



Engineering Leadership Professional Program Spring 2016 Alumni Mixer

Ikhlaq Sidhu,
Chief Scientist & Founder, Center for Entrepreneurship & Technology
Department of Industrial Engineering & Operations Research
IEOR Emerging Area Professor Award



Engineering Leadership Professional Program

Berkeley
UNIVERSITY OF CALIFORNIA

Archive

Engineering Leadership Professional Program (ELPP)

HELD IN SILICON VALLEY

Open the door to your FUTURE

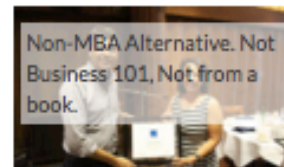
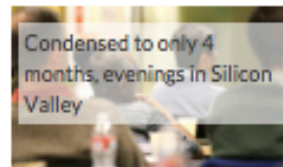
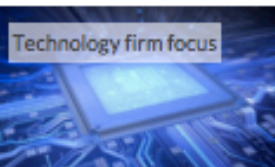
LEARN MORE

- Over 5 years
- 8 Cohorts
- 400 Alumni

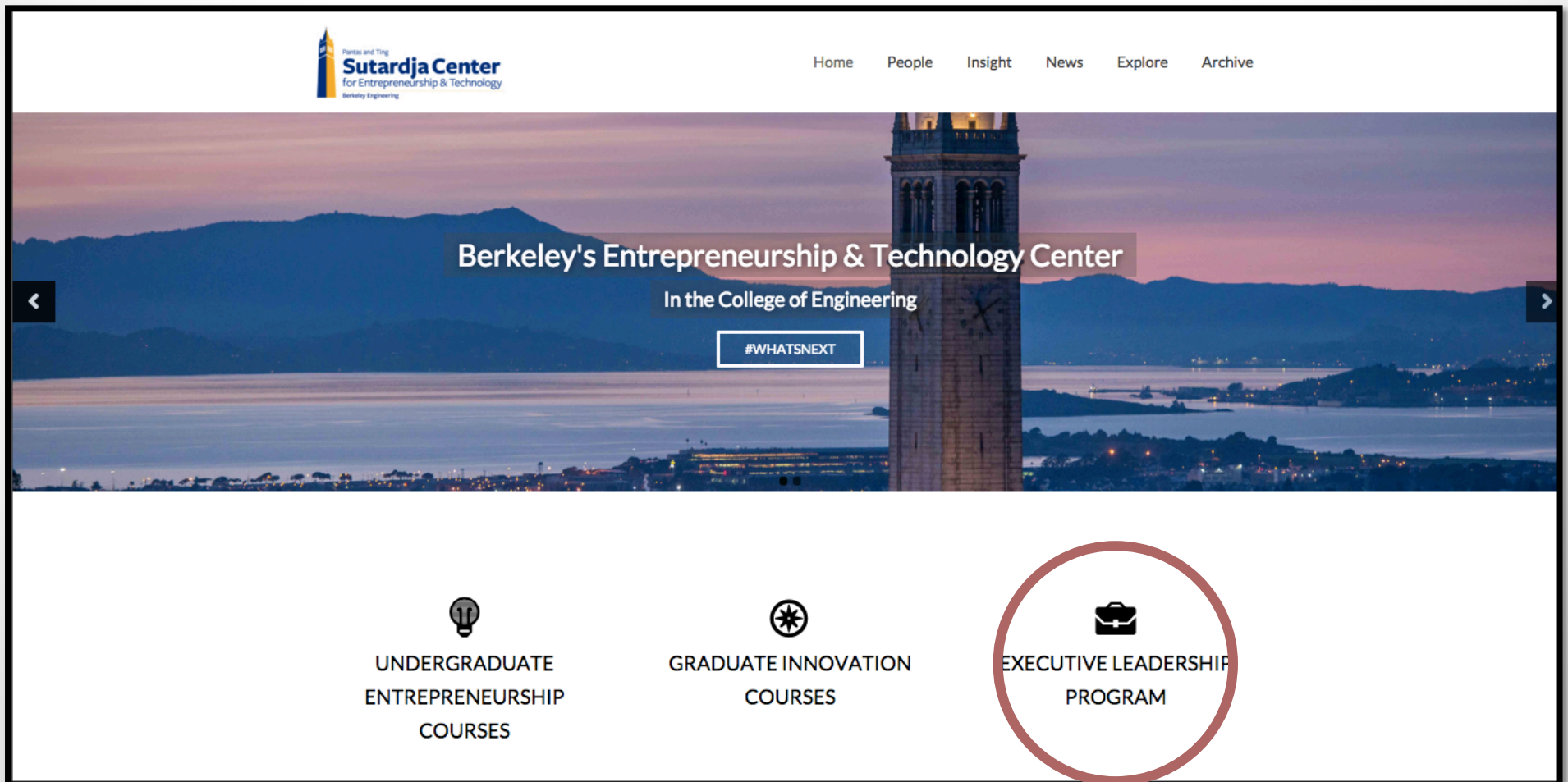
A New Paradigm for Technology Firm Leadership

