JS|HELD

PERSPECTIVES

The Value of 360-Degree Technology in Property Claims

Our perspectives feature the viewpoints of our subject matter experts on current topics and emerging trends.

INTRODUCTION

While certain 360° cameras and technologies have been around for a while to assist in documenting property claims field inspections, only recently have they begun to cater to, be adapted by, or be created for the property claims industry in efforts to make the claims experience more definitive and efficient. There are a wide range of 360° cameras and technologies available to the industry now, so decisions regarding which type to implement or utilize depends on what is being documented and/or communicated as well as which will meet the user's needs while providing the greatest value. For example, some available 360° technologies may work very efficiently and create great communication of documentation for small property claims, while the same 360° technologies may show limited to no value or efficiency for use with larger property claims.

In just one year, 2020, J.S. Held created 80% of the 360° technology reports we had created since beginning to use the technology two and a half years earlier. That is a testament to the COVID-19 pandemic pushing the property claims industry to utilize all available tools to maintain and improve communications on property claims during a pandemic and limiting health risks for all parties involved. While the pandemic forced the ramp-up of usage for 360° technology to provide virtual representations of property claims, it really did more; it showed the industry the value the technology brings and why it should be utilized regardless of pandemic-related circumstances.

The purpose of this paper is to provide general information about the use and value of 360° technologies J.S. Held has implemented and found success with, namely HoloBuilder and Matterport. We will discuss the basics of these technologies, how and why we use them, and their advantages in the property claims process as well as their impact within the industry.

360° CAMERAS & TECHNOLOGY IMPLEMENTATION

Background

There are many 360° cameras and technologies available, and our team has tested a variety of them. J.S. Held began using 360° cameras about 10 years ago because we quickly saw the benefits of capturing 360° images on loss sites. One 360° image takes the place of many 2-dimensonsal (2D) images, making documenting a site in its entirety far more efficient. The data captured is also much more useful internally when preparing estimates, performing peer reviews, and confirming Like Kind Quality (LKQ) scopes of work.

Originally, the only challenges we experienced with 360° images involved organization and external sharing. Implementing HoloBuilder™ remedied this issue, allowing for the organization of these 360° images amongst a floor plan and sharing the 360° reports easily with the adjustment team, using a simple web link. These 360° reports are completed efficiently while onsite, so upon leaving the site, the 360° report is complete. This efficiency of communicating site conditions for a property claim shows tremendous value for all parties involved.

While HoloBuilder proved itself efficient, easy to use, and valuable—both internally and externally—for the bulk of the property claims our consultants handle, J.S. Held also made the decision to implement Matterport™. An additional tool available to our consultants and clients, Matterport provides complete dimensional data along with an unparalleled 360° virtual tour. Matterport's added value lies in the ability to capture dimensional data and the capabilities that extend from that feature.

As much success as we have had with both tools, the initial implementation of each had significant ramp-up time as our team bought into using the tools and our clients began to understand what the tools are and what value they bring to their property claims. The pandemic fast-forwarded what surely would have been another year or two before we would have seen the amount of usage, and requests for usage, for both HoloBuilder and Matterport.

What Are HoloBuilder and Matterport?

HoloBuilder is a technology that allows users to place 360° images amongst a building plan or drawn-up field sketch and create a 3-dimensional (3D) virtual tour of a project site. Its capabilities allow unlimited square footage to be documented in one report. This means multiple properties, multiple buildings, multiple floors, and even follow-up inspections can be documented in one report.
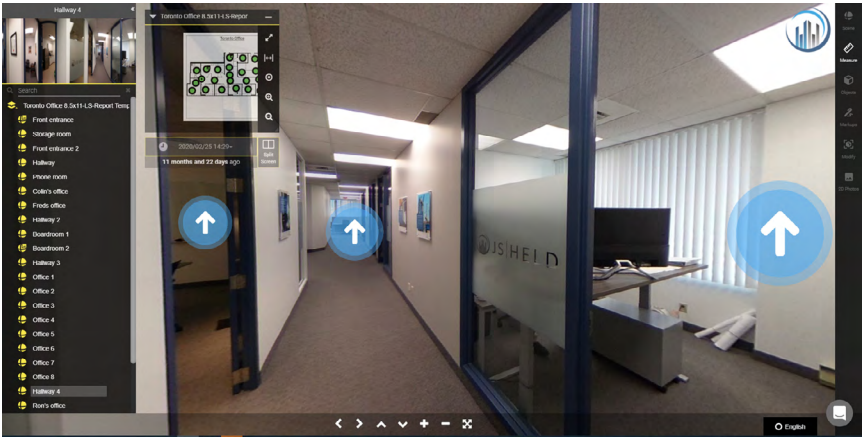

