Great Talent + Great Technology = Great Success

Macy's Project Leads Studio Rendering to Find the Formula with BOXX



BOXX Senior Copy Editor and Video Producer John Vondrak recently spoke with Studio Rendering CEO, Chief Creative Officer, Sonny Sultani to learn about the award-winning company's role in last year's most expensive retail construction project. Along the way, he discovered how Sultani and his team transitioned from building their own workstations to becoming BOXX believers.

Sonny, how about providing us with some background on Studio Rendering and the types of projects you're involved with.

Studio Rendering opened its doors in 2006 as a family-owned architectural visualization studio. Our primary focus has always been to produce 3D renderings and animations for interior designers—primarily, designers working on projects in hospitality, retail, healthcare, and education. What was most exciting for us in 2012 was our ability to venture out of our comfort zone. We were given the opportunity to work on animations which were used inside ads for major brands like Comcast, Motorola, and Honda, one of which became a Super Bowl spot.

How did you become aware of BOXX?

Our first encounter with BOXX was a set of servers (six to be exact) which we bought off of eBay in 2007 from Charles Hellwig who worked at SOM and now owns a company called CineArc. We were told that he had acquired those servers from Joseph Kosinski (best known for directing *TRON: Legacy* and *Oblivion*) who had stepped away from KD Labs in NY and no longer needed them when he had moved to LA. Surprisingly, in a world where we change computers every two years, we had those servers in operation until mid-2011 when we finally retired them. Those where the most efficient machines we had.

Now you're a customer of BOXX sales consultant Dustin Leifheit. Describe your experience working with him?

Dustin is the MAN! I can't say enough good things about him. I have never, ever received that type of individualized attention from any other company. I learn a great deal from Dustin about technology, our industry, and how to better manage our workflow every time I talk to him.

Have you ever needed the assistance of legendary BOXX Technical Support?

Yes, there was a time when one of our BOXX machine's power supply was giving us problems. Without question, I received a brand new power supply overnight. That was ridiculous! I have never had a computer back in operation so quickly. Dustin and the support staff at BOXX took the issue seriously and I could tell that they understood our industry. They knew exactly what it meant for us to have a computer out of commission. In terms of requiring service, it was my one and only experience with BOXX Tech Support.

Which BOXX system (or systems) do you use?

We currently work with the 3DBOXX 8950 and 4920 workstations, and now have two render PROs (dedicated rendering modules) as well.

Prior to your BOXX system, what type of workstation (or renderers) were you using?

We were making our own computers for the most part. Every freelancing blog out there said that is what we should do and so we did. But as your studio grows, so do your technology needs and we had to find a healthy substitute for making our own. I just didn't have the time to build, procure, and support the computers we had built, so we started to buy Dells and while those were economical, they just couldn't withstand the demands of 3D software. We had a lot of trouble with them and they couldn't render as fast as our in-house machines.

When we made the decision to eliminate our servers (server room entirely) in 2012, we needed machines that could work with our FOG rendering solution. FOG or "Farm on Ground" was an in-house solution we developed with Northwestern grad and technologist, Brad Hunter. Brad provided the necessary research and we developed the software that clustered our workstations and allowed renders to stream in the background of each computer while our artists were working on them. The technological improvement was essential to reducing hardware and software costs, but it required us to have computing power that would make sense. BOXX seemed to have the right technology that worked.

What advice would you give to those who say, "BOXX is too expensive and for a lot less money you can build your own system that is comparable to a BOXX?"

After testing BOXX with the same hardware configuration as our own built machine (spec to spec) BOXX is dynamically faster, so the question is a little unfair... You learn a lot as you progress in the industry and the first thing you learn is that technology grows old and you have to find a home for old technology (our old technology is usually faster than what's normal in the mass market). Custom built computers are almost impossible to sell at a respectable price, but I've never had a problem selling a name brand computer. The second thing you learn is that in our industry, work can become overwhelming. Support (and the ability to be up and running) become increasingly important as the workload progresses. A good example of this is when the liquid cooling system started leaking on a machine we had built. We had to wait six weeks before the manufacturer could send us a check to replace all the damage that had rendered it useless. If that had been a BOXX, we would have probably had the technical support needed to get up and running in a physical day. Lastly, you learn that you can quickly spend a lot of time doing everything besides what generates you money. Putting a computer together can take you away from what's really important.



Which software applications do you rely on?

We couldn't live without Autodesk 3ds Max and Adobe Photoshop. We also have AutoCad, SolidWorks®, Adobe® After Effects®, Z-Brush, Autodesk® Revit®, and a host of other software that we've experimented with.

How about rendering? Which application(s) do you like and why?

We primarily use V-Ray and have started to play with iray and Maxwell. We like V-Ray for a few reasons: it works seamlessly with 3ds Max (and works fast), we are able to find artists who have a good foundation in it, and we like the control it gives us. *Describe the experience of working with your BOXX systems*.