There is no such thing as a management-only track in Silicon Valley. For technical leaders, the MBA can often be too broad and possibly counter-productive for career development in technology firms. This program builds on the core skills of technical managers, engineers, and scientists. It is focused on technology firm situations and is condensed into only 4 1/2 months. The ELPP program offers career building skills that solve real problems in technology firms specifically for engineering directors, lead architects, technical product managers, business development leads, CTO office members, and other key technical staff.

Learn about our model for Engineering Leadership [here](#).



About US: The Sutardja Center for Entrepreneurship & Technology is the premier hub at UC Berkeley for “technology-centric” innovation and entrepreneurship.



Our projects are at the most current and highly applied edge of the University

Fundamental
Research

Use-Inspired
Research

Industry Projects

Sutardja Center 2016 #WhatsNext Watch List:

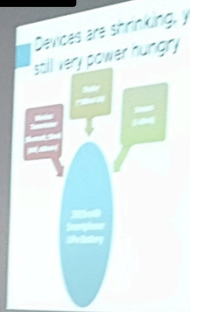
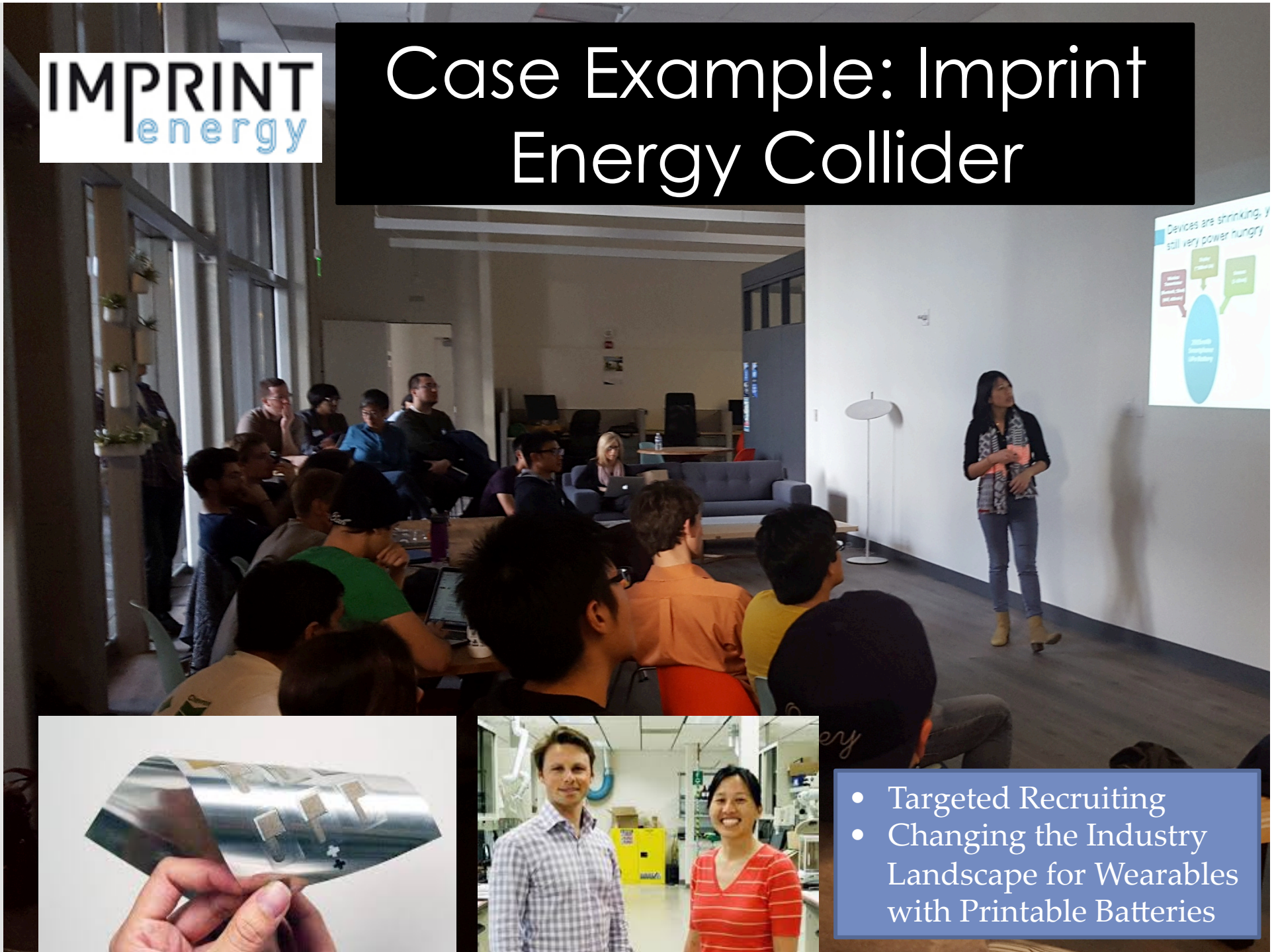
1. Blockchain
2. Meat Alternatives
3. Connected Cars
4. Wearables and patient recovery in healthcare
5. Data + Health
6. Practical Data for Small and Medium Size Businesses
7. 3D printing for healthcare
8. Virtual Reality + Everything
9. Preventing Neurological Disease - We are on the verge.
10. Home Robotics