Figure 1 - Example of HoloBuilder's 3D walkthrough interface and display.

For an interactive demonstration of HoloBuilder featuring a walkthrough of our Toronto office, visit the link below:

• HoloBuilder 3D Walkthrough – J.S. Held Toronto Office

Matterport is a technology that utilizes either their proprietary Pro 2 Camera or a supported third-party 360° camera to capture a complete three-dimensional representation of a real-world location. With the Matterport Pro 2 Camera, the data collected can be used to create dimensionally accurate floor plans, gather quantities of scope, take and/or log 2D photos, and provide a high-definition 3D virtual tour of a project site.

Figure 2 - Example of a Matterport 3D rendering of the J.S. Held Cincinnati office (viewed from above).

For an interactive demonstration of Matterport featuring a walkthrough of our Seattle office, visit the link below:

• Matterport 3D Walkthrough – J.S. Held Seattle Office

While we have found that both HoloBuilder and Matterport bring value to the property claims process, it is important to know which technology is best suited for certain assignments. As the table below outlines, both HoloBuilder and Matterport provide 3D virtual tours, the capability to insert or create 2D imagery in a report, and both are easily shared via a link (i.e., no additional software is required by a recipient to open the report and access the 3D virtual tour). The main differences lie in dimensional data, the quantity of square footage documented per report, the pace/speed of usage on site, and in time lapse capabilities.

Capabilities	Holobuilder	Matterport
3D Virtual Tour	✔	✔
2D Imagery	Can Insert or create	Can Insert or create
Dimensional Data		✔
Square Footage	Unlimited	*10,000 SF or less
Time Lapse	✔	
Pace	Rapid Pace	~2,500 SF per hour
Share Port via Link	✔	✔

*This is the approximate SF capable for 1 Space w/Matterport, if additional SF is needed to be scanned, multiple Spaces can be stiched together by Matterport.

When it comes to deciding which technology to use, it is important to know what type of loss site(s) are being documented in a property claim. For example, if multiple locations or a large amount of square footage needs to be documented, HoloBuilder may be the optimal choice. If a unique structure or high net worth home needs to be documented, Matterport may be the optimal choice. There may also be circumstances where it makes sense to implement both technologies; such as documenting the entirety of a large commercial loss with HoloBuilder and, on the same loss, document the origin and cause area with Matterport so more definitive documentation is captured in that immediate area.

USES AND VALUE OF 360° TECHNOLOGY

No matter which tool is used, the value of these 360° technologies for the property claims industry lies in the communication of site conditions at any point in time for all parties involved in a claim. Sharing reports with adjusters and carriers within hours of leaving a site assists in communicating the extent of a claim as quickly and with as much detail as possible. The following are examples of the applications of 360° technology throughout J.S. Held for property claims.

Building Consulting Applications

From a Building Consulting perspective, these tools are generally used to document a site in its entirety for estimating purposes. This would include preparation of a Rough Order of Magnitude (ROM), detailed repair/replacement estimate, or an estimate for a tender package during the bid process.

