We have been impressed by how easy it is to use the system, and how straightforward it is to incorporate and visualise a wide range of different imagery, BIM models and associated 3D data."

Anne Carroll, Design Manager, Dŵr Cymru Welsh Water



Prism Offsite Manufacturing

Using Igloo technology across project lifecycles To enhance its digital engineering offering, Prism Offsite Manufacturing added an Igloo immersive workspace to its Coventry Customer Experience Centre, which sits alongside its offsite factory.

In the immersive workspace, all four walls are giant screens, onto which any 2D or 3D digital tools or content can be projected. This offers a wide range of applications, not just for Prism but for anyone from Wates Construction Group, across whole project lifecycles - from the workwinning stage, to design reviews, to delivery and handover. In using the technology, Prism has noted:

Audience engagement

- Prism has been able to demonstrate how its solutions can add value to client projects in a far more engaging way
- The Igloo has offered an experience customers have not had before - they were able to be immersed in the middle of their projects and given detailed walkthroughs
- It also means that customers get

 a better sense of scale when
 viewing models in the workspace,
 compared to viewing them on a
 desktop screen

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We've had two key clients experience this space and they were blown away by the level of detail they could immerse themselves in, to help them understand the project. It opened their minds. This space can be used not just in design, but by our marketing, PR, sales, and all our teams."

Dan Sadler, Prism Offsite Manufacturing, Director

Enhanced workflows

 By using federated BIM models in the Igloo (which means all the available project data is brought into one single model) design issues are spotted more quickly



Hudson Pacific Properties

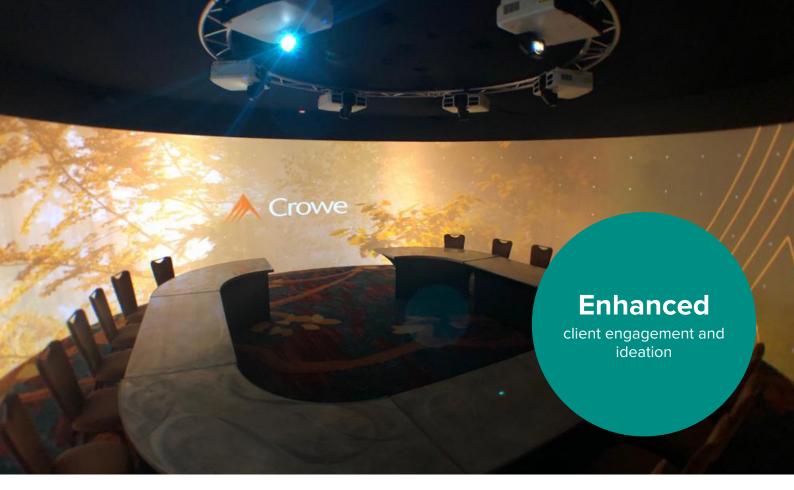
Using Igloo Shared VR to preview Hollywood's latest development

Hudson Pacific Properties is a visionary real estate company that builds, transforms and operates Class A properties for Fortune 500 companies, disruptive start-ups and premier growth companies across the West Coast. In 2017, it had just completed a showroom on its Sunset Bronson Studios production lot that featured three recent Hollywood office buildings. It wanted a memorable way in which to showcase the latest development, EPIC. It used an Igloo immersive cylinder which hosted a dazzling visualisation of the future development. Potential tenants could step right inside a true-to-scale representation of their future office space, without having to rely on 2D drawings, or on content trapped behind a computer screen. Aided by this technology, Hudson Pacific Properties noted:

Time and money saved

 The company was able to lease the entire property, ahead of completion, to streaming giant Netflix

www.igloovision.com 13



Crowe

Using Igloo technology to catalyse some blue-sky thinking At its 2019 Ascend Global Summit, the public accounting, consulting and technology firm was looking for an environment to host a series of Crowe Blue Sky innovation workshops with a select group of clients. It used an Igloo cylinder to immerse 22 professionals in 360° panoramic blue-sky content and in a wraparound canvas filled with Stormboard whiteboard and brainstorming tools.

As a result, Crowe noted:

Audience engagement

 "We received a great deal of positive feedback on the Igloo Vision environment which helped us make a strong impression. Your support was critical, and we appreciate the work you did to create a truly memorable experience for our attendees."

Jason Kingma, UI/UX Innovation Project Manager, Crowe

How you can measure the ROI for yourself

As the above examples demonstrate, there are so many ways to demonstrate the value your Igloo can add to your organisation. Now, let's dive into some of those ways...

16 Adoption within the business

17 Time or money saved

glòo

18 Impact on learning outcomes

19 Audience or employee engagement

20 Overall impact on enhanced workflows Adoption within the business

This is a great starting-point if your Igloo is used by multiple teams for multiple applications.