Teaching in Innovative Areas

What about the current topics and opportunities where the book has not yet been written?



Case Example: Imprint Energy Collider



- Targeted Recruiting
- Changing the Industry Landscape for Wearables with Printable Batteries

Case Example: Venture Funds, Experienced Founders, and Faculty Develop a Berkeley Ecosystem for Blockchain Innovations



BLOCK



Sutardja Center
for Entrepreneurship & Technology
Berkeley Engineering



**BLOCKCHAIN
TECHNOLOGY
COLLIDER**

Kickoff: March 2, 2015 at 5:00pm
RSVP: <http://blockchaincollider.eventbrite.com>

Learn about the emerging opportunities at the intersection of finance, security, and cryptography - and win \$5000!

Blockchain is the underlying technology behind bitcoin. But forget cryptocurrency, this technology has the potential to change the world as we know it. Marc Andreessen has called Bitcoin and the underlying blockchain technology a "breakthrough in computer science".

Open to graduate and undergraduate students in engineering, finance, economics, mathematics or others interested in understanding and pursuing opportunities related to blockchain technology.
IEOR 190c (CCN 41264) or IEOR 298 (CCN 41177)

Berkeley
UNIVERSITY OF CALIFORNIA

Sutardja Center for Entrepreneurship & Technology
1923 Grdiron Way, Room 122, Berkeley, CA 94720 || sct.berkeley.edu

amazon



1) Forecasting the number of vehicles required for delivering packages is a difficult problem. Too many vehicles creates unnecessary costs, but too few vehicles will cause late deliveries. Given a demand distribution, recommend a rate to pay for guaranteed vehicles, option vehicles, and spot vehicles. Propose a term for acquiring these vehicles.

2) Create a supply/demand model proposal for available capacity in Amazon's haul network. We have vehicles frequently moving between facilities with available capacity to pick up vendor products (or do work for the vendor).

amazonlogistics

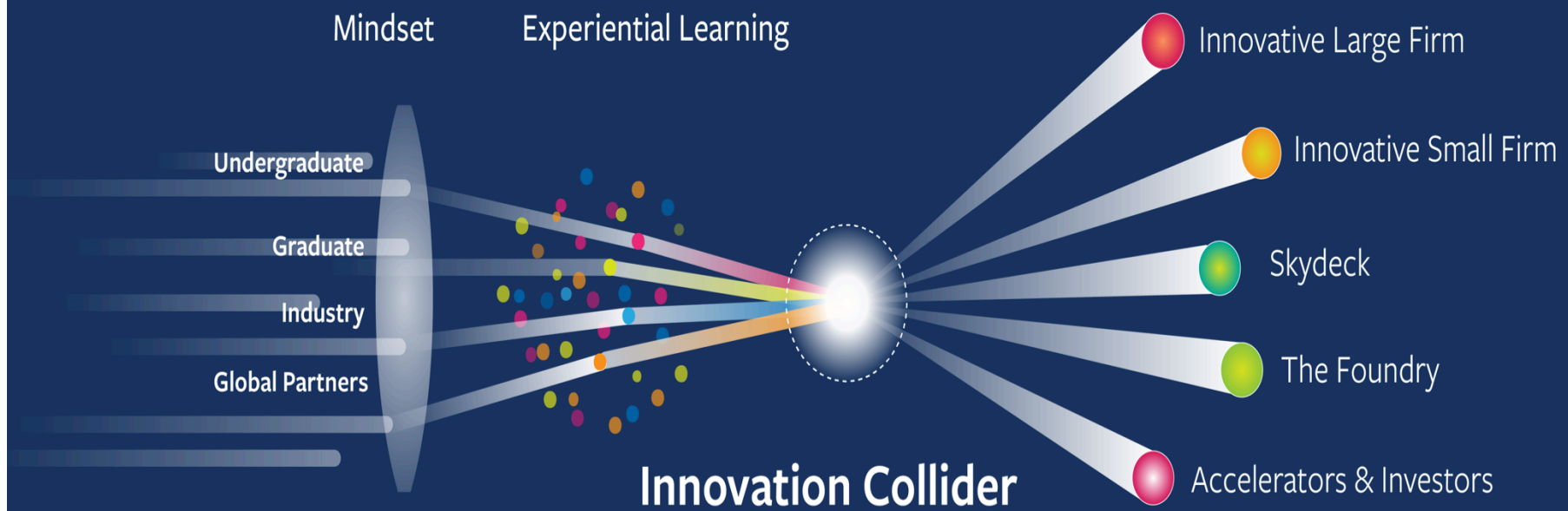
- Targeted Recruiting
- Redesigning the Amazon Supply Chain