2020 brought a heavy season of catastrophes (CATs), including California wildfires, various tornado events, the Derecho, multiple hail events, and many hurricanes and tropical storms. Usage of 360° technology during these times enabled building consultants—deployed to respond to these events—to document the sites while experts back at the home offices would use the 360° reports to assist in preparation of ROMs and estimates. This resulted not only in great efficiency and timely execution of deliverables, but also a means of keeping experts in the field and meeting client demands to triage loss sites to understand true exposure as quickly as possible.

With a heavy CAT season comes more need and requests for site monitoring. HoloBuilder becomes an invaluable tool for the site monitoring process because of its time lapse capabilities. Each time a consultant revisits a site, they can take a new series of 360° images in the same locations as the previous visits, thus giving the entire adjustment team a date stamped trail of 360° images in every documented location of a site. This is useful from many perspectives—reviewing emergency service invoices, agreeing on LKQ scopes of work for repairs, validating whether completion of scopes of work for a bid

were met, and gaining a full understanding of the overall progress of work onsite.

Environmental, Health & Safety Applications

Our Environmental, Health & Safety (EH&S) Practice utilizes these technologies for the following reasons:

- To document as-built conditions and assist with materials mitigation protocols.

- To report sampling locations for various materials of concern amongst a 3D Walkthrough.

- As a communication tool between CAT deployed and non-deployed personnel to assist with preparation of deliverables, creating greater efficiency and allowing the deployed personnel to stay in the field.

- To prepare COVID-19 pandemic return to site protocols recommending locations for floor stickers, signage, hand washing stations, and dividers.

Builder's Risk Applications

360° documentation is very useful to the analysis of Builder's Risk claims, which involve impacts on active construction projects. Beyond just capturing the extent of the damage immediately following a loss, 360° documentation is particularly useful when it captures the entire project site, including non-loss areas of the in-progress construction project. Since schedule delay analysis (one element of a BR claim) considers how the loss impacted the delivery of the entire project, it is critical for Builder's Risk experts to understand the status of the entire project at the time of the loss. 360° documentation can quickly and thoroughly capture the project status and tell the story of the project, helping to answer several questions: Was the project tracking to the most recent pre-loss schedule? Were materials onsite? And were there non-loss field conditions impacting progress onsite?

As repairs progress, 360° documentation captured over time is also very helpful in determining, for instance, whether repairs are progressing on track with the post-loss schedule. Again, provided the 360° documentation

captures the entire project including non-loss related areas, it is easier to understand if there are other non-loss field conditions impacting progress onsite and possibly contributing to the delay.

Forensic Architecture & Engineering Applications

Consultants working in Forensic Architecture and Engineering (FA&E) utilize these 360° technologies to better support their expert reporting. The ability to capture a full situational awareness of a loss location allows engineers to better explain and reference damages and recommended repairs. These technologies also have the added benefit of providing virtual access to a site that the engineer was unable to physically inspect. The 360° documentation affords the offsite engineer the ability to see the damages and provide reporting where appropriate. HoloBuilder has also allowed engineers to see areas that are inaccessible due to conditions at the site. Because the cameras being used are small and remotely controlled, they can get into positions and situations that people cannot, providing detailed information that can later be used in reporting.

THE ADOPTION OF 360° TECHNOLOGY

When new technologies arrive in an industry, companies that implement them frequently experience hurdles such as employee buy-in and the task of initial investment and ramp-up for utilization of the technology within the company. While a percentage of professionals get excited for new technologies and buy in right away, there are others who are disinclined to adapt to such changes early on.

When the right technologies are implemented, buy-in grows as internal advocates grow, and more staff see the true value. If the right technologies are not adopted and implemented in a timely fashion, the opportunities for more efficient work and improved customer service may also be delayed or missed. The goal with implementing any technology is to implement the correct ones, understanding where they are effective and when they are needed, to better serve all parties involved.

CONCLUSION

With or without the accelerated need brought on by current events, 360° technologies would have established more place in the property claims industry because of the efficiency and value of these tools. As 360° technologies grow with the industry and users become more adept, we will likely continue to see an improved efficiency in the property claims process moving forward.

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