The BOXX systems greatly surpass our other systems. They're quiet, which means I can keep them spaced out in shorter distances. They hardly ever go down or give me problems, and are very, very stable for their clock speed. My built systems, spec to spec, don't render as fast. We generally see our built systems with the same specs getting a Cinebench score 11% lower than our BOXX systems. We have looked up and down the bios to discover the magic and have concluded that you guys use magic. The BOXX systems require less space than our built systems, which means there is some leg room. I love the design of the BOXX systems.

They give my firm credibility for being in the field and above all,

they use less power than my built systems. At the end of the day, every studio needs to make money and at some point, stop looking at computer purchases as an ordinary expense but as an investment. If a workstation can give me give me more reliability, better performance, and provide savings on utilities and space I think, as the studio expands, it would be hard for me not to keep choosing BOXX.

At the end of the day, every studio needs to make money and at some point, stop looking at computer purchases as an ordinary expense but as an investment.

- Sonny Sultani

What was Studio Rendering's biggest workflow issue that your BOXX systems were able to solve?

The biggest workflow problem our BOXX solved was being able to handle a lot of geometries—especially in regard to the type of work we do with interior designers. Everything you see in our scenes is custom made and has to be done in high quality. Detailed work is extremely important to our hospitality and retail clients.

In 2011, Macy's began a complete renovation of their Macy's Herald Square store in New York City. According to Architectural Record, this \$400 million dollar endeavor was the most expensive retail construction project of 2012. Can you tell me how Studio Rendering and your BOXX system factored into that?

When the Macy's project came to us in 2011 through Charles Sparks + Associates, an interior retail design firm which is a great company and has been really instrumental to our success, we only had four employees, about a third of the size we are now. Macy's presented us with deadlines that we really weren't accustomed to. While we were working on the renderings for the world's largest shoe department it became clear that the amount of work and the speed at which they wanted it finished required more and better hardware, but there was no time to build our own systems. We decided to spend the money on the best BOXX workstation we could get. I also let Dustin know how desperate are situation was so if he could do anything to help, time was critical. We purchased the 3DBOXX 8950 XTREME and had our workstation in four days.

So what was your reaction when you put it to work?

As soon as we had it, there was one particular scene, a ladies shoe department image that featured over a hundred different shoe models. Our 32GB Dells and home built systems couldn't handle the geometrics. Macy's wanted us to fill the store images with as much merchandise as possible, so we packed the scene with shoes. The polygon counts were so high that the machines just stalled out. Not the BOXX though. Nothing could faze it. Creating the images on the machine was a great experience, but when we hit render, it was the perfect machine-three times faster than our current systems. I remember when I got a call from our VP saying that if we had not had the BOXX, we would not have been able to render the scene the same day. On the same 3DBOXX 8950, we've since worked on the Macy's Café, as well as most of the men's department sections. Working on the BOXX changed our whole experience and really helped us get through the project and meet those deadlines.

Besides your workflow, BOXX changed your experience in what ways?

I became a BOXX believer. Before this, and with the exception of the Dells, we always built our own machines. I probably shouldn't tell you this, but still being a freelancer at heart, we tried to build our own BOXX.

So this is when you said you tested the BOXX against a built system?

Yes. As soon as we had some time, we tried to save some money and attempt to build our own BOXX. We deconstructed the system, and made our own replica, spec to spec, part for part, config, BIOs, everything—and put it head to head against the BOXX.

And you couldn't get the same results?

I tell people that we saved 18% in cost, but unfortunately, we gave up 11% in performance.

- Sonny Sultani

We couldn't get it to go as fast! We couldn't figure it out. We tore it down, spec for spec, and still it wouldn't go as fast. I tell people that we saved 18% in cost, but unfor tunately, we gave up11% in performance.To make matters worse, the built machine occasionally over heats when the job is too much, but the BOXX always runs cool.

What did you take away from that experience?

That it's not worth it. If you knew how much agony we went through trying to replicate that system, I wouldn't want anyone to go though that! (laughs). With BOXX we get great support, a quick turnaround, and let's face it, you can't build and test a system in two seconds. When you're younger, you want to learn everything about everything—your curiosity is huge. That's a great quality; however it can also lead to wasting time. I've learned that it is a better use of resources to focus your energy on your strengths and dedicate time to your craft. When you reach a certain pinnacle, all the accumulated knowledge is very useful, but often times, you have to trust someone to do certain things for you—someone who specializes in another area. I trust BOXX.

What does the future hold for Studio Rendering and your relationship with BOXX?

After purchasing that first BOXX, we've added more workstations, along with the renderPROs. We've tripled the size of our company, increased our revenue four times over, and are in the process of expanding to an off shore site, which means adding more artists and purchasing more BOXX workstations. This isn't all because of BOXX, of course. Our growth is also attributable to the talented people we have here, but when you merge great talent with great technology, success is the result.

> Senior Copy Editor and Video Producer John Vondrak BOXX Technologies





Sonny Sultani CEO, Chief Creative Officer

More than 16 years of management and professional experience to the studio. Sonny directs talent, long term innovation and strategic initiatives for the company.