The C.V. Starr Program in Business, Entrepreneurship and Organizations (BEO) is a unique, interdisciplinary, undergraduate concentration at Brown University focused on the study of business, entrepreneurship, technological innovation, and organization theory. BEO educates students to be creative and flexible leaders for careers in for-profit, social mission and startup organizations. Through the disciplines of economics, sociology, engineering and entrepreneurship, students learn methodological approaches to address challenges in national and global economic context.

All BEO seniors take a required capstone course which includes a one- or two-semester long project. Project teams, usually comprised of five students, are supervised by a faculty advisor. Students apply conceptual and theoretical grounding obtained in BEO courses to deliver analysis and recommendations related to a specific challenge facing a sponsor organization. Sponsor organizations appoint a senior level mentor to help define and guide the project.

This academic year marks the fourth cohort of BEO students to participate in the capstone. All told, BEO students have participated in over 70 projects. For this past academic year, over 90 students worked on 18 projects in the fall with eight continuing in the spring. Student learning experiences were excellent. Mentors and faculty were incredibly impressed by the depth and quality of analysis and recommendations produced by the teams. Please join us in celebrating this accomplishment.

BEO Capstone Faculty

MARY FENNELL
Director, BEO, Professor of Sociology

ERIC SUUBERG
Professor of Engineering

LISA DI CARLO
Lecturer in Sociology

CARRIE SPEARIN
Lecturer in Sociology

BRENDAN McNALLY
Associate Director, BEO

TIM NGUYEN
Adjunct Lecturer in Economics

STEVE PETTERUTI
Adjunct Lecturer in Engineering

ELIZABETH BRENNAN
Teaching Assistant, PhD Candidate Sociology
Bloodhound Inspection

This project team found a novel approach to provide inspection services for off-shore oil rigs and other remote infrastructure. By tapping the communication capabilities of the their sponsor company, KVH Industries, Bloodhound developed the prototype of a cost-effective, autonomously piloted drone to capture high-resolution video. Bloodhound's solution eliminates the cost of sending engineers and pilots to inspection sites, and effectively utilizes the communications infrastructure of KVH. KVH, a leading manufacturer and provider of solutions that provides global services via satellite to mobile users at sea, on land, and in the air, is based in Middletown, RI, with facilities in Illinois, Denmark, Norway, London and Singapore.

Sponsor: KVH Industries, Middletown, RI
Mentor: Brian Arthur, VP, Product Development
Project Advisor: Steve Petteruti

TEAM MEMBERS: DEAN BLOEMBERGEN, TRENT GREEN, BRUCE HALL, WILLIAM LACE, TYLER LONG, JASON PESEK, ANDREW THOMPSON
Anista

Anista provides simple but ingenious tools to more effectively teach middle and high school students the basics of electronics design and assembly. Through the successful development of an app, tutorials and a “breadbox”, the Anista solution offers teachers and enthusiasts the tools to upload projects, create Fritzing diagrams, conduct interactive walkthroughs and order components with one click. The project was sponsored Bay Computer Associates, a full-service software and electronics contract design firm committed to providing the best possible design to match client timelines and budgets for each project. BCA’s permanent staff of over 20 engineers acts as an entire electronics and software group to augment client teams with a wide range of technical skills.

Sponsor: Bay Computer Associates, Cranston, RI
Mentor: David Durfee ’80 SCM ’87, PhD ’92, CEO & Chief Scientist
Project Advisor: Steve Petteruti

TEAM MEMBERS: MARINA CANO, GRACE HENDEE, EMILY HORNING, MONIYKA SACHAR, RISHABH SINGH
Business/Finance/ Consulting Projects (Fall Semester)

Projects are designed generally as one-semester commitments. Students typically act as members of the mentor organization or in a "consultant" role to tackle critical issues for the sponsor organization. Students must collect data, analyze information, and make recommendations all within the fall semester.

The Business Case for Hiring Veterans

General Dynamics has launched a national campaign to recruit veterans for their company and tasked the capstone team to develop objective metrics to underscore the value to states, the federal government and General Dynamics, of hiring and training veterans. The BEO team collected and analyzed demographic data related to housing, medical services, and job training in Rhode Island to make the case that hiring veterans is an economically, as well as socially, prudent investment for the state as well as General Dynamics.

