



Product Design

Session 5 - Industrial Design | Crowdsourcing

Professor Karl T. Ulrich
Vice Dean of Entrepreneurship & Innovation

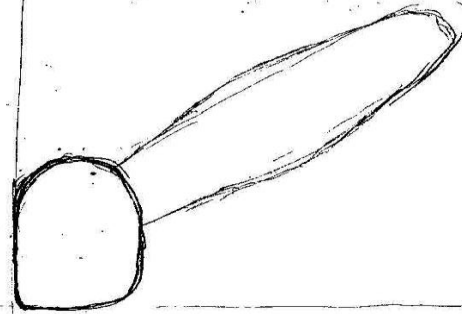
@ktulrich | ktulrich.com | ulrich@wharton.upenn.edu





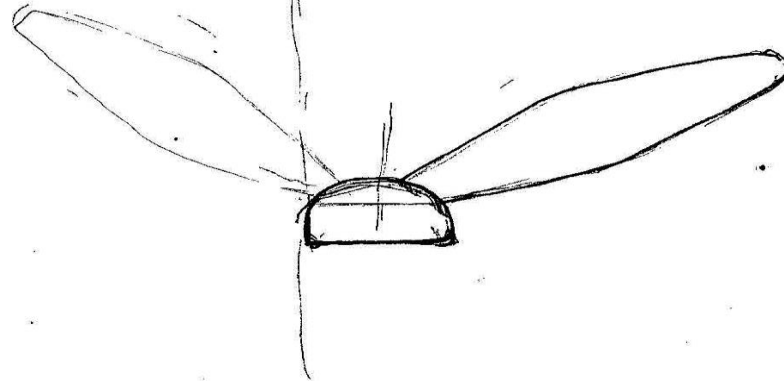


FIXED
OPTIMAL
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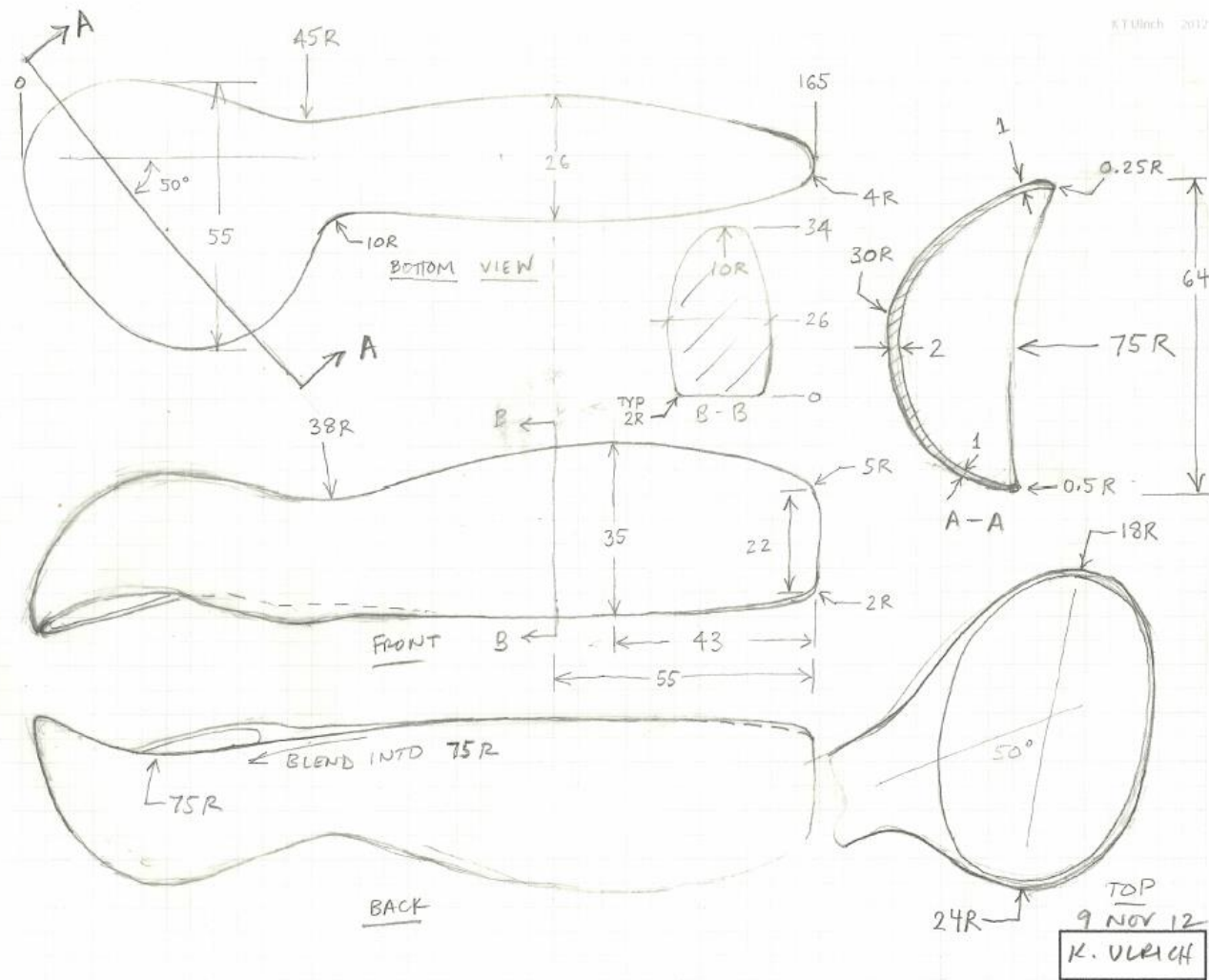
PIVOTING
HANDLE

