

# MARKETER

THE JOURNAL OF THE SOCIETY FOR MARKETING PROFESSIONAL SERVICES

VOLUME 36, ISSUE 6, DECEMBER 2017

## TECHNOLOGY

10 UX RULES!

19 OMNICHANNEL MARKETING

24 CHART YOUR COURSE TO VALUE-DRIVEN LEADERSHIP

8

### 5 Graphic Design Tips To Take Your Proposals to the Next Level



BETSY LOEB, PLA, LEED AP, is marketing coordinator for Stewart in Richmond, VA. She is active in SMPS Virginia and will serve as Treasurer for 2018–19. She uses her background in communications, graphics, and landscape architecture in one fun job. Contact her at 623.262.1025 or bloeb@stewartinc.com.

10

### UX Rules! How Interactive 3-D Reality Systems Enhance Client Engagement



*Marketer* Contributing Editor CRAIG PARK, FSMPS, Assoc. AIA, is a principal with The Sextant Group in Omaha, NE. Park is an SMPS Fellow, past Society president, and the 2007 Weld Coxe Marketing Achievement Award recipient. Contact him at 402.932.6121, x341, or cpark@thesextantgroup.com.



TERRY CAYWOOD, CPSM, is the director of marketing for The Sextant Group in Pittsburgh, PA. Caywood can be contacted at 412.323.8580, x105, or tcaywood@thesextantgroup.com.

19

### Omnichannel Marketing: Catching Up to the Future of B2B



IDA CHEINMAN is principal/creative director of Substance151, a strategic brand communications firm in Baltimore, MD. She is a designer, strategist, tech geek, writer, speaker, and huge fan of all things SMPS. Contact her at 410.732.8379 or ida@substance151.com.

24

### Chart Your Course to Value-Driven Leadership



JEN MCGOVERN, CPSM, is mid-Atlantic regional marketing manager for VHB in Vienna, VA. McGovern serves as the Director of the Career Advancement Committee for SMPS Washington, D.C. Contact her at 571.389.8171 or jmcgovern@vhb.com.



JEFFREY M. TAUB, CPSM, is senior technical director for business development at AKRF, Inc., in New York, NY. He is a former SMPS chapter president, current member of SMPS chapter and regional conference committees, and prior contributor to *Marketer*. Contact him at 646.388.9857 or jtaub@akrf.com.

27

### Navigating the Complex World of Marketing Technology



TIM ASIMOS, CPSM, is a strategist, writer, and national speaker. As VP and director of digital innovation at circle S studio in Richmond, VA, Asimos leads the agency in website development, content marketing, lead generation, and marketing technology. Contact him at 804.232.2908 or tim@circlesstudio.com.

32

### Keep Your Head in the Clouds, but Your Feet on the Ground



ARIK BROOKS is the owner and co-founder of SoSimple Interactive, a custom A/E/C website design and application development firm based in Wolcott, CT. He is also owner of Untapped Resources, a design and advertising agency. Contact him at 203.887.6048 or arik@sosimplecms.com.



LINDSEY MATHIEU is the owner and founder of Golden Egg Concepts in Colchester, CT. She provides graphic design, web development, proposal preparation, and strategic planning for A/E/C development and real estate clients. Contact her at 860.531.9721 or lsiragusa@goldeneggconcepts.com.

35

### SMPS Member Spotlight



MINDY M. BACON, M.S., CPSM, is vice president, director of marketing for the Bacon Group, Inc., in Clearwater, FL. Bacon is responsible for marketing and public relations, proposal writing and coordination, and business development. Contact her at 727.725.0111 or mindy@bgarchitects.com.

38

### A 360-Degree View of Marketing/BD Technology



SHELLEY SHAFFER is the vice president and director of marketing at HKS in Richmond, VA. Working with all 24 offices, she is a strategist, collaborator, and problem-solver. Contact her at 804.644.2905 or sshaffer@hksinc.com.



# UX Rules!

## How Interactive 3-D Reality Systems Enhance Client Engagement

By Craig Park, FSMPS, Assoc. AIA,  
with Terry Caywood, CPSM



User experience (UX) design is the next “new thing” in professional services. From marketing to projects, client-facing experiential-design thinking is changing the ways firms position, promote, sell, and deliver their services. Today, using advanced 3-D visualization technologies—drawing on more than two decades of some of Silicon Valley’s technology company best practices—the A/E/C industries are catching up fast, showing clients something they’ve never experienced before.



Lynx Center, Colorado University Denver Student Commons Building, Denver, CO. ©BradNicolPhotography, bradnicolphotography.com.