Sponsor: General Dynamics, New London, CT
Mentor: Anthony Paolino, Head of Veterans Affairs and Development
Project Advisor: Tim Nguyen

TEAM MEMBERS: GWYNEDD KIEFFER, KRISTIN RAMCHARAN, VICTORIA TRAYNOR, BREWSTER WARBLE, FAVIOLA ZUNIGA

Analyzing Green Investment Strategies

The BEO team reported to Charles Van Vleet, Assistant Treasurer and Chief Investment Officer of Textron's pension assets. Textron's pension investment group, based in Providence, RI, manages $10.5BN in assets on behalf of 85,000 participants. The Plan has investments in diversity of asset
classes including equity, fixed income, private equity, hedge funds and direct real estate. The capstone team delved deeply into calculating the return on investment generated by commercial real estate assets designed and built according to Leadership in Energy and Environmental Design (LEED) “green” versus traditional standards. The team made recommendations to invest in highly-rated LEED certified assets to deliver superior returns and satisfy the fiduciary duty to invest solely in the best interest of Plan participants.

Sponsor: Textron, Inc., Providence, RI  
Mentor: Charles van Vleet, Chief Investment Officer  
Project Advisor: Tim Nguyen

TEAM MEMBERS: MIKAELA GROSS, STEPHEN KEARNS, CONSTANTINE LAVALLE, MATTHEW MADIGAN, GARRETT SWANKY

Marketing Strategies to Boost Fan Attendance

Brown University’s Men’s Ice Hockey Team attracts a loyal base of fans from students, faculty, staff, alumni and the local community. However, like many collegiate teams, resources and expertise to market the team and games are very limited. The capstone team was tapped to research the fan-base, better understand the impact of competing teams in the local market, and develop strategies to increase operational funds for the team and university. Working with the coaching staff, the team researched options, made recommendations and successfully implemented new strategies for improving game attendance, fan support, corporate sponsorships, and alumni fund development.

Sponsor: Brown University Men’s Ice Hockey, Providence, RI  
Mentor: Brendan Whitett, Head Coach  
Project Advisor: Tim Nguyen

TEAM MEMBERS: CHAD CARLSON, JAMES COUGHLAN, LAWRENCE KEMP, DYLAN MOLLOY, REBECCA MUSGROVE
Designing a Compelling Membership Model Roger William Park

The leading philanthropic leader in the state, The Rhode Island Foundation, is spearheading a $10 million campaign for Roger Williams Park as part of its centennial celebration. In partnership with the Providence Parks Department and community partners, a new 501c3 organization - a conservancy – was formed to steward, market, and program the Park well into the future. The capstone team advised its mentor on various options for a new membership model, tailored to leverage the unique assets of the park and its current and potential membership. The project entailed research and analysis of other parks around the United States and how to best leverage and partner with the zoo, the park’s major contributor of revenue. The team built a membership revenue model for the Conservancy which also included specific benefits for each category of membership.

Sponsor: The Rhode Island Foundation, Providence, RI
Mentor: Jessica David, Senior Vice President of Strategy and Community Investments
Project Advisor: Tim Nguyen

TEAM MEMBERS: CLAYTON EUBANK, EMILY YEH, JAKE SPEZIAL, JULIA XU, KERIANNE HUNT

Increasing Rhode Islander’s Participation in College Savings Plans

Since 2013 the State of Rhode’s manager of its 529 plan (CollegeBound) has funded a program for all RI residents, including a $100 seed grant for each newborn in RI. By 2015 over 6,000 parents took initial steps to participate in the program, representing 52% of births in the state. However only 3% of the parents took subsequent steps to create qualified 529 accounts. The capstone team worked with Treasury to develop an on-going database to help measure success, test different marketing approaches to encourage CollegeBoundBabies’ families to
open and account, and evaluate effective ways to grow savings. The team analyzed RI demographics to compare participants versus non-participants including variables such as race, income and geography. Final recommendations included multi-lingual outreach and awareness strategies.

*Sponsor:* State of Rhode Island, Office of State Treasurer (529 Plan), Providence, RI  
*Mentor:* Lisa Churchville, Chief Operating  
*Project Advisor:* Tim Nguyen

**TEAM MEMBERS:** AARON COMERY, FRANCISCO HERNANDEZ, MELISSA NAVOA, ALESKI ROSSI, MARIE WILLERSRUD

### Revenue Management and Building an Endowment

This project team developed revenue options for Beat the Streets (BTS) Providence, a local non-profit committed to inspiring urban youth to succeed in school and life through the vehicle of co-educational wrestling. BTS draws at-risk students into a positive after-school environment where they receive mandatory academic support, connect to strong mentors, engage in healthy physical activity, learn about nutrition and general health, and have incentives to attend and succeed in school. Like so many early stage ventures, BTS is searching for long-term streams of revenue. The BEO team researched and provided recommendations for why, when and how to establish an endowment to fund specific operational costs. Further, the team analyzed and proposed a number of new revenue options that would leverage the BTS brand among participants, volunteers and sponsors.

