AN ARCHITECT'S PERSPECTIVE: WHY VIRTUAL REALITY IMPROVES DESIGN

By **Troy Camplin** - June 21, 2018

Architects are increasingly turning toward virtual reality (VR). No matter how good a blueprint or sketch may be, there is nothing like seeing your design or the space in 3D. A space can look bigger or smaller in 2D than it really is, while a 3D rendering will provide the architect, engineer, or designer with a more accurate conception of what they are working with.

VR can be a very powerful way to visualize a space. Although not everyone is using VR, even those who haven't adopted the technology quite yet find it to be incredibly useful. Laura Davis at *hpd architecture + interiors* says that, "As an architect, I have the challenge of communicating my vision for a place that doesn't exist. Some clients who are experienced in construction can look at a floor plan and 2D elevation drawings and imagine what that room or building will look like, feel like, and how it will function. However, for many clients, those plans are just a tangle of lines on paper. Additionally, the client may be reluctant to admit they don't fully understand the plans.

"Any advancement in technology that can help bridge the communication gap between the architect and the building owner is an asset to the project. We have seen projects get under construction and then have expensive delays and changes because the owner did not realize that's what they were getting until they could physically stand in the space. That's where I see the value of virtual reality," Davis said.

For Davis, the bottom line is VR gives the client confidence in the design and even empowers the client who can now really see what the design looks like rather than, as Davis puts it, "trusting unintelligible lines on a floor plan." In other words, "VR models can allow the building owner and end users to experience sight lines, wayfinding, and potential security hazards. They can get a sense of ceiling heights, relationships between rooms, and circulation paths. VR models can also be helpful in soliciting support, excitement, and funding for a project."

This is no doubt why 35 percent of architects use VR and similar technologies and 79 percent expect such technologies will make their work more efficient. There seems little doubt the future of architecture, engineering, and design lies in their continued use, given they make the work itself easier and improves the ability of firms and customers alike to create what the customer wants.