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Pell Frischmann improves stakeholder collaboration and cuts field & modeling time by 10% with HxDR Reality Cloud Studio

Challenges:

• **Inefficient file management** limited ability to share up-to-date project data across internal teams, clients, and subcontractors led to collaboration challenges

• **Storage limitations** requiring constant server monitoring to avoid upload delays and disruptions due to insufficient space

• **Data Volume Bottlenecks** was a key requirement for Pell Frischmann, as clients and subcontractors struggled to access large datasets without depending on internal SharePoint systems or local servers

• **Heavy IT infrastructure demands** high capital costs from processing large files on local hardware placed heavy demands on CPU, GPU, memory, and storage resources

Solution:

• **Centralized data workflows** established a single source of truth, enabling real-time access and collaboration across internal teams, subcontractors, and clients by streaming data to browsers and connected desktop CAD applications

• **Eliminated reliance on SharePoint and local external storage drives reduced processing delays** by over two hours per project upload, minimizing security risks and greatly enhancing data accessibility

• **Removed the need for constant local hardware upgrades** by shifting compute-intensive processing to the cloud, enabling scalability as data volumes grow

• **Supported a wide range of file formats and sensor types** such as .lgsx, .e57, .las, .ifc, .rvt, .nwd, .obj, .glb, and more, and data from drones, handheld and tripod-based scanners, including third-party hardware, to ensure broad compatibility

• **Simplified collaboration and accelerated delivery** by consolidating all project data into one cloud-based platform, reducing manual data handling and eliminating the need to toggle between multiple systems

Value:

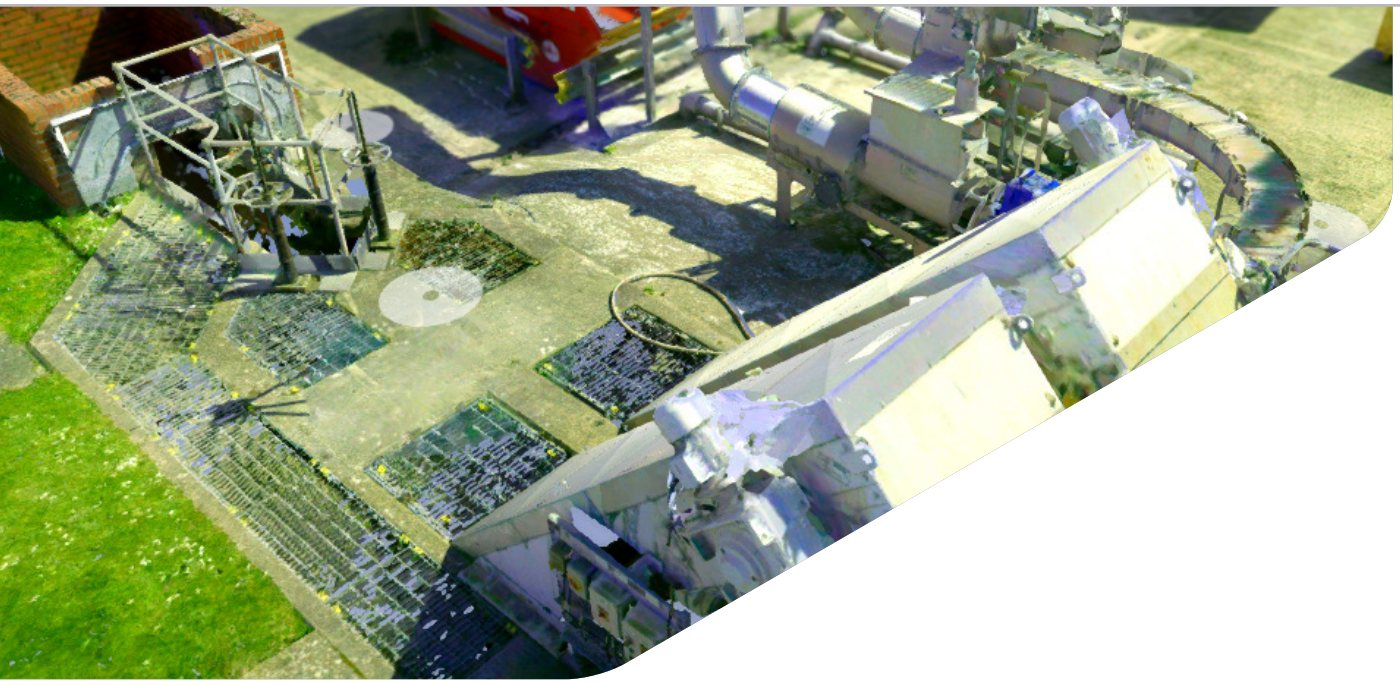
• **Deliver measurable client value** through centralized access to project data by supporting multiple file formats and connecting and streaming to desktop CAD applications, removing technical barriers and streamlining interaction with large files.

