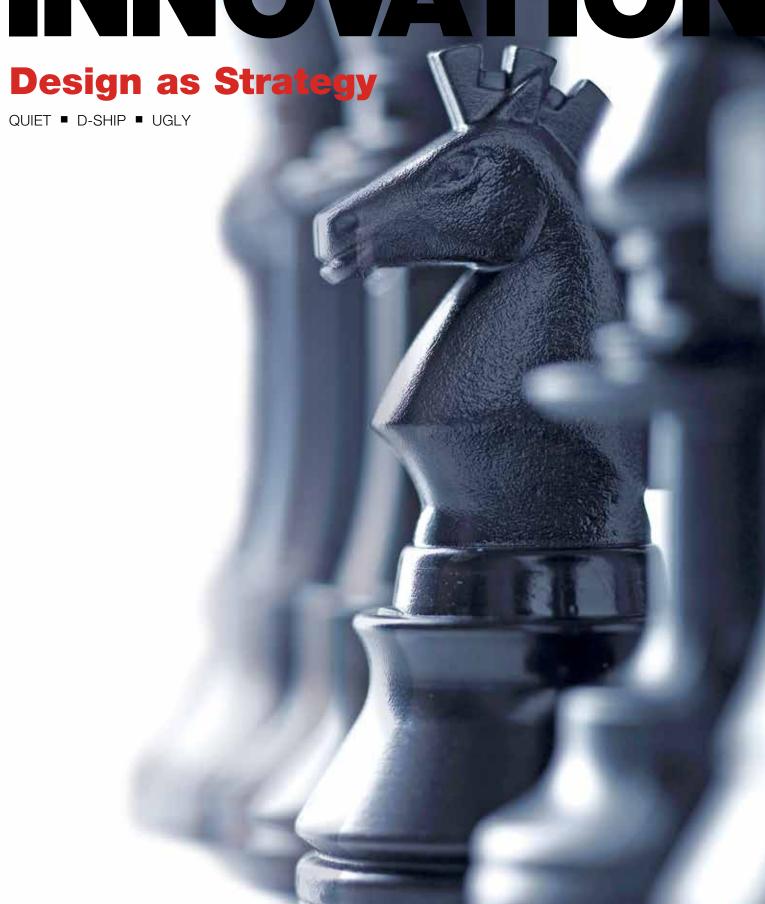
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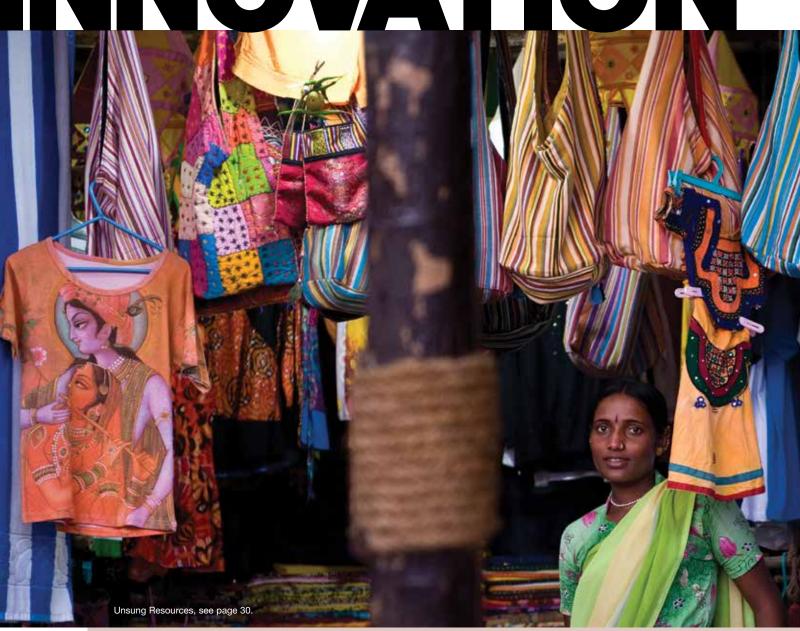
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By Gerard Furbershaw, IDSA and Scot Herbst, IDSA