**M**any design firms are investing heavily in learning, applying, and enhancing client engagement using 3-D technologies to improve both the accessibility and level of collaboration in their client interactions. User experience design improves the traditional, personal relationship-building of the business developers by extending the conceptual experience of two-dimensional (2-D) drawings to a three-dimensional (3-D) virtual representation of how services, and the resulting project, will be delivered.

### Do You See What I See?

One of the biggest challenges A/E/C firms face is helping the client visualize the potential results of the design, engineering, and construction processes. As one of *Marketer's* Contributing Editors, Marjanne Pearson of Talentstar once said about marketing professional services, "It's like selling the amorphous to the uninformed." That's not a challenge to take lightly, but one where advanced user experience design can make all the difference.

In the past, design ideas were developed using 2-D drawings, which often elicited the customer's nodding agreement, only to result in "I didn't think it would look like that..." at project completion. This would happen even when those drawings were supplemented by models and renderings. Customer understanding was good, but not always great.

With the advent of 3-D building information modeling (BIM) tools like SketchUp™ and Revit™, enhanced by various rendering tools like Enscape, designers could display realistic walk-through models using projected images or large flat-panel screens. These more effectively showed what the final project would look and feel like when complete.

Today, designers are using augmented reality (AR) and virtual reality (VR) to give the client an even more realistic experience of walking through life-like and at-scale models of their projects. Combining these technologies, there are now mixed reality (MR) systems, like Microsoft's HoloLens, that merge real and virtual worlds to create environments and visualizations where physical and digital objects co-exist. Further, companies from aerospace to land development are building advanced immersive reality spaces—known as a Computer Aided Virtual Environment or CAVE—combining VR with architecture to allow multiple

users to interact in a Star Trek holodeck-style experience. (See sidebar, "Cool Tools for Creating Your Own UX.")

### This Is How We Do It...

To get a feel for where our industry is heading, we interviewed several firms that have been using visualization technologies for marketing and as a key component of their design practice.

Arash Irani, visualization specialist at SmithGroupJJR, describes that the company-wide investment in VR technologies includes the goal of having a dedicated VR space in every office. "In our Chicago office, we use HTC Vive VR headsets with wall-mounted sensors and specialized software in a purpose-built 250-square-foot VR space that allow our architects to work directly with clients to experience design concepts." Some of their VR content includes realistic medical operating suites. "New advances in VR software and hardware will allow clients to not only look around the room, but to also be able to move/relocate furnishings to better configure the space."

For marketing, Irani says that VR goggles—using a SmithGroupJJR-branded version of Google Cardboard goggles—and AR (with iPads) are used for interviews to show a selection committee design ideas. "We often include a URL in our proposals that takes a potential client to cloud-stored visual designs that they can experience using our branded goggles."

RDG Planning & Design began by using AR, taking iPads to interviews and allowing the selection committee to see an overlay of a 3-D building design concept through the iPad screen overlaid onto a physical model of the site. They found this had a wow factor, as it also allowed for immediate client feedback—interactions that made the interview process more effective.

RDG principal Joe Lang comments, “We’ve moved on from augmented reality and are now regularly using virtual reality technologies with a combination of HTC Vive headsets and the Enscape Revit plug-in. Where the Vive is great for giving an individual the walk-through experience, displaying the Enscape rendering on a large screen is a great way to engage a large group with a simulation of what the space will be like.”

Lang notes that from a marketing perspective, it can be challenging to use VR in an interview, given limited time and logistics, but having it there can still be useful. He says, “You have to really think through your marketing objectives. In an interview, a short video of someone using VR can be more effective than trying to get the selection committee to use the technology. While there certainly is a wow factor to consider, showing VR is less about the moment of the interview than about educating our clients about what our capabilities are.”

Ron Heims, RDG’s principal and IT director, adds, “We see some version of mixed reality as the next frontier, combined with data science. Imagine being able to simulate a scenario, overlaying the VR images with content drawn from data from the client’s current facility usage—circulation and traffic patterns, weather, even population density over time—to illustrate how buildings will actually be used.”

At BNIM, VR content is being developed for a wide variety of projects. BNIM recognized the potential for technology

and visualization and began using VR several years ago. Brandon Wlosinski, the firm’s manager of virtual design and construction notes, “We’ve been using VR for both marketing purposes and for design review of ideas. We found that Google Cardboard is a very inexpensive and useful tool. Combined with Enscape, it’s a simple, fast way to show the spatial qualities of the design idea with clients and collaborators and get feedback on the design. It’s been an important part of our process for acquisition of work.”