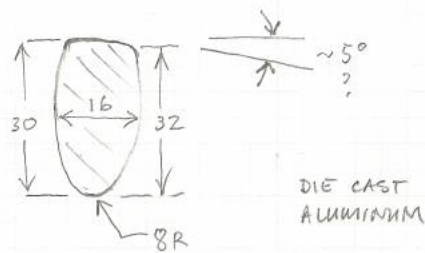
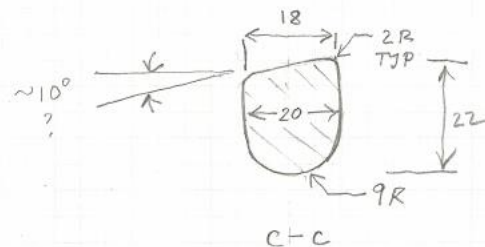
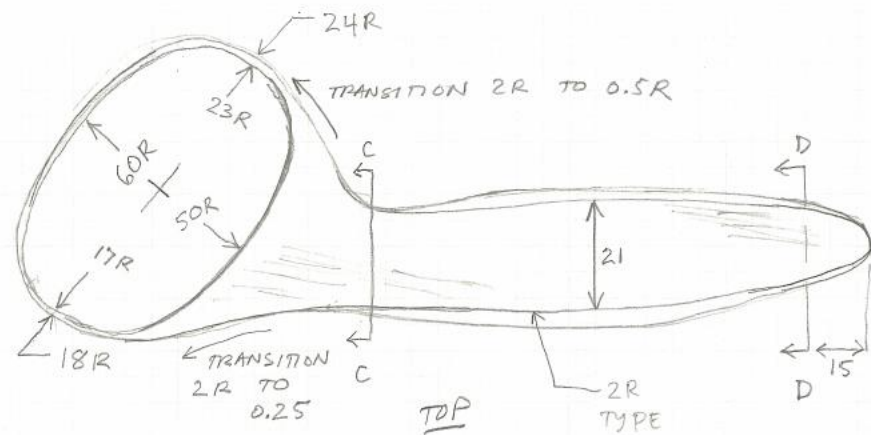
5 POSITIONS