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San Jose State University's Design Entrepreneurship Class



This page: The funding goal for the Vers 1Q Bluetooth Sound System was \$10,000. David Laituri, the founder of Vers and designer of the 1Q, raised \$196,000 on Kickstarter in 30 days. Right: Daniel Ash of Bauhaus playing an RKS guitar. Rock 'n' roll artists, such as Ron Wood of the Rolling Stones, Daniel Ash of Bauhaus and Don Felder of the Eagles, quickly adopted the RKS guitar for its extreme playability, fresh look, ergonomic controls, tone and sustain.

Gerard Furbershaw is one of LUNAR's founders and its vice president of licensing and investments. He launched and chaired the Association of Professional Design Firms' Royalty and Licensing Summit series and he has taught design entrepreneurship at the USC School of Architecture's XED executive education program and San Jose State University's industrial design program.

Scot Herbst is the creative director and partner at Herbst Produkt. In addition to collaborating with a broad list of partners, including Crate & Barrel, CB2, Home Depot, Clorox, Facebook, and numerous small brands and startups, Herbst is a faculty member at San Jose State University's School of Art & Design, and is a member of the advisory board at Olive Inc.

In the past, starting a product manufacturing business was difficult and painful. Raising money, getting publicity, protecting intellectual property, lining up manufacturing and fulfilling orders were formidable challenges. Due to a confluence of six factors, it is now a lot easier to become an entrepreneur. Rapid prototyping services enable budding entrepreneurs to inexpensively prototype their ideas. Crowdfunding platforms, such as Kickstarter and



Indiegogo, provide quick feedback on the feasibility of a product concept, access to funding, the ability to develop a customer base and critiques of the product design. Product reviews from a myriad of specialized blogs and Web magazines, like *Gizmodo* and *Engadget*, can generate invaluable publicity for a new venture. The US Patent and Trademark Office's provisional patent gives entrepreneurs a quick and economical way to protect the functional intellectual property they have developed. China Inc. makes it possible to cost-effectively manufacture almost anything and within a fairly rapid timeframe. Lastly, turnkey e-commerce solutions, such as Amazon's Webstore, offer stand-alone platforms that integrate payment processing and shipping. These factors enable a design entrepreneur to more easily transform a compelling product concept into a viable business.

The Pros Speak at D-SHIP

The D-SHIP class at San Jose State University (SJSU) is structured to expose students to the possibility of design entrepreneurship by teaching them the prerequisite skills and introducing them to design entrepreneurs who have experienced success in a wide variety of product categories and on a continuum ranging from royalty-based entrepreneurship to company acquisitions. A number of designentrepreneur guest lecturers, which vary by semester, share their war stories with the class. They are powerful role models for the students, letting them see that a

designer can succeed as an entrepreneur. A handful of guest speakers are also invited to talk about complementary topics that are essential to the creation of a successful product company.

Although the design entrepreneur has a great deal of sophistication in the use of design, learning about other business-related areas from brand to manufacturing strategies is critical to ensuring the success of a new venture. The

essence of a company is its brand. Just as design is the soul of a product, brand is the soul of a company. Melanie Robinson, the founder of the Los Angeles-based brand consultancy Fluid Figment, has spoken about the key aspects of brand. She informed the students that it was essential for entrepreneurs to identify their core values and beliefs, create connections with people who care about the same things they do and tell their stories. Robinson explained that the core components of brand strategy are what we believe, why we exist, where we are going, how we will get there and what we will do. She also talked about brand promise, a stated or implied pledge that creates customer expectations and employee responsibilities.