Venture Case: Foundation Capital Collider



New Venture
Formation

The Innovation Collider is our new model for Experiential Teaching, Laboratory, and Targeted Recruiting



The Berkeley Method with Mindset & Behaviors

A holistic, journey-based approach to entrepreneurship and innovation

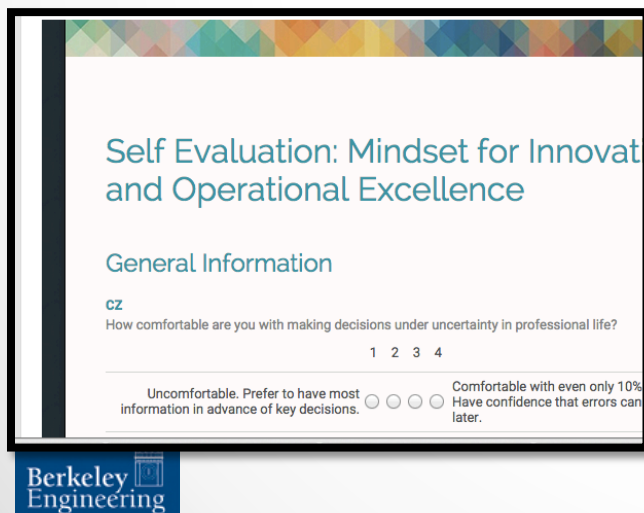
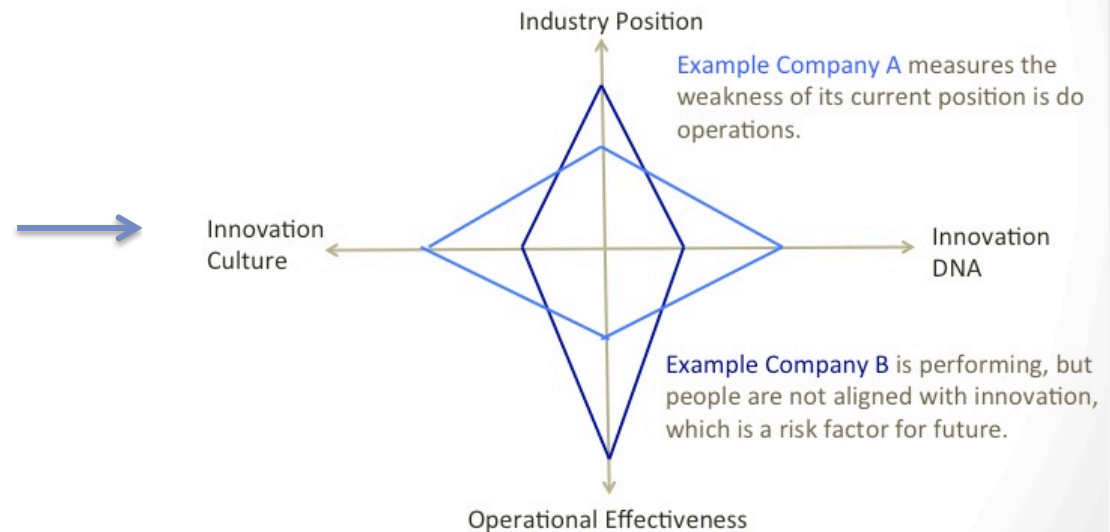
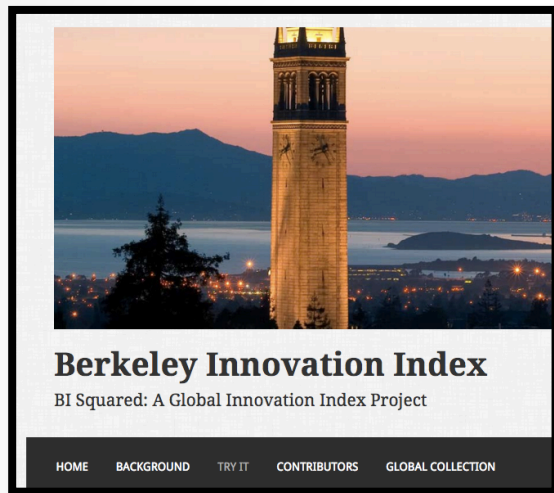