• **Position the company as an innovation leader** by showcasing HxDR Reality Cloud Studio in bids, helping differentiate from competitors and win new business.

• **Increase revenue potential** by reducing project modeling time by approximately 10% and enabling the team to take on more work without additional headcount

• **Create a scalable, client-friendly service model** by offering paid access to project data in the cloud, enhancing transparency, flexibility, and long-term engagement

• **Teams became fully productive in under two days**, supported by the platform's intuitive design that enabled quick adoption without formal training.



The Client

Pell Frischmann is a multidisciplinary consultancy operating across sectors including buildings, infrastructure, and urban regeneration. The firm supports 82 project types spanning Environmental Services and Civil and Environmental Engineering.

Established in 1926, Pell Frischmann brings nearly a century of experience in delivering client-focused solutions rooted in commercial insight, sustainability, and innovation. As part of Dorsch Global, under RSBG UK ownership, the company is backed by patient capital from RAG Stiftung, a foundation committed to addressing the environmental and social legacy of Germany's former coal industry. Through this structure, Pell Frischmann's work contributes to long-term environmental stewardship and socially responsible engineering.

Challenges

With a high-frequency scanning operation using Leica Geosystems' RTC360, the firm captures data nearly 200 days a year, generating massive point cloud datasets, generating massive point cloud datasets. Projects with up to 552 scan setups often generate raw datasets exceeding 1 TB in size, which can lead to processing delays of more than two hours per project. Scan sites range from compact areas to expansive locations spanning over 36,000 square meters.

However, their legacy workflows presented several challenges. Project data was siloed across teams and systems, making collaboration between internal stakeholders, clients, and subcontractors difficult. As client expectations shifted toward real-time access and seamless collaboration with remote third-party modelers in platforms like Revit, the firm encountered growing pressure to modernize.

Accessing and sharing large datasets was cumbersome. Clients and subcontractors were given SharePoint links to manually download physical files, which were then archived upon project completion. Despite a capable archival system, the 1 TB SharePoint limit and reliance on local storage constrained operations. Processing these large files placed heavy demands on CPU, GPU, memory, and storage, requiring the rollout of high-spec laptops and constant monitoring of server space to avoid delays.

Security and compliance were also top of mind. With growing data protection requirements from clients, Pell Frischmann needed a platform that could offer both flexibility and robust safeguards.

Pell Frischmann required a scalable cloud-based solution that would reduce office-based modeling time, improve collaboration, enhance data accessibility, and ensure end-to-end security without compromising performance across their projects and partners.

Solution

To improve operational efficiency and ensure real-time data accessibility across internal teams, subcontractors, and clients, Pell Frischmann identified the need for a centralized digital workflow. The adoption of HxDR Reality Cloud Studio marked a strategic shift in how the firm managed and collaborated around scan data. By moving to a cloud-based platform, they significantly increased the return on investment from their scanning operations and eliminated the inefficiencies tied to legacy systems.

With Reality Cloud Studio, Pell Frischmann gained a single source of truth, a centralized environment for data access, sharing, and modeling. Previously, the team relied on SharePoint for uploading and downloading large datasets, which introduced delays, security risks, and inconsistencies in project collaboration. The switch to HxDR's cloud-based platform with streaming capabilities (including directly into Revit via Leica CloudWorx for Revit) removed these bottlenecks, reduced errors, and improved overall project accuracy.

The platform now supports a wide range of projects across water, transportation, buildings, and airfields, with clients spanning clean and wastewater utilities, local authorities, property developers, transport agencies, shopping centers, and homebuilders. Reality Cloud Studio enables the firm to manage a diverse set of file types, including .lgsx, .e57, .las, .ifc, .rvt, .nwd, .obj, .glb, and more, while integrating data from drones, handheld scanners, and tripod-based scanning systems within a single workspace.

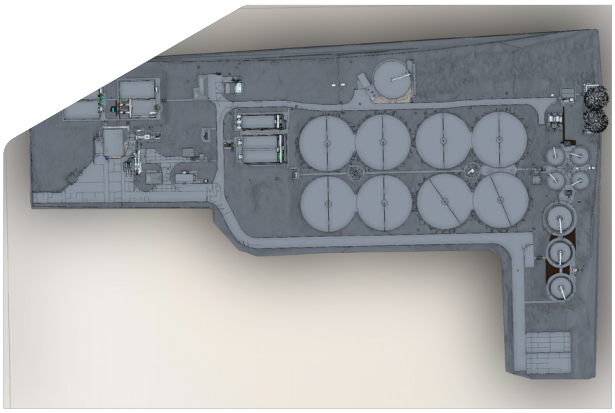
This centralized approach eliminated the need for manual data organization and platform switching. All stakeholders now access the same environment, improving transparency and accelerating decision-making. As Alan Muir, Technical Director of Land and Engineering Surveying ,noted:

> " Everything is visible in the same space, and that's a big help for our clients. They're not jumping between platforms or managing massive files on their own servers. They can simply access what they need and start working."