Dan Siroky, architectural technology specialist at BNIM, adds, “Today, plugins to Revit, like IrisVR, make VR an easy, portable, and quick way to render that takes little or no time, and allows clients to be able to see a 3-D space quickly. It is a good way to start the conversation, and entice them to consider full-scale VR in the design process.”

Dan Brown, graduate architect at BNIM, notes, “We’ve used VR in interviews and events to showcase our technical prowess. In one instance, we created a VR model that allowed clients to navigate the full buildout of a master plan concept. It was a very effective way to stimulate and engage them in the conversation about the goals for that development.”

Brown adds, “The VR toolset is continually adapting and evolving and becoming more streamlined. We’re beginning to use it to engage the clients early in the design process, where VR helps with visualizing design iterations in a much more fluid and adaptable process. It’s been interesting to watch the technology—hardware



and software—develop in such a short timeframe.”

Aubrey Tucker, innovative technology developer at Stantec Architecture, comments, “Interactive BIM is our holy grail—being in an environment that responds in real-time and allows for complex data manipulation that is effortless in its execution. We want things to be simple and intuitive so that we can get more people to participate and capture their input for a truly collaborative process. If we do our job right, the technology is invisible and the ability is greatly enabled.”

Brendan Mullins, an associate at Stantec Architecture, is currently leading a company-wide research and development grant exploring how the firm can integrate VR into its design practice. “Using cutting-edge, real-time visualization and virtual reality technology gives both our design staff and clients the chance to occupy unbuilt projects in first person. This has democratized our designs, allowing staff and clients at any level to understand our



Deloitte offices, Denver, CO. Turner Construction Company. ©BradNicolPhotography, bradnicolphotography.com.

projects the way they are supposed to be experienced: at human scale. As a firm, we continue to innovate and strategize methods to stay at the forefront of this emerging technology by supporting and funding research by staff, always encouraging us to be forward thinkers.”

Finally, Bostwick Design Partnership’s BIM manager, Rami Berner, says, “While we use VR in projects, the extent of our marketing use is to show that we do it, not to actually put headsets on everyone. On one project, we used 3-D panoramas and Google Cardboard headsets to evaluate designs and finishes. Later, in design, we did a true VR walkthrough session with Oculus Rift to engage all the users. We also did a walkthrough with the client’s physical plant staff to help them understand a particularly complex mechanical room.”

### Beyond the Single User Experience

One of the challenges of the current AR, MR, and VR technologies is that they are, for the most part, single-user experiences.

Those looking to create group collaborative interactions in a virtual environment turn to a Computer Aided Virtual Environment, or CAVE. These three-, four-, or six-sided purpose-built spaces use rear-projected images on special glass surfaces or an array of flat-screen displays to create spaces where 3-D images can be viewed.

Mechdyne has been creating 3-D virtual environments for clients for more than 20 years. As both pioneers and market leaders in the development of immersive technologies, Mechdyne is at the forefront of CAVE development. Kurt Hoffmeister, vice president of research and development, says, “Not everyone is comfortable with wearing head-mounted displays (HMDs). Many times, our clients combine a large screen or multisided CAVE that mirrors the virtual environment view on the HMD. Think of it as a two-player game where one player leads the game, but several people can have a mutual viewpoint. The advantage of the CAVE is that it can be a shared view or an independent view for a small group

collaborating on a design, something a single HMD does not provide.”

### Why the Focus on UX?

UX design’s main goal is to solve a client’s problem and the technology for communicating the design is critical to the ultimate success of the project or interaction. AR, VR, MR and immersive reality design strategies are quickly becoming established methods where marketing and design work together to create a truly memorable user experience.

Making UX a focus for your marketing effort can net results that clearly distinguish your firm from your competitors. For the A/E/C communities, new visualization technologies offer an enhanced and engaging user experience with interactions that can be designed, refined, and customized for each unique client. ■

*See the sidebar on page 14, “Cool Tools for Creating Enhanced UX,” for definitions and descriptions of new and emerging visualization technologies and products.*

# Cool Tools for Creating Enhanced UX

By Craig Park, FSMPS, Assoc. AIA

**Augmented reality (AR)** is a live direct or indirect view—often using tablets, mobile phones, or specialized head-mounted displays (e.g., Google Glass)—of a physical, real-world environment whose elements are “augmented” by computer-generated sensory input such as sound, video, graphics, or GPS data.