A Question to Psychology Ph.D Student Jan Pries:

Which of the BMoE Behaviors can be measured in
Psychology?



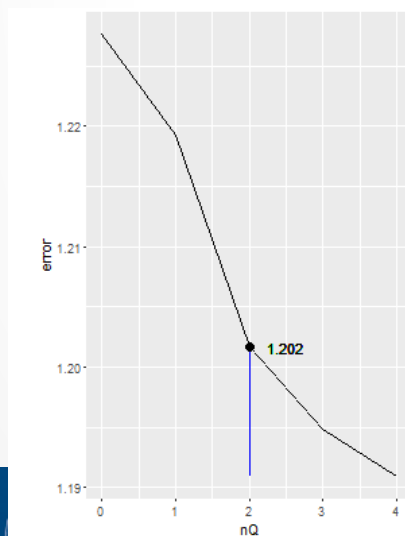
Berkeley Innovation Index – A Global Project



- Innovation Mindset: Personal
- Innovation in Organization by people, processes, and culture
 - By function
 - By social graph
- Diagnostics and index

- Same group, similar answer
- Some questions are too similar
- Negative correlation of perfection
- QP1 and belief questions
- EP, CZ and QB2 correlate most with ER

LASSO Regression



weight

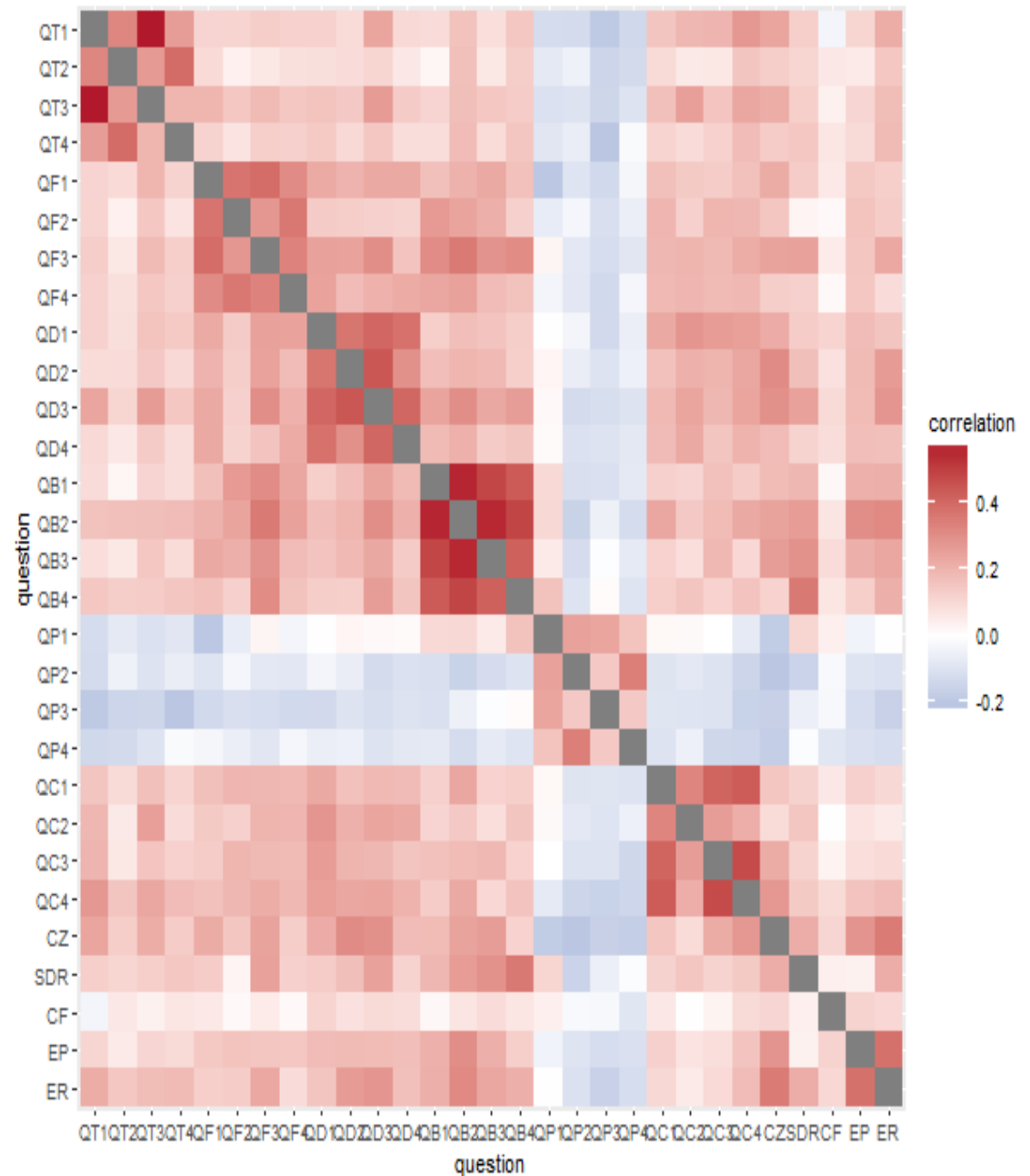
0.12

0.09

0.06

0.03

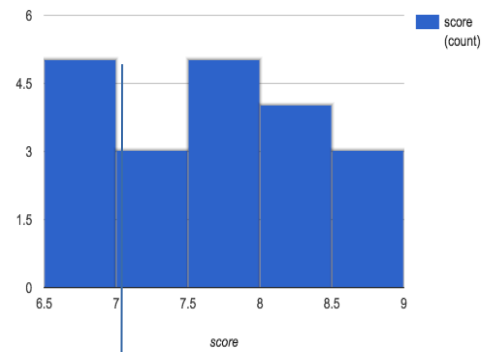
0.00



We can now measure students before and after a class and they can see how their attitudes have changed.

