

By Joseph Guinto



Property Portals

Virtual reality is changing the rules of real estate by enabling buyers to explore homes all over the world from anywhere in the world — even before they're built

IT'S A FRIGID, gray day in New York, and an icy wind is blowing through the city's concrete canyons. But inside ArX Solutions' Tribeca offices, a software designer named Nicolas Michael tells me that today is a great day for a swim. "The pool is right outside that door in front of you," he says. "Go jump in."

I follow Michael's instructions, walking out into bright sunlight and diving into the pool. The water splashes around me. I feel warm and relaxed. Then I remind myself: This is only virtual reality. In real reality, I'm not swimming, but sitting. There's a long

conference table in front of me, and on it a flat-screen monitor projecting a 3-D rendering of a luxury-condominium property in Sunny Isles Beach, Florida.

The development doesn't exist yet. Construction only started this spring. But high-end computer-graphics studio ArX Solutions has brought it to life — from the grand lobby to the outdoor pool to the residential units — in a virtual-reality product called ArXperience.

The software works with an Oculus Rift virtual-reality headset. Strap on the headset (as I do before my "swim") and you are immersed in a startlingly realistic digital space. Stand on the patio and you can hear the ocean. Use the video-game-style controller to step through open doors, flip switches, move between units and, ultimately, decide which property



Frequent *American Way* contributor **JOSEPH GUINTO** is, in reality, not fond of swimming pools or bathing trunks.

ILLUSTRATIONS ROB WILSON



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might be right for you. Virtual reality also allows for customization: Don’t like the granite countertops? One click and they become metal. Want a brighter backsplash? Click on.

THE MIAMI-BASED ArX Solutions — they also have offices in New York and Madrid — is not what you’d call a startup, having been around in some form since 1998. But the work the firm is currently doing for more than 100 global clients is very much on the cutting edge. ArXperience is one of the few market-ready applications for virtual reality that’s not made for gaming or entertainment — both of which still dominate the field.


“Real estate makes sense for virtual reality,” says ArX co-founder Gonzalo Navarro. “If you get a buyer from Shanghai who doesn’t want to travel to look at a property, or if you’re trying to sell a building that isn’t even built yet, virtual reality is the best way to show it.”

Still, the full ArXperience does not come cheap. My virtual swim at the not-yet-built Turnberry Ocean Club Residences cost the developer — no fooling — \$95,000. Navarro says prices vary per client and that costs have fallen since the Turnberry

project was completed. And, for potential property buyers, use of ArX’s virtual-reality experiences are free, either at a property’s sales center or on their own mobile devices.

ArX has also developed a less-expensive product called ArX 360, which requires only an iPad or a similar device to produce a virtual-reality walk-through of similar visual quality, minus some features. Because it doesn’t use an Oculus Rift headset, the experience is not as immersive (swimming, for example, is not possible with the ArX 360).

Another difference is that the ArXperience relies on more advanced rendering software called Unreal, while ArX 360 uses a proprietary software to display spaces. For both, it takes about four days for designers to create a single room, and then three more days for the software to bring that room to life.

Ultimately, bringing virtual-reality real estate to the market depends on cutting development time and costs, which is something Navarro thinks software advances will enable in the coming years. “In time, you’ll be able to see all kinds of houses in some form of virtual reality,” he says. “Virtual-reality real estate will be the closest you can get to being there without actually being there.” 

Three virtual-reality apps on the market

BRAIN EXPLORATION

Surgical Theater, an FDA-cleared platform for neurosurgical pre-operative planning, has developed a 3-D version of its own surgery-simulation service that uses the Oculus Rift to let doctors go deep inside a patient’s brain. Surgeons make scans (2-D or 3-D) of a brain before an operation, and the software converts those into terrain that doctors can “fly” through, enabling them to explore the most minuscule structures in the brain. Think of it as a life-saving, virtual version of the film *Innerspace*.

GAME-DAY CLOSE-UPS

It costs a pretty penny to snag courtside seats at the NBA Finals or to sit behind the glass as teams battle for the Stanley Cup. Instead, you might soon be able to strap on your virtual-reality headset for a much cheaper view thanks to **NextVR**. The company uses Oculus Rift headsets to place clients at major events and concerts. With plans to expand to live broadcasts, they also have a growing digital library.

SIMULATED SHOPPING

Virtual-reality firm **InContext Solutions** creates 3-D shopping environments for retailers to test concepts with consumers, including letting executives use virtual-reality headsets to walk through simulated stores before revamping the actual spaces.