In addition to envisioning the brand, the entrepreneur must also envision the business model. Gary Cantu, a serial entrepreneur and CEO of Brightline Medical, has taught the class about business plans. He explained that the key components of a business plan are market size, distribution channels, competitors, risks and the company's team. He also talked about the different types of company stock, the concept of dilution and the use of bootstrapping to retain as much company value for as long as possible.

With the brand defined and the business plan roughed out, the entrepreneur needs to create an organization that can deliver the brand promise. Jeff Smith, co-founder and CEO of LUNAR, has presented a holistic view of business, proposing that there are six Cs an entrepreneur needs to







Clockwise, starting top left: Smart Design's idea of sliding a bicycle handlebar grip over a conventional potato peeler became the catalyst for launching the hugely successful OXO brand. Jim Gentes, founder of Giro, talks about his strategy of giving helmets to professional cyclists and triathletes. Greg LeMond's use of a Giro aerodynamic helmet in the winning of the 1989 Tour de France by a mere 8 seconds helped put Giro on the map.

- Its premium design-centric brand plus multiple utility patents positioned Astro Gaming as an attractive candidate for Skullcandy's first acquisition.
- Herman Miller Capelli stool. The original goal of designer Carol Catalano was to create a piece of furniture she could fabricate in her garage workshop.



address: who the customers and competition are, what differentiated capabilities a company possesses, how to implement a competitive cost structure, and what social consciousness and culture need to be instilled within the company.

Because laws create the framework companies must work within, an understanding of the legal environment is critical to an entrepreneur. Joe Hustein, an industrial design graduate, electrical engineer and attorney, has discussed what intellectual property is, the ownership of intellectual property and the different categories, such as provisional and utility patents, design patents, trademarks, copyrights and trade secrets. He also covered the liabilities design entrepreneurs face, particularly intellectual property infringement and product liability, and the use of legal entities to avoid personal liability.

At the center of a product company is its manufacturing capability. Alan Cook, CEO of Lucky Litter, has shared his recommendations regarding offshore manufacturing

strategies. He suggested that the right manufacturer can be found through one's network or sourcing agents or Alibaba (like Google for manufacturing in China). He chose to go to China in search of a manufacturer himself. He found that by working with a small manufacturer, he had its top people available to him. Although manufacturing costs are much lower in China, he warned the students that many earlymorning and late-night calls and emails are required to keep the project on track.

Learning about aspects of the creation of a company provides the students with a strong theoretical business foundation, but hearing nine industrial designers who have become design entrepreneurs tell their war stories puts everything into context. Two SJSU alumni, Jim Gentes and Jim Blackburn, founders of Giro and Blackburn Design, have shared their experiences in the bicycle helmet and accessories markets and talked about their acquisitions by Easton Bell Sports. Brett Lovelady, IDSA, founder of Astro Studios, has recounted another acquisition story. He spoke of the design and development of Astro Gaming's professional-grade video gaming products and the company's eventual sale to Skullcandy.

Tom Dair, IDSA, co-founder of Smart Design, and Carol Catalano, IDSA, founder of Catalano Design, have shared their learnings from the royalties' domain. Smart Design was involved in launching the hugely successful OXO brand, and Catalano with the iconic Herman Miller Capelli stool.

Dave Laituri, founder of Vers, has discussed his company's sustainability orientation and the Kickstarter campaign for his 1Q Bluetooth Sound System. Like Vers, RKS Guitars found a niche in the music industry. Paul Janowski, the former director of operations at RKS Design and RKS Guitars, has spoken about the impact their design had on high-profile rock 'n' roll artists.

Although the need to create value and profits are a universal theme from the design entrepreneurs, broader societal implications of social entrepreneurship are also addressed. Surfer and former head of design for O'Neill in Santa Cruz, CA, Eli Marmar has taken the class on an

D-SHIP

The D-SHIP Curriculum

Referred to as "The Roadmap for the Design Entrepreneur," the D-SHIP curriculum creates a toolkit for anticipating and managing the progression of events that a typical venture will encounter. The process evolves each week, building to a crescendo with the culmination of a final emotionally charged sales pitch using the Kickstarter platform with a mock campaign and video. The topics discussed during these lectures cover activities almost any design entrepreneur would need to engage in to successfully launch a product in the market.