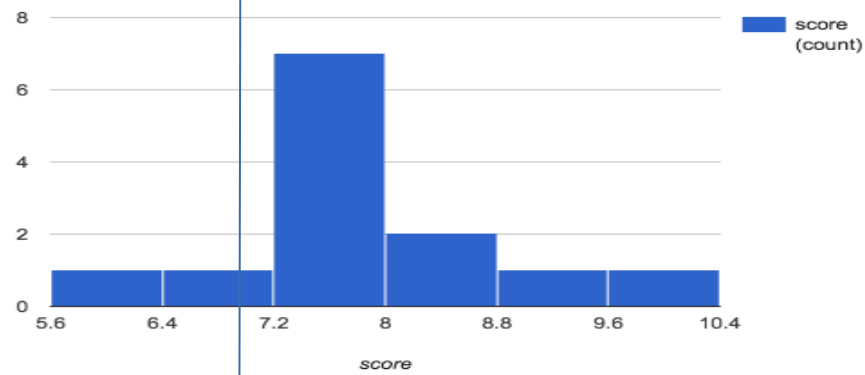


Histogram of score- SV

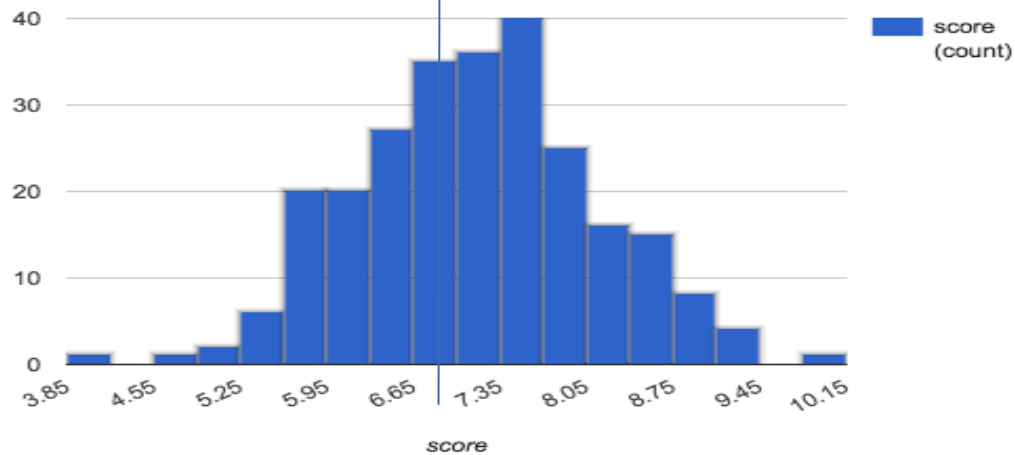


SV Only

Histogram of score



GVL

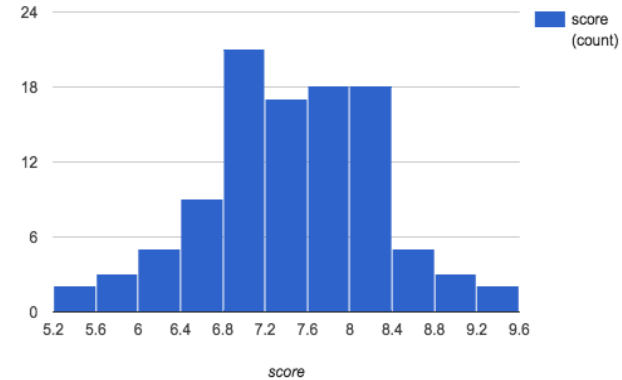


All

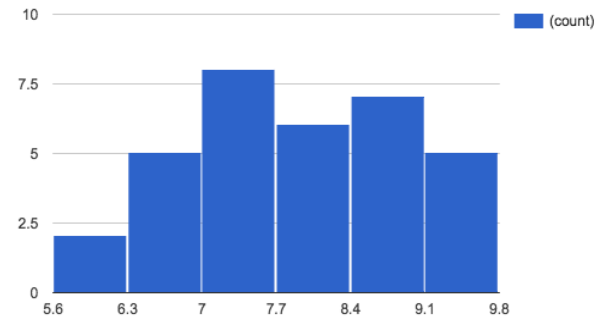
Innovation Mindset Scores: Pre, Mid, and Post BMoE Bootcamp



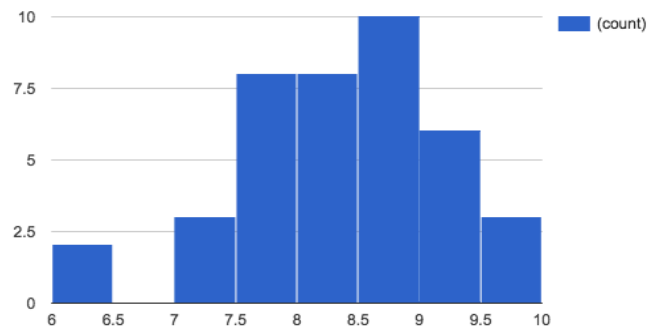
Score (Prior) mean 7.5, st dev 0.83



Score (Mid) Mean 7.9, st dev 0.96



Score (Post) mean 8.4, stdev 0.9

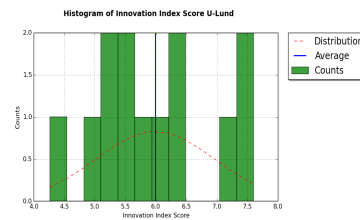
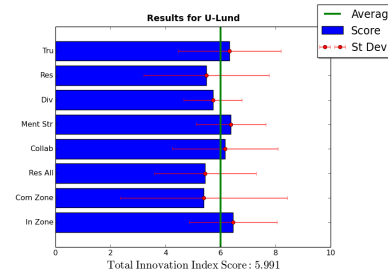
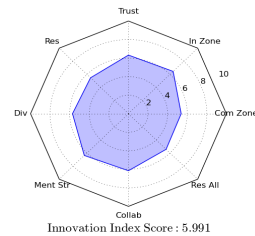


Berkeley Innovation Index A Global Research Project

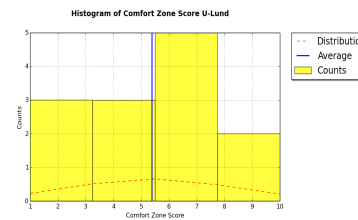
Beta version 1.07

Workgroup report

U-Lund



Workgroup Result Statistics : $\mu = 5.991$, $\sigma = 0.962$



Workgroup Result Statistics : $\mu = 5.385$, $\sigma = 3.027$

INNOVATION MINDSET

Your work group's average Innovation Index Score is 5.99 out of 10*

Factors of your Innovation Mindset

TRUST (Tru) 6.32 out of 10. (Ability to trust others and gain trust)

RESILIENCE (Res) 5.48 out of 10. (Ability to overcome failure)

DIVERSITY (Div) 5.72 out of 10. (Ability to overcome social barriers)

MENTAL STRENGTH (Ment Str) 6.38 out of 10. (Confidence and belief that you can succeed)

COLLABORATION (Collab) 6.16 out of 10. (Ability to work with everyone including competitors)