DIE CAST ALUMINUM

9 NOV 12

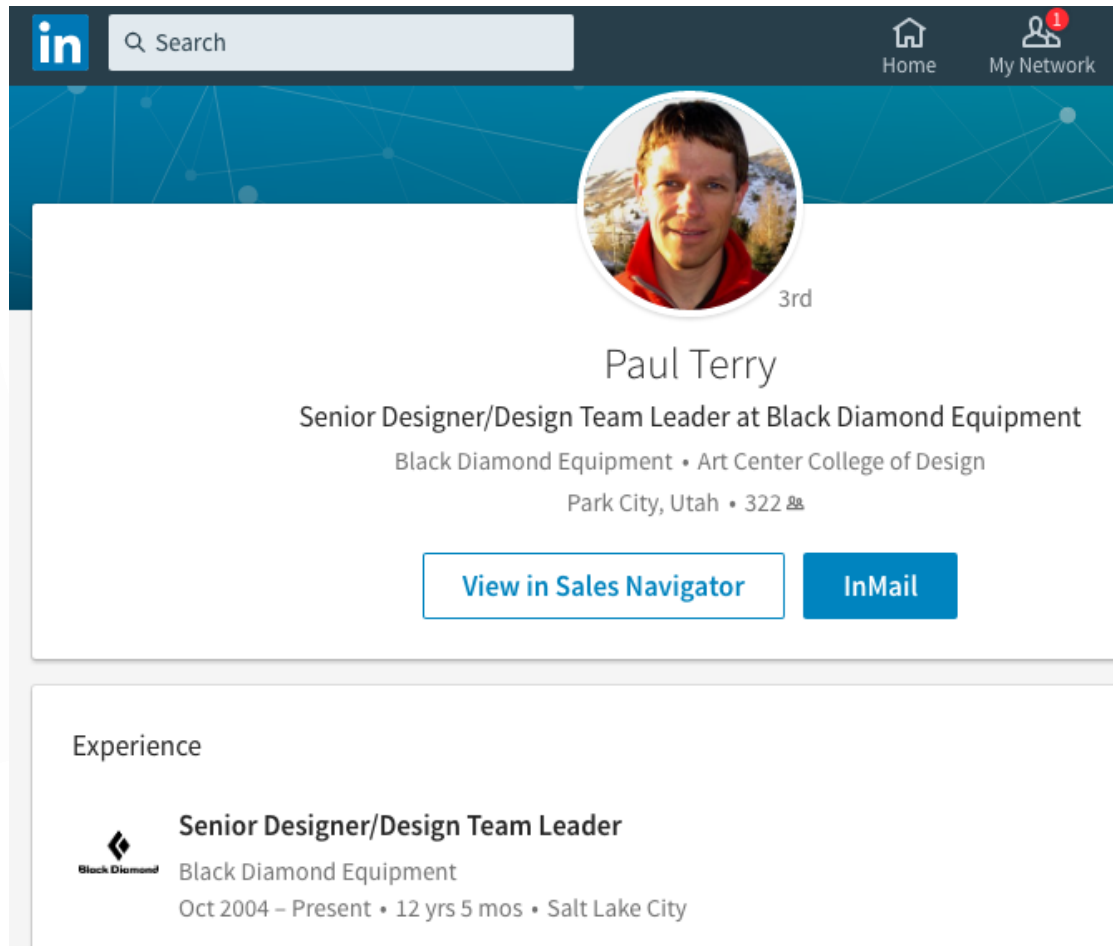




For Many Products, Aesthetic Response is a Paramount Objective



All Products Can Benefit from Positive Aesthetic Response




LinkedIn profile of Paul Terry, Senior Designer/Design Team Leader at Black Diamond Equipment. The profile includes a search bar, navigation links (Home, My Network), a profile picture, and a list of experiences.