The Discovery Phase

- Preliminary product definition
- Qualitative research methods
- Survey Monkey analysis
- The value of research and engagement

Marketing Principles

- Customer identification and segmentation
- Ethnography and market definition

Making It

- Sourcing and vendor selection
- Manufacturing, supply chain, logistics and coordination

The Retail Jungle

 Selecting and working through retail channels, margin structure and sales

Pack It Up

Retail packaging and presentation (the less-is-more approach)

Pricing

Product costs, retail pricing and margin requirements

Selling

 Traditional methodologies along with the new sales frontier: leveraging social media

The Big Pitch

- The product launch
- Simplifying the message
- The art of storytelling
- Leveraging new media and video in creating an emotional connection



emotional deep dive with his clean water initiatives through startup footwear company Freewaters. The company just reached a milestone of topping \$1 million in annual sales, proof that good design + good karma = good business.

Possessing limitless amounts of talent and a variety of skills, the design entrepreneur has no codified blue-print. However, one common thread does exist that binds every successful design venture: passion. With his boundless energy and consummate business creativity, Dario Antonioni, founder of the Los Angeles studio Orange 22, has immersed the students in a world of opportunity from furniture manufacturing to intellectual-property licensing with an undeniable passion for the entrepreneurial journey.

With a diverse cross section of contributors, stories and paths to market, D-SHIP is predicated on the basic thesis of nimble creativity: That is, rather than a singular linear approach to launching a product, the design entrepreneur should express as much creativity in the product development process as in the physical design of the object. Each venture is unique to the circumstances, the design entrepreneur's skills and variables that exist in an unpredictable and constantly changing environment. Staying flexible, bootstrapping the startup costs, revisiting the design attributes, exploiting creative sales and social media outlets-all of these strategies provide a degree of freedom and problem solving that each venture will encounter on very different terms. And yet with the absence of a formal playbook, a vibrant science does underpin the various disciplines needed to better ensure product success. We developed a 16-week curriculum that reveals the process from napkin sketch to store shelf (see sidebar).



Kicking Off a Kickstarter Campaign

With the rapid emergence of crowdfunding as an alternative form of fundraising, understanding how to best use it has become essential. For the midterm, students present their research on what makes a Kickstarter campaign successful. They then select a product to design and prototype based on their passions or the market opportunities they have discovered. For the final, they mock up a Kickstarter project page to reflect their product pitch and create an accompanying video. At that point, the students have a Kickstarter-ready project.

A number of students have developed projects with commercial feasibility. They have kept these projects under wraps until they will have the time to cultivate them. One team has launched its project on Indiegogo.

The Future of Design Entrepreneurship

Most industrial designers have fantasized about designing their own products and getting them to the market. The confluence of rapid prototyping, crowdfunding, blog product reviews, provisional patents, China Inc. and e-commerce have provided the infrastructure to easily turn these fantasies into reality. In addition, successful design entrepreneurs have become role models. The combination of this new infrastructure and role models is fueling the interest in and passion for design entrepreneurship within our profession. Classes like D-SHIP are essential to providing students with an understanding of the tremendous opportunities to be found, the skills to transact in this arena and the confidence that an industrial designer can succeed as an entrepreneur.



Top: Pursuing a triple bottom-line (people, planet, profit) model,
Freewaters donates a portion of its time and profits to digging and maintaining clean wells in Africa and beyond. ■ As a result of the D-SHIP class, classmates Jozy Klupar and Susi Matsuoka launched Peruvian Artisan Exchange (PAX) on Indiegogo and created a website. They worked with the Chijnayan artisans to create a range of handwoven Alpaca products to give the impoverished women of the Altiplano region of Peru an opportunity to become financially stable.



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