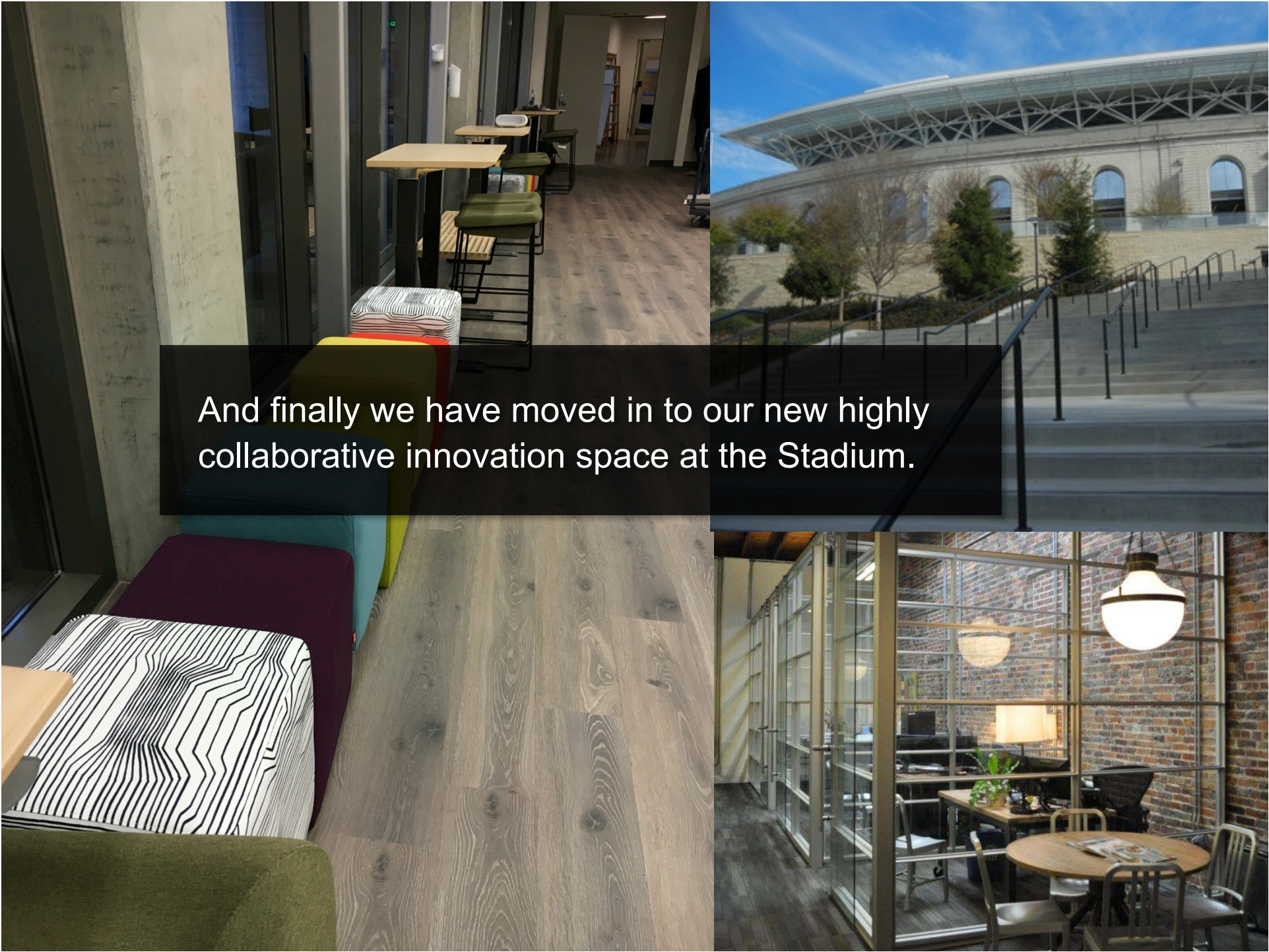
RESOURCE AWARENESS (Res All) 5.44 out of 10. (Ability to balance your resources)

INNOVATION ZONE (In Zone) 6.45 out of 10. (Ability to work in areas of uncertainty)

* This is not a fixed level, anyone can grow their innovation mindset. Your level has been estimated using an analysis based on the Berkeley Method for Entrepreneurship & Innovation, the Comfort Zone Scale, and fundamental testing methods in social psychology.

www.berkeleyinnovationindex.org





And finally we have moved in to our new highly collaborative innovation space at the Stadium.



Contact:
Ikhlaz Sidhu, sidhu@berkeley.edu
Sutardja Center for Entrepreneurship & Technology
UC Berkeley.