*Sponsor:* Beat the Streets, Providence, RI  
*Mentor:* William Watterson ’15, Founder  
*Project Advisor:* Tim Nguyen

**TEAM MEMBERS:** STEVEN GALIARDO, THOMAS KUTSCHKE, DAVID MIDDLETON, VIVIAN RAMOS, AUSTIN RUGRAFF
Product Management and Penetration

Dee’s Careers is a very early-stage startup founded by a recent Brown graduate to provide career-related writing services for working professionals from all backgrounds and careers. The firm specializes in cover letters, resumes, and LinkedIn profiles, and has serviced nearly 300 clients within its first year of operation. This capstone project helped the Dee’s team evaluate various strategies to grow the business by evaluating core competencies, conducting bottom-up field research and exploring new markets. Final recommendations focused on building out Dee’s core competencies of content creation and copy-editing. Supporting entrepreneurs with business plan writing services was the most promising new market recommendation.

Sponsor: Dee’s Careers, San Francisco, CA
Mentor: Dmitry Sedykin ’14, Founder
Project Advisor: Brendan McNally

TEAM MEMBERS: ISABELLA AMRAN, JEFFREY BIESTEK, TIMOTHY DAVENPORT, ALEXANDER JETTE, JACOB WHALEN
Refining Customer Segments and Customer Needs

Tizra, Inc. is a growth-stage, boutique software company currently operating in the digital publishing space. Founded in 2006 and funded through venture capital, Tizra helps publishers market digital assets to new and existing clients over the Internet. The BEO team was tasked to help the venture identify potential customers who have significant content management challenges and opportunities, but may not call themselves publishers. The team identified and critiqued a number of potential new market segments, including academic publishing and direct-to-consumer options. The team also developed the business case for hiring and training a sales professional with skills and contacts appropriate for recommended market segments.

Sponsor: Tizra, Inc., Providence, RI
Mentor: Abe Dane, President, COO & Co-Founder
Project Advisor: Brendan McNally

TEAM MEMBERS: ANDREW DOANE, ALEXANDRA KLATZKIN, CARLOS ANTONIO MANZANO, AUSTIN MARTIN, JOHN SIMPSON
Taking Student Satisfaction to the Next Level

BrownConnect is an initiative started by President Christina Paxson to link students to the Brown community for career success. This capstone project focused on identifying the most relevant metrics and using data to enhance and market this important campus program. The team analyzed usage trends of the BrownConnect website to make recommendations for increased usage of BrownConnect and the Job and Internship Board. The capstone project then developed a marketing campaign to increase usage of both BrownConnect and the university’s new job and internship management platform.

Sponsor: Brown CareerLAB, Providence, RI
Mentor: Aixa Kidd, Director BrownConnect
Project Advisors: Carrie Spearin & Lisa DiCarlo

TEAM MEMBERS: ASLI ANGIN, TAVON BLACKMON, MARISKA CHAMDANI, ZACHARY PREYZBEK, STEVEN SPIETH

Assessing Brown’s “Transportation Footprint II”

Brown’s Energy & Environment (E&E) Office is committed to achieving sustained energy and environmental performance. Greenhouse gas emissions (GHG) from transportation activities is a major contributor to the University’s GHG footprint. Working with extensive survey gathered from
last year’s capstone team and other university data, this capstone project helped calculate a GHG baseline and developed policy recommendations for senior administrators to reduce Brown’s transportation footprint. Recommendations included offering rideshare programs and adjusting the current mix of parking incentives and fees for Brown faculty and staff.

*Sponsor: Brown Facilities Management, Office of Energy and Environment, Providence, RI
*Mentor: Jessica Berry, Sustainability Program Manager
*Project Advisor: Carrie Spearin

TEAM MEMBERS: TREVOR LAM, ERIC SUGARMAN, TYLER WOOD

Building a Campus Metabolism Platform

The Office of Energy and Environmental Initiatives (E&E) is developing a database, metrics and website to display various elements of Brown’s “Campus Metabolism” – critical information related to sustainability. To improve the design, marketing and launch of the website, the BEO team assessed best practices of peer institutions, interviewed experts, and conducted focus groups to understand how this site can best affect individual behavior. Recommendations included a marketing plan targeting first-year students and frequent, inexpensive competitions to attract community members to the site and reward desired “green” behaviors.

