Understanding Immersive Computing's place beside Virtual Reality and Augmented Reality

By Warren Volkmann Sprout Pro Storyteller

"Immersive Computing" is the term HP coined to describe the rapidly blurring lines between 2D and 3D imaging and printing. Immersive computing bridges the 2D world of screens and the 3D world we live in. It's one of those new tricks that computers can do today that they didn't – couldn't – do before. (Watch this 1-minute video about Immersive Computing.)

Sprout Pro by HP is one of those new technologies that feels exciting, but leaves some wondering how and they would use it. In that respect, the Sprout and Immersive Computing is similar to Augmented Reality (AR) and Virtual Reality (VR).

Augmented Reality

The world woke up to Augmented Reality in the summer of 2016 when geeks and gamers emerged from their dimly lit dens and dorm rooms and ran around cities, malls, and parks worldwide pointing their smart phones at anything and everything in a game called Pokemon Go. The Augmented Reality game uses the smart phone's camera and GPS locator to generate Pokemon cartoon critters in front of the real scene shown on the phone's camera.



Virtual Reality

Augmented Reality adds images to the world around you, but Virtual Reality puts an entire world around you. VR is 360-degree, high-def 3D television with you in the center. Gamers and virtual thrill seekers are all working feverishly to perfect strap-on goggles that put the wearer's eyes in the middle of a completely realistic scene. Want to climb Mount Everest



wearing your jammies? For \$15 you can download <u>Everest VR</u> and head out for the summit. (Wind chill not included.)

Immersive Computing



Immersive Computing doesn't require goggles or a smart phone. The bridge from 2D to 3D happens in front of you on the Sprout Pro's touch mat. A 3D object can be scanned into the Sprout, then manipulated – spun, flipped, rotated – on the touch mat. Colors can be changed. Textures can be added. (Watch Sprout's 3D scanning commercial.)

Onramp to 3D printing

The 3D scanner makes Sprout an onramp to the emerging world of 3D printing. The scanner can serve as an input device for a home 3D printer. In time, consumers may have in-home manufacturing capabilities akin to the replicators on Star Trek.

Cyber skeptics will counter that nobody needs a 3D printer and "maker corner" in their house, just as they balked 30 years ago at computers in the home. The notion that computers would shrink to the point that everyone would be toting a supercomputer in their pocket was pure science fiction, just as Star Trek replicators are today.

An HP Sprout paired with a 3D printer is a harbinger of future home replicators. Three decades from now, ordering a generic phone case from a factory halfway around the world will seem as antiquated and inefficient as plugging coins into a pay phone.