Paul Terry
3rd

Senior Designer/Design Team Leader at Black Diamond Equipment
Black Diamond Equipment • Art Center College of Design
Park City, Utah • 322

[View in Sales Navigator](#) [InMail](#)

Experience

 **Senior Designer/Design Team Leader**
Black Diamond Equipment
Oct 2004 – Present • 12 yrs 5 mos • Salt Lake City

Industrial designers are product designers skilled in creating aesthetic forms.

pure function

pure form



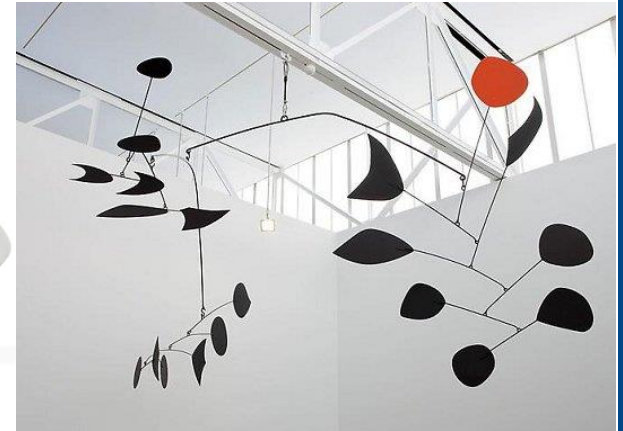
Masonry nail



Oculus touch



Allbirds shoe



Alexander Calder mobile

Engineering Design

Industrial Design

Fine Arts

IPD
(+ business)

Design Arts

Partnership with Lunar Design and Alan Cook







鋁



不銹鋼









Models for Engaging “The Crowd”

Product Development



“Kickstarter-Style” Pledges



Pre-Orders



(Chris Tsai WG13)

Equity Crowdfunding




KU interview with Slava Rubin W00, co-founder of Indiegogo:

<https://soundcloud.com/user-634502599/karl-ulrich-talks-with-slava-rubin-w00-founder-of-indiegogo>

Kickstarter (as of 2018)

- 391k launched campaigns.
- 4k projects currently live.
- 3.5 B USD pledged to date.
- 3.1 B USD “successful” funding.
- 139k successful projects (36%).
- Majority of successful projects raise less than 10k USD.
- Successful projects usually barely achieve goal. Unsuccessful projects usually miss by a lot.
- Projects raising more than 50k USD have median shipping delay of 6 months.

Source: <https://www.kickstarter.com/help/stats>



Vue Smart Glasses
Music | Calls | Activity | Notifications

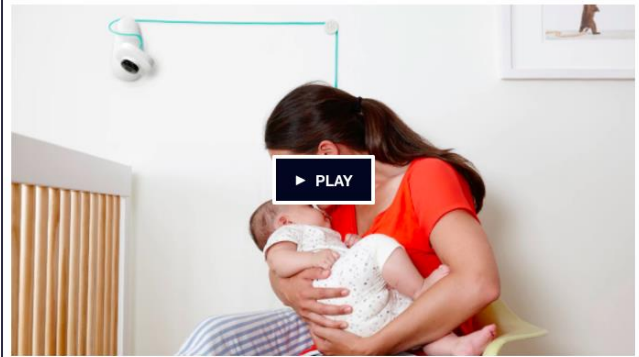
▶ PLAY

Vue: Your Everyday Smart Glasses

San Francisco, CA • Product Design

\$2,215,583
pledged of \$50,000 goal

10,410
backers



▶ PLAY

Knit Monitor —Tracks Sleep & Breathing w/o Wearables

San Francisco, CA • Product Design

\$101,111
pledged of \$100,000 goal

427
backers

Get the scoop!

Tuesday, October 29th 2013

KICKSTARTER



KICKSTARTER

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Belle-V Ice Cream Scoop

by Belle-V Kitchen

Home

Updates **11**

Backers **1,289**

Comments **58**

📍 San Francisco, CA

🔧 Product Design

Funded! This project was successfully funded on Dec 8.



