

# CANVAS BY OCCIPITAL :: FACT SHEET

## CANVAS SUMMARY:

Canvas is the simplest way to capture and share a 3D model of a home's interior. With just an iPad and Occipital's Structure Sensor, DIY homeowners and home service professionals like contractors, architects, or designers can now generate a shareable, scale-accurate 3D model of a room in seconds for their next remodel, design, or other home improvement project.

## QUICK FACTS ABOUT CANVAS:

- Canvas is an iPad app that lets you capture a 3D scan of a typical residential room in one minute, versus up to an hour or more with the measurement by hand required for typical home improvement projects.
- Canvas requires a Structure Sensor, a mobile 3D sensor accessory also created by Occipital. Learn more at <http://structure.io>.
- Simultaneously captures tens of thousands of measurements which are processed on device into a scale-accurate 3D model of a room. This lets users extract any measurement at any time after the 3D scan has been completed.
- A full 3D model, including far-away and hard-to-reach spots, can be captured by one person. Traditional methods often require contractors and additional equipment.
- Appropriate for remodels, redesigns, installations, and more.
- CAD formats available include .dwg, .skp and .dae. These files are compatible with SketchUp, Revit, AutoCAD and other popular CAD programs.
- CAD files of rooms include built-in features like cabinets, countertops and other architectural elements, but are clear of furniture and other movable objects and clutter.

## ABOUT CANVAS:

Canvas gives you a new superpower – the ability to capture an accurate 3D model of a room in minutes, all on an iPad.

Today, most home improvement projects start the same way: rummaging for a tape measure, taking dozens of imprecise measurements, and then copying them from notepad to computer. It's agonizingly slow, error-prone, and requires a helper for more challenging spaces.

Canvas makes that clunky process obsolete. In one minute, one person can capture thousands of measurements, for a scale-accurate 3D model of a room, right on their mobile device.

Inside that 3D model, any measurement can be extracted anytime, and the model can be shared with anyone, anywhere. It can even be converted into professional-grade CAD-ready files for use in the programs that DIY homeowners and home service professionals use the most.

To use Canvas, consumers and pros need only an iPad and Occipital's Structure Sensor (\$379 at <http://structure.io>), a precision 3D sensor for mobile devices.

## **CUSTOMER TYPES:**

Canvas is designed to be used by home service professionals like contractors, interior designers, and architects, as well as enterprising homeowners who plan and execute their own household projects.

## **USE CASES:**

- **Remodeling:** Capture and share a precisely measured model of any room for planning and collaboration, including features like cabinets, countertops, and other architectural details.
- **Interior Design:** Skip tedious measurements and jump right into design with most popular CAD programs, laying out and visualizing changes before you make them.
- **Furniture Shopping:** Take your room with you when you visit a furniture store, and retrieve any dimension or vantage point on-demand.
- **Insurance:** Preserve a scale-accurate model of your home to aid in documentation and claims processes.
- **Real Estate:** Show any client a professional-grade CAD model before they even set foot in the door.

## **MARKET:**

- US home improvement market size in 2015: \$331.9B (source: [statista](#))
- DIY retail sales in the US in August 2015 alone: \$27.8B (source: [statista](#))

## ABOUT THE STRUCTURE SENSOR:

With Structure Sensor, Occipital introduced the world to 3D sensing for mobile devices. It gives mobile devices a new sense – the ability to not just capture the world in two-dimensional images, but to actually understand it in three dimensions. Learn more at [www.structure.io](http://www.structure.io)

The Structure Sensor isn't a 3D scanner: It's a hardware platform that enables a completely new set of mobile applications, including:

- 3D mapping of indoor spaces for instant measurements and virtual redecoration via the new Canvas app.
- Mixed reality (MR) games where virtual objects interact precisely with the physical world.
- 6-DoF positional tracking for virtual reality, including collision avoidance.
- 3D scanning of objects and people for rapid 3D content creation.
- Advanced medical imaging used by thousands of doctors for prosthetics, orthotics and more.

The Structure Sensor has been designed from the ground up to be mobile: compact dimensions, no external power source, precision brackets that let it quickly and securely attach to iPads, and an SDK that makes it easy for developers to create apps for the Structure Sensor.

Since its successful launch on Kickstarter in 2013 (raising \$1.29M from over 3500 backers), the Structure Sensor & SDK has become one of the most popular platforms for adding 3D sensing to mobile devices.

## STRUCTURE SENSOR FACTS:

### Performance

- *Depth sensing range:* 40 centimeters to 3.5+ meters
- *Frame rate:* 30-60 frames per second
- *Resolution:* 640x480
- *Precision:* 1% of measured distance (typical)
- *Battery life:*
  - Integrated lithium polymer battery – doesn't use the iPad's battery
  - 3-4 hours of active sensing, 1000+ hours standby

### Supported Devices for Canvas

- Works with all recent iPad models:
  - iPad Pro 9.7-inch and 12.9-inch, iPad Air 2, iPad Air, iPad mini 4

## **OCCIPITAL AND STRUCTURE SENSOR HISTORY:**

Occipital is fundamentally a software company that now creates hardware, too. After being one of the first companies selected to join TechStars, we decided to focus on mobile computer vision, giving mobile devices the ability to understand the world through their cameras.

We launched RedLaser (acquired by eBay in 2010) and then 360 Panorama (the first application to enable 360-degree panorama capture in realtime. Learn more about 360 Panorama at <http://360.io>).

In November 2011, we conceived of the idea for the Structure Sensor after playing with a Microsoft Kinect 3D sensor plugged into a high-end desktop CPU. We mapped a small indoor environment using the sensor and some prototype software. After tripping over the Kinect's cord a few times, we realized that needing a high-end desktop CPU meant that this amazing technology was never going to make its way to everyday life. So we spent the next 18 months creating the Structure Sensor, and with it, a new chapter for mobile computer vision.

## **COMPANY DESCRIPTION:**

Occipital makes the Structure Sensor & SDK, Skanect and 360 Panorama. Occipital focuses on making advanced computer vision technologies simple enough for everyday use. Occipital is based in Boulder, CO and San Francisco, CA.

For more information, visit Occipital on the Web at <http://occipital.com> and <http://structure.io>.

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