SeriousFun

Alumni Brad Hoffert and Steve Kelsey teamed up to create LocoLabs, an engineering design firm with a sense of humor and purpose.

As students at San Diego State University, Brad Hoffert and Steve Kelsey vowed they would start a company together one day. Since these two are anything but conventional engineers, their venture, LocoLabs, is not your typical engineering development and design firm.

The first clue is the robot in the lobby of their Santa Clara offices. An employee created it—from the tennis shoes on up-for one of LocoLabs' legendary Halloween parties. Then there are the products Hoffert and Kelsey have helped to develop. They range from a 3D-imaging,

gamma-ray detection instrument for the Department of Defense (DOD), pictured at far right, to a games console platform for children and a DVD rental kiosk, above.

LocoLabs collaborates with inventors to turn original ideas into reality by engineering Cinderella prototypes into elegant, marketable products. Before joining forces, Hoffert worked

for Sun Microsystems and Kelsey was with Qualcomm Inc. Each pledged \$3,000 to start up LocoLabs in 1996 and "never had to put in another dime," Hoffert said. To read the full text of their interview, visit sdsu.edu/locolabs.





Both of you have multiple degrees. In your field, how important is it to have a broad domain of knowledge?

BH It's a combination of staying curious and acting on your curiosity. That's why I double majored in electrical engineering and German with a minor in computer science. The goal of starting my own company was largely driven by my desire to always be doing new things. The Steve Buscemi character in "Armageddon" sums it up for me when he talks about why he likes his job. "Because the money's good, the scenery changes and they let me use explosives, okay?" It's like that, but without the explosives.

We are a "systems house," meaning we deliver hardware, software and mechanical solutions, integrated together. Most of our engineers are cross-trained in hardware and software, so each aspect of the design is engineered to serve and enhance the others. This results in a high level of elegance and efficiency. Also, our personal interests in nature, hiking, sports and music drive our technical knowledge and passions. We're consumers who want new features and more intelligent design, and we're engineers who can deliver those things.

Talk about the project you're doing for DoD. How did that come about?

S . We were on a High Sierra hiking trip in Yosemite and met an interesting gentleman at one of the camps. We chatted for some time and exchanged business cards. A couple of years go by and, boom, we get an email from him. He works for a large firm on the East Coast that specializes in government contracting. A bunch of paperwork later, we're working together on a very advanced 3D-imaging gamma-ray detecting instrument. Now, we're at work on the third generation of the system, having turned a cool lab-bench science project into a useable instrument. You never know where a chance meeting or a hike in the high country might lead.

In today's market, what separates a great idea from a good idea?

I believe there are two types of great ideas those whose time has come, and those whose time will come. We listen for the sucking sound of the market pulling the product. We actually look for projects



to invest in where an early prototype has already been built, customers are clamoring for it, but the product is way too premature. We have jumped in on multiple occasions to harden and properly release a product to make it a success. Redbox is a good example. We were asked to look at why the first generation was unreliable. We ended up using one of our own modules to work around the technical constraint, and ultimately built multiple generations of DVD rental machines for DVDPlay, which was later subsumed by Redbox. The CEO of DVDPlay is a dear friend and backpacking companion with a common German background; many technical or strategic conundrums have been solved over a pint and a few pretzels. Steve's skateboarding history melded well with the technical challenges of a surfer-camera project for some crazy smart guys with a kite-boarding school in the Bahamas, especially when we called on Steve to skateboard around the parking lot to tune the GPS tracking algorithms.

By Coleen L. Geraghty



/ There are many great ideas out there, and even more good ideas. What separates any idea from a great product is a sound plan, inspired marketing and well-engineered implementation. Sometimes the consumers don't know they need the product until you create it. Those are the trickiest products to develop, but the most rewarding, when you guess correctly, and the marketing team is equally inspired. Our work on the original TiVo design is a great example of this.

What are your best memories of SDSU?

/ There are so many. Skateboarding all over campus and getting my photo in the Daily Aztec by jumping off the "Free Air" wall of the Aztec Center. Meeting my wife (to be) in Philosophy 101 and getting married while still in school. Destroying a few curves. Conquering some challenging projects, often way beyond the required scope. Performing with friends in the Marching Aztecs and hanging out at the Murph so many Saturday nights. Being a rare EE/CS double major. Teaching a couple of computer design courses at SDSU for a professor friend on sabbatical.

Napping in the banana garden in the warm afternoon shade. Learning machine languages from Vernor Vinge (and later reading his science fiction series). Doing my senior project under Dr. Len Marino's watchful eye. (Later, he agreed to be the arbiter in case Steve and I ever disagreed on anything major. We never had to call him, but thanks, Len!) Meeting my business partner and lifelong friend, Steve, and pledging to him that we would start a company someday. Meeting my spikey haired, quirky, future wife and traveling the world with her on the CSU study abroad program.

14 SUMMER 2015 | sdsu.edu/360 360mag@mail.sdsu.edu | 360 MAGAZINE 15 Photos: Charles Barry