1,289

backers

\$64,724

pledged of \$5,000 goal

0

seconds to go



Project by

Belle-V Kitchen




































Chicago, IL

[Contact me](#)

K First created · 2 backed



Ownership Model

| | Development | | | | Operations | | | | | Cash | |
|-------|---|---|---|---|---|--|---|---|---|---|---|
| | Idea | Proto | Design | Team | Activity | Mgmt | Sales | Mktg | Opns | Acctg | \$ |
| Karl |  |  |  | | | |  | | | |  |
| Alan | |  |  |  |  |  |  |  |  |  |  |
| Lunar | |  |  | |  | |  |  | | |  |
| Kevin | |  |  | |  | |  | |  | |  |
| Kim | | | | |  | |  |  |  | | |
| Trev | | | | |  | | | |  |  | |
| Other | Review catagories, sum totals and %. Need to see if this makes sense | | | | | | | | | |  |

Corporate



(54) **ICE CREAM SCOOP**

(71) Applicant: **Belle-V, LLC**, Chicago, IL (US)

(72) Inventors: **Karl T. Ulrich**, Philadelphia, PA (US);
Jeffrey Allen Salazar, Palo Alto, CA (US); **Alan J. Cook**, Chicago, IL (US);
Jeff Smith, San Francisco, CA (US);
Kevin John Augustyniak, Elma, NY (US); **Gerard Furburshaw**, Menlo Park, CA (US); **Kenneth D. Wood**, Portola Valley, CA (US)

(73) Assignee: **Belle-V, LLC**, Chicago, IL (US)

(**) Term: **14 Years**

(21) Appl. No.: **29/468,569**

(22) Filed: **Oct. 1, 2013**

(51) **LOC (10) CL** **07-99**

(52) **U.S. CL** **D7/681**
USPC

(58) **Field of Classification Search**
CPC **A47J 43/282**
USPC **D7/680-696, 368, 669, 393, 393;**
30/324-328; 425/187, 276-286, 299,
425/DIG. 13; 294/176-180

See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

D475,899 S * 6/2003 Ming-Shiue D7/681
D501,374 S * 2/2005 Crowley D7/681
D505,303 S * 5/2005 Crowley D7/681

* cited by examiner

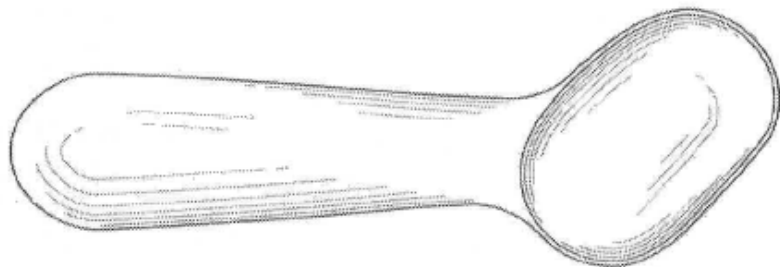
Primary Examiner — Terry Wallace
(74) *Attorney, Agent, or Firm* — Michael J. Femal; Much Shelist

(57) **CLAIM**
The ornamental design for an ice cream scoop, as shown.

DESCRIPTION

FIG. 1 is a perspective view of an ice cream scoop with a two piece handle showing our new design;
FIG. 2 is a right side elevation of the ice cream scoop of FIG. 1;
FIG. 3 is a left side elevation of the ice cream scoop of FIG. 1;
FIG. 4 is a top end view of the ice cream scoop of FIG. 1;
FIG. 5 is a bottom end view of the ice cream scoop of FIG. 1;
FIG. 6 is a top view of the ice cream scoop of FIG. 1; and
FIG. 7 is a bottom view of the ice cream scoop of FIG. 1.
FIG. 8 is a perspective view of an ice cream scoop of an unitary construction showing our new design;
FIG. 9 is a right side elevation of the ice cream scoop of FIG. 8;
FIG. 10 is a left side elevation of the ice cream scoop of FIG. 8;
FIG. 11 is a top end view of the ice cream scoop of FIG. 8;
FIG. 12 is a bottom end view of the ice cream scoop of FIG. 8;
FIG. 13 is a top view of the ice cream scoop of FIG. 8; and
FIG. 14 is a bottom view of the ice cream scoop of FIG. 8.