AR enhances the viewer’s current perception of reality, whereas in contrast, virtual reality replaces the real world with a simulated one. Augmentation techniques are typically performed in real time and in context with environmental elements, such as overlaying supplemental information like scores over a live video feed of a sporting event. The worldwide phenomena of Pokémon Go is an excellent example of AR.

Check out these resources:

- ARToolkit: An open-source tracking library for augmented reality. Supported platforms: Android, iOS, Linux, Windows, Mac OS, and Smart Glasses. [artoolkit.org](http://artoolkit.org)
- Augment: An iOS and Android app lets users overlay building plans, marketing materials, and other 2-D collateral on a 3-D BIM model. [augmentedev.com](http://augmentedev.com)
- EasyAR: A free and easy-to-use alternative to Vuforia. Supported platforms: Android, iOS, UWP, Windows, Mac, and Unity Editor. [easyar.com](http://easyar.com)
- Visidraft: An iOS app to let project teams see building products and other elements, such as furniture, within a 3-D CAD model of a space. Compatible with models from Autodesk’s AutoCAD, Revit, and 3DS Max platforms, as well as Trimble’s SketchUp, Nemetschek Vectorworks, and Graphisoft’s ArchiCAD. [visidraft.com](http://visidraft.com)
- Vuforia: One of the most popular platforms to help you work with AR development. Supported platforms: Android, iOS, UWP, and Unity Editor. [developer.vuforia.com](http://developer.vuforia.com)

**Virtual reality (VR)** is a computer technology that uses virtual reality headsets—sometimes in combination with physical spaces or multi-projected environments—to generate realistic images, sounds, and other sensations that simulate a user’s physical presence in a virtual or imaginary environment. A person using VR equipment is able to “look around” the artificial world, and with high quality VR move about in it and interact with virtual features or items. VR headsets are head-mounted goggles with a screen in front of the eyes. VR systems may include audio and sounds through speakers or headphones.

Check out these resources:

- Enscape: A Revit plugin for simple and fast 3-D and “walk-through” content creation. [enscape3D.com](http://enscape3D.com)
- Google Daydream View: A step up from Google Cardboard, and an affordable and comfortable gateway to virtual worlds—there just aren’t many to visit yet. This is more comfortable than other mobile VR headsets. Included remote control is easy to use, but very little hardware and software support so far. [madeby.google.com/vr](http://madeby.google.com/vr)
- HTC Vive: A comprehensive PC-tethered VR system that supports both motion controls and whole-room VR. It provides an immersive experience and is expensive. Tethered headsets make whole-room VR tricky. [vive.com/us](http://vive.com/us)
- IrisVR: An immersive architecture plugin for VR. It works with SketchUp, Revit, Rhino files, and creates panoramas in the Oculus Rift, HTC Vive, and Google Daydream. [irisvr.com](http://irisvr.com)
- Microsoft HoloLens: The first self-contained, holographic computer enables users to experience MR engagements with digital content and interact with holograms in the world around them. [microsoft.com/en-us/hololens](http://microsoft.com/en-us/hololens)



3D Systems, Littleton, CO. Tenant Planning Services.  
©BradNicolPhotography, bradnicolphotography.com.

- Oculus Rift: The Oculus Rift is a powerful, low-cost, PC-tethered VR system for creating an immersive VR experience that works with Oculus and SteamVR platforms. It does not provide for whole-room VR, and requires four USB ports to fully function. [oculus.com/rift](http://oculus.com/rift)
- SmartReality: This software was designed for the A/E/C sectors and works with many 3-D software programs, including Revit. It allows users to turn 2-D plans into interactive 3-D models on a tablet or through a VR headset like the Oculus Rift VR smart glasses. Project team members can use SmartReality to scan their paper plans with the device’s camera, syncing it with the correct 3-D model. [smartreality.co](http://smartreality.co)

## Computer Aided Virtual Environments (CAVE)

This was originally developed in 1992 at the Electronic Visualization Lab (EVL), University of Illinois, Chicago. It is an immersive reality environment where projected images or flat-screen displays are directed on three to six of the walls (floor and ceiling) of a room-sized cube. Groups of users wear 3-D glasses, similar to those used in commercial movie theaters, and an operator with a gaming-style joystick to navigate through what appears to be a virtual 3-D space.

Creating the types of 3-D spaces that are truly immersive is more science than art. Checkout Mechdyne ([www.mechdyne.com](http://www.mechdyne.com)) and Eon Reality ([www.eonreality.com](http://www.eonreality.com)). These firms are leading the way. ■