Clients and subcontractors no longer need to share or download RCS and RCP files. They can now view project data directly in the free CloudWorx for Revit viewer, keeping all information securely within Reality Cloud Studio. The LGSx database serves as a photographic reference when creating models from point clouds, giving BIM teams confidence in accurately modeling plant features and helping reduce rework. For clients that do not permit Model-in-Place (MiP), this workflow also ensures the correct Revit family is assigned to each feature.

Whether modeling in-house or collaborating with external suppliers, Pell Frischmann can now share point clouds seamlessly across teams, including water engineering, land development, and structural engineering.

From topographic and building surveys to cross sections, long sections, and roof scans, Reality Cloud Studio allows Pell Frischmann to deliver point clouds and rich visuals in one place, offering clients both flexibility and control without burdening their own infrastructure.



Overall - Revit model derived from the point cloud

Close up of point cloud

Value

Pell Frischmann currently has 15 active projects in HxDR Reality Cloud Studio and has achieved notable gains in uptime, operational efficiency, and overall productivity. The company continues to expand its use of the platform, with a growing number of clients leveraging their services each year. To support this momentum, Pell Frischmann plans to integrate additional Leica Geosystem scanners into their workflow, feeding even more data into HxDR Reality Cloud Studio.

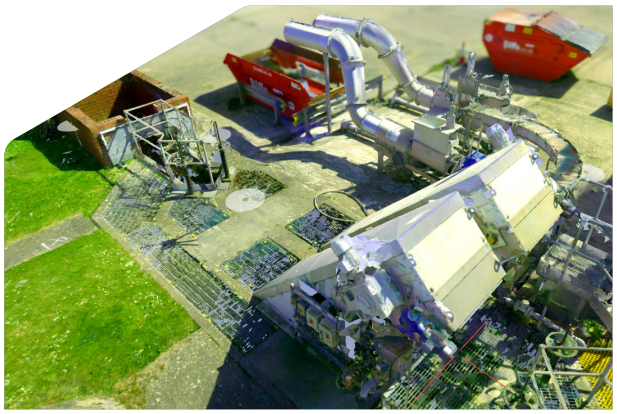
Cloud-based collaboration has become a central focus for Pell Frischmann's project strategy. The ability to invite team members and subcontractors into a shared project environment has streamlined coordination across multiple stakeholders. Rather than managing large file transfers or depending on local storage, contributors can access data directly in the cloud, complete their tasks, and share updates in real time. As Alan Muir, Technical Director of Land and Engineering Surveying , put it,

> "We could add tags, check dimensions, and even draw on the project. Whoever needs to finish their part of the project just logs into HxDR Reality Cloud Studio, picks up where things were left off, and gets to work. We send the invite to collaborate, and they're ready to go."

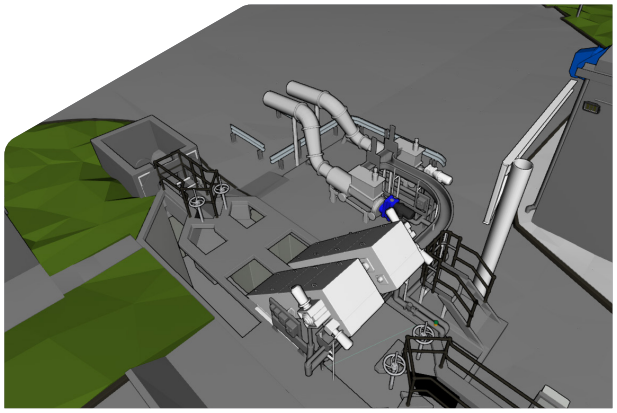
HxDR's Reality Cloud Studio has also become a strategic advantage when bidding on new projects. Pell Frischmann emphasizes their use of the platform as proof of their innovation and commitment to modern workflows, differentiating themselves from competing vendors. Clients immediately see the benefit of having access to multiple file formats within a centralized environment. There's no need to toggle between tools, and no concern about whether their desktop systems can handle massive files. Whenever needed, teams can simply open HxDR Reality Cloud Studio, interact with the data, and move forward efficiently.

The platform helped reduce both time spent on site and modeling effort by approximately 10%, contributing to faster project delivery.That reduction has freed up resources, allowing the team to take on more projects and increase overall revenue. Additionally, offering clients access to their data in HxDR Reality Cloud Studio for a fee has created a valuable new revenue stream, and clients have been highly satisfied with the flexibility it provides.

Alan Muir, Technical Director of Land and Engineering Surveying , shared: "Cloud hosting and meshing was a real advantage. Instead of running the process across multiple desktops, we could generate the mesh directly in the cloud and share it instantly. Without any formal training, we were able to figure it out in less than two days."



Mesh generated within HxDR



Revit Model uploaded to HxDR

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