1 Claim, 6 Drawing Sheets



Claim 1 from Utility Patent 9,173,527

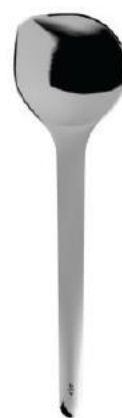
1. An ergonomically designed ice cream scoop, comprising:
 - a handle;
 - and a scoop head integrally attached to the handle
 - having an irregular bowl for receiving an ice cream therein
 - with a generally spade-shaped leading edge
 - integral with a portion of the bowl and
 - extending outwardly therefrom for scooping an ice cream out of a container,
 - wherein the bowl is generally an oblong shaped scoop member attached at one end of the handle at an approximately 45 degree angle from a longitudinal axis running the length of the handle.



HOST & ENTERTAIN

SERVE

PREPARE





ONE



TWO



THREE



FOUR



FIVE



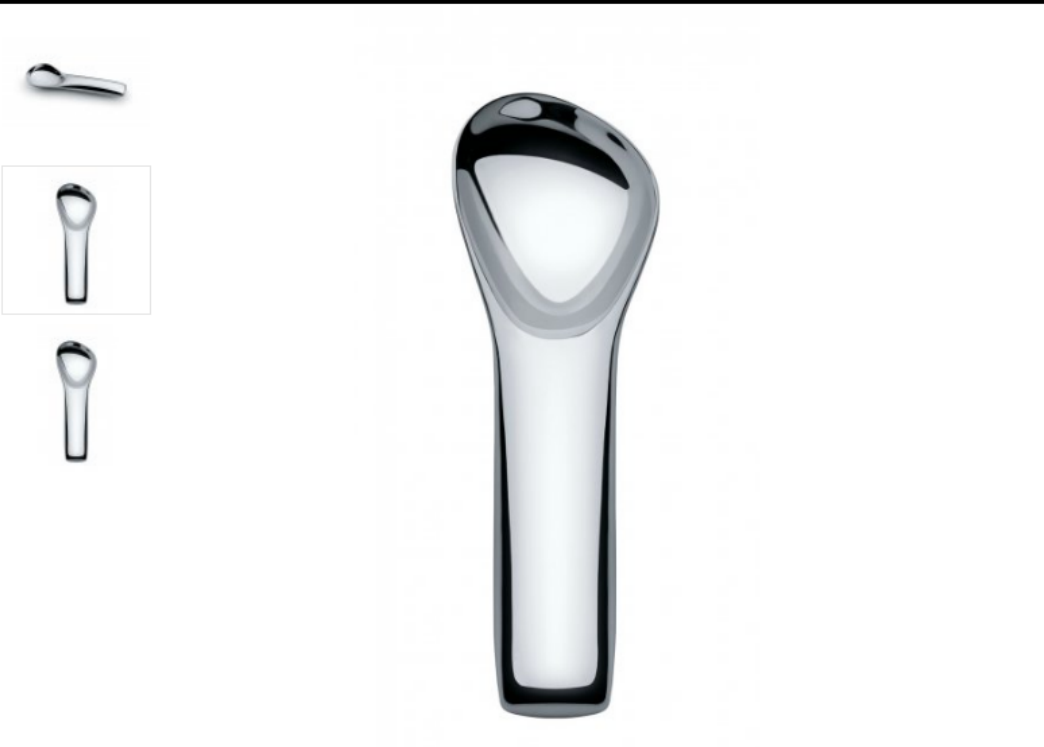
SIX



SEVEN



EIGHT



● in stock \$60.00 [f](#)
Ice cream scoop Koki
KOKI VS05
Designer **Valerio Sommella**
[Details](#) [p](#) [t](#)

1 ▼

ADD TO CART

Shipping & refunds

Add to Wishlist

Belle-V



Silver | Kitchens | 2014

The Belle-V ice cream scoop is a solid aluminum scoop with a classic, ergonomic design that is made to last. The angled head works with the natural rolling action of a user's wrist to give maximum leverage to easily scoop the hardest ice cream. The spade-shaped edge helps users get into those hard-to-reach corners at the bottom of the ice cream container.