We start here because, while these types of measurements don't directly inform you about the ROI you're getting from your immersive space, they can act as a leading indicator. After all, to get value or return on your Igloo, it needs to be used. For example, you could track metrics such as:

- The number of meetings booked inside your Igloo
- The number of presentations, pitches, or other events held inside the Igloo
- The overall amount of time the Igloo is being used
- The level of employee satisfaction before and after introducing the Igloo
- The level of employee satisfaction with the Igloo itself
- The number of teams or departments using the Igloo
- The variety of applications the Igloo is being used for
- The popularity of the Igloo compared to other facilities





These are just a few suggestions but they can be a useful way to see how much use your investment is getting, and to indicate what more could be done to encourage uptake.

From seeing the technology being adopted in your business, you should then see the rest follow... 2 Time or money saved

This is the perfect methodology if your Igloo is used as part of your everyday workflows, and is intended to bring new efficiencies.

This is a super common measure of ROI, particularly for investments that might not directly generate revenue themselves. And often, by showing the time or money you've saved, you can show when an investment has paid for itself.

Many Igloo customers use their spaces to work in ways that can save them time and money. For example:

- Using a shared immersive space to carry out design reviews can help construction teams detect potential problems before building actually commences and before any issues get too difficult or expensive to fix
- Thanks to tools such as Matterport, Google Street View, Esri and more (which all work quickly and easily in an Igloo), teams can carry out virtual visits of locations, reducing the need for multiple trips and the associated costs

- These tools are great for educators too - you can conduct virtual field trips, both before and after the real thing, to give students context for their learning
- And thanks to Igloo's integrations with leading video conferencing tools such as Zoom, Microsoft Teams, and so on, you can collaborate with colleagues whether they're onsite or working remotely - saving the need for everyone to physically be together

This type of metric is easily calculated too (and is sure to be something your finance team appreciates).

Here's one formula you could use (which we've **borrowed from Wrike**) to compare project costs before and after implementing an Igloo:

Average project duration: X weeks

- V number of workers
- W worker salary a week
- X projects per year
- Project planning: Y weeks
- Project execution: Z weeks

Total cost for one project:

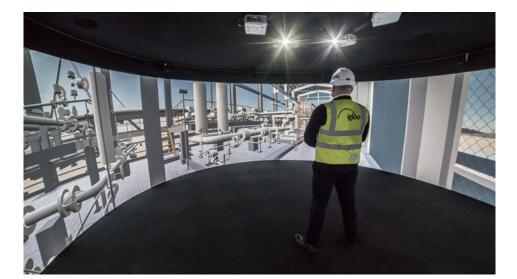
- Cost of planning 1 project: V workers x £W salary x Y weeks = £££
- Cost of executing 1 project: V workers x £W salary x Z weeks = £££
- Add those 2 numbers together to get total cost: £££

Impact on learning outcomes

This is a methodology to consider if your Igloo is primarily used for training, teaching or learning

It's well-known that virtual reality and immersive experiences can enhance the learning experience, whether for students and pupils in schools or universities, or for on-the-job training in a range of areas - from health and safety, to conflict resolution, to continued professional development. This kind of technology can increase retention, add context to the lesson at hand, and more. And it's something you can measure. Indeed, <u>a study by the consultancy</u> <u>PwC</u> found that VR-trained employees:

- Learned 4 times faster than their classroom peers
- Were 275% more confident in applying the skills they learned after training
- Were 3.75 times more emotionally connected to content than their classroom peers
- Were up to 4 times more focused than e-learning peers





The PwC study recognises VR headsets can't replace the classroom any time soon. It suggests that a team of employees could take training and have follow-up discussions. And that's because learning, whether in enterprises or education, is generally a shared process.

And this is exactly where Igloo immersive spaces can be used to complement the use of VR headsets. In a shared immersive space, groups of colleagues can connect with a VR experience together - and each other. They can collaborate and discuss during their training. They can see what other people are looking at, they can read body language. The tutor can lead the training, rather than leaving everything to the VR program. Yet they're still cut off from the distractions of the outside world.

igloo



Audience or employee engagement

If the primary purpose of your Igloo is to engage an audience with your brand and its story, this is a way to evaluate its impact.

Extended reality, including shared immersive space technology, is a great way to get a message across - and make it stick.

The audience will depend on your organisation and how it's using a shared immersive space.

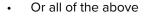
For example:

- It might be used to deliver immersive pitches to potential clients (such as in the architecture, engineering, construction industry, where companies are demonstrating their expertise)
- It might be used to give customers an experience of a product that doesn't yet exist (such as using immersive visualisations to give buyers virtual tours of unbuilt houses or apartments)
- Or a shared immersive space makes for the ideal customer experience centre, to give your audience a visceral sense of your strategic intent, your brand values, a new proposition, and more

Similar to the education use case, by delivering your message with a shared immersive space, you can make sure it resonates and leaves a truly lasting impression. Depending on the exact use case, you might measure this by comparing the number of opportunities closed before Igloo, and after, or the time between a lead generated to being converted.