*Sponsor: Brown Facilities Management, Office of Energy and Environment, Providence, RI
*Mentors: Jessica Berry, Sustainability Program Manager and Erin Donnellan, Academic and Student Engagement Coordinator
*Project Advisor: Brendan McNally

TEAM MEMBERS: ALEXA DEMIRJIAN, ANDREW DESESA, JACOB MACKAY, LORRAINE SALIM
The Beige Impala Conundrum

Motus is a Boston-based B2B software-as-a-service (Saas) company dedicated to making work-life balance better for mobile employees and their managers. Motus’ mobile, cloud-based platform automates mileage capture and vehicle reimbursements services and integrates with client expense management and CRM systems. Motus allows the mobile workforce and their employers more freedom and accuracy. This project tackled the “beige Impala conundrum”: fleets of bland company cars that fail to motivate or distinguish ambitious, image-conscious salespeople. The team researched the demographics and preferences of the Millennial workforce to help Motus better understand products and services that would motivate and reward salespeople. The team found that while not a homogeneous group, certain strategies could work well for segments within the Millennial generation.

Sponsor: Motus, Boston, MA
Mentors: Craig Powell ’01, Founder, CEO and Sara Woodworth, People Operations Manager
Project Advisors: Carrie Spearin & Lisa DiCarlo
TEAM MEMBERS: HENRY BUMPUS, JOSHUA HUNTLEY, AGRIS KOLOMICEVS, VUOCHLY VEUNG, ADRIAN YOUNG

Assessing Digital Health Solutions

Manatt Health is one of the leading law and consulting practices in the United States advising clients on strategies which transform the way health care is organized, paid for and delivered. Manatt Health is developing new digital and tele-health solutions aimed at supporting clients with strategic and tactical plans to enhance patient engagement, physician communication, medical education, and performance improvement initiatives. BEO students worked with senior Manatt Health leadership to understand the competitive landscape, identify best practices among tele-health providers, and analyze organizational requirements to be the leading consulting firm in this field.
A RI Model for Revitalizing Urban Towns and Centers

Grow Smart Rhode Island provides statewide leadership for diverse public and private interests seeking sustainable and equitable economic growth. Grow Smart promotes such growth by advocating for compact development in revitalized urban, town, and village centers balanced with responsible stewardship of our region’s natural assets – farmland, forests, the coastline, and the Bay. This capstone project conducted an in-depth program evaluation of MassWorks, a successful infrastructure funding program, implemented in nearby Massachusetts. The team identified successful program features and then recommended RI municipalities as ideal candidates for a pilot program. The team drafted a white paper to help in the lobbying process of a proposed bill and participated in a panel of state leaders to discuss program feature before legislation is introduced this session.

Sponsor: Manatt Phelps & Phillips, LLC, Health Practice, New York, NY
Mentor: William Bernstein ’78, AM’79, Partner
Project Advisors: Carrie Spearin & Lisa DiCarlo

TEAM MEMBERS: JOSHUA BUTLER, DAKOTA GIRARD, CARLY GOULD, ERIK HANSON, TAYLOR WORTHY

Sponsor: Grow Smart RI, Providence, RI
Mentor: John Flaherty, Deputy Director
Project Advisor: Brendan McNally

TEAM MEMBERS: HYUN JUN KIM, KYLE KRAMER, AMY NG, MICHAEL RAMIREZ, MAX TYKLI
Scaling the Impact of SWS

Smart Woman Securities (SWS) is a nonprofit whose mission is to educate undergraduate women on finance and investments and empower them to be the next generation of successful female leaders with greater investment knowledge and financial influence. The national office of SWS provides structure, guidance, resources and policies to support campus chapters. The BEO capstone team worked collaboratively with the national director and 23 chapter leaders to identify and share best practices in marketing, communications and organization. In their research the team surveyed all chapter leaders and conducted interviews to establish high, medium and low performing organizations.

Sponsor: Smart Woman Securities, New York, NY
Mentor: Darla Jade ’86, Executive Director
Project Advisor: Brendan McNally

TEAM