Designed by Jeff Salazar, IDSA, Karl Ulrich, Alan Cook, Gerard Furbershaw, Jeff Smith, Junggi Sung and Ken Wood of Belle-V

Contact: Naomi Kieser - naomi@lunar.com

GALLERY

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LUNAR



LUNAR

City, California, United States

www.LUNAR.com

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STATUS

Winner

AWARD CATEGORY

Product Design

YEAR

2014



Belle-V Ice Cream Scoop

by LUNAR

124 1713

Engineering, Industrial Design, Prod...



Lendstar

by LUNAR

10 499

Interaction Design, Product Design, ...



NOVA

by LUNAR

72 1097

Interaction Design, Product Design, ...



Mobilegear.com



SF Prep



SWITCH

Jerry Greenfield of
Ben & Jerry's



What's the Scoop?

- No product category is so mature you can't innovate.
- No product is so simple that it doesn't present commercialization challenges.
- Conceptual insight + excellent industrial design = wow product.
 - Business discipline also important!
- Crowdfunding can be a nice way to launch a product.
- Great product does not ensure a great stand-alone business.



Tech

f
t

Penn alum creates 'smart' glasses

By Haley Suh | 11/16/16 1:23am



Campaign

FAQ

Updates ¹¹

Comments ^{1,203}

Community



Vue: Your Everyday Smart Glasses

📍 San Francisco, CA

🔧 Product Design

\$2,215,583

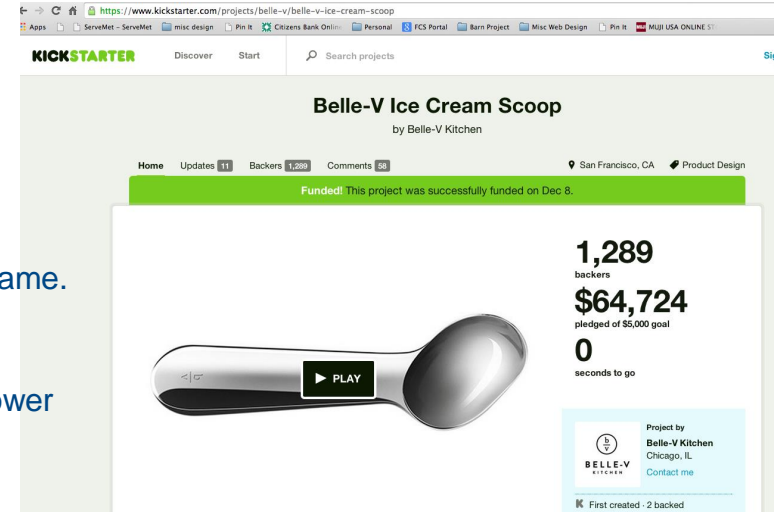
pledged of \$50,000 goal

10,410

backers

Best Practice for Crowdfunding (e.g., Kickstarter, Indiegogo)

- Create a great product.
- Signal preparedness to funders.
 - Excellent video.
 - Reputation and social proof of competence.
 - e.g., cite prior employers and/or relevant experience by name.
 - Care and attention to detail.
 - e.g., a spelling error in the pitch is associated with 13% lower chance of funding.
- Develop and exploit your own strong social network.
- Set funding goal that enables you to deliver product on time.
- Plan carefully in order to set a realistic funding goal and ensure eventual ability to deliver on promises.



Reference:

Ethan Mollick. 2013. The dynamics of crowdfunding: An exploratory study. *Journal of Business Venturing*.

Industrial Design – Learning More

- Classes at Penn under IPD Program.

<http://ipd.me.upenn.edu/pipd-academics/courses/>

- Blogs

- <http://www.core77.com/blog/>
- <http://www.fastcodesign.com/>
- ...lots more via Google.

- Movies

- *Objectified*
 - *Eames: The Architect and the Painter*
 - *Helvetica* (mostly about graphic design, but still interesting and relevant)
- 