This type of innovative technology can also be a great way to engage your employees. It can signify a commitment to innovation, digital transformation, and to providing your teams with the best tools they can possibly use.

And if they can work faster, better, and more collaboratively, it can only be a good thing for their engagement. You could check this with internal employee surveys, to measure the sentiment on your investment.





Overall impact on enhanced workflows

Some of our clients have invested in many Igloo immersive workspaces across their office networks, so a more in-depth assessment is warranted.

For inspiration, it's worth turning to the research company, Forrester.

A company called Oblong Industries produces an immersive collaboration solution called Mezzanine. And it commissioned an analyst called Forrester to calculate the <u>Total</u> <u>Economic Impact</u>.

Speaking to four Mezzanine users, Forrester calculated (over three years) typical:

- Benefits of \$1.7 million
- Costs of \$522,000
- ROI of 226%

The benefits highlighted in the report included:

- Improved internal workflow and collaboration particularly with distributed, cross-functional teams the organisations in the report noted 'they could use Mezzanine to share information faster and come to a resolution in less time than without using Mezzanine'
- Increased sales opportunities won/closed the 'pivot to an immersive sales experience allowed organisations to better showcase and connect with prospects in real time, reducing the time to reach a sales decision'
- Reduced time spent advancing qualified
 opportunities using the immersive solution 'early in the sales process increased the attention of the prospect and made it more likely for key stakeholders to come on board'
- Travel savings organisations noted that the use of
 Mezzanine 'allowed distributed teams to meet from
 their own offices and experience the same benefits of
 in-person meetings without having to incur travel costs'

So it's clear to see how this type of immersive collaborative solution can pay dividends for companies that invest in it.



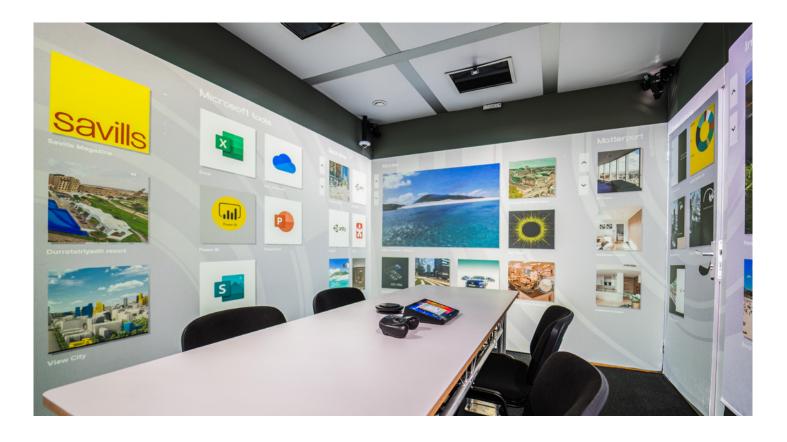


Crucially, the Oblong Mezzanine solution differs from Igloo in several key ways:

- Immersion an Igloo shared immersive space is typically a fully-immersive solution that offers a vast wraparound canvas to work with an Oblong Mezzanine solution only ever comprises several TV monitors installed in one, or several rooms (of course, if this is a set-up you'd like to power with Igloo, we can do that with our display-agnostic media player)
- **Flexibility** the powerful Igloo Immersive Media Player integrates, out-ofthe-box, with an incredibly wide and diverse range of industry-standard tools, from immersive visualisation applications such as Unity, to well-known project management tools such as Trello
- **Usability** with applications such as Igloo Home, our intuitive interface (it's a bit like using a super-sized smartphone), and Igloo Touch, a smartphone app to control your Igloo, our technology is pitched at an everyday user of digital content
- **Affordability** it's an important Igloo attribute we are constantly seeking ingenious cost-efficiencies, to pass these on to customers

So, if you consider the potential ROI to be had from the Mezzanine solution, imagine how much greater it could be with Igloo technology.

How we can support you to optimise the ROI of your immersive space



With you every step of the way

It's incredibly important to us that our customers get the most out of their Igloo investments. So we're here to help - from planning, to logistics, to set-up, to training, to on-going support. If you want to learn more about any of the areas that you can achieve more value on your Igloo investment, just drop us a line.

If you need ideas or support on making your installation a success, we can help there too.

For example, if a key metric is how often your Igloo is booked, we can work with you providing training or upskilling to your staff, or on internal communications to make sure everyone is aware of the new resource available to them. Or if you're looking to enhance workflow processes, it's important to ensure all the tools you already use work in your Igloo. So, we can support you on integrating any tools that need that extra tweak, or help you to carry out a gap analysis of how your teams currently work, and where they can be with the Igloo technology.

These are just a few ideas and, for a deeper dive, we'd encourage you to check out our white paper, **'What makes for an effective Igloo installation'**. It tells you everything you need to consider to set you up for success from day one.



For more information

Igloo Vision is the shared immersive space company

From bases in the UK, USA, Canada and Australia, we work with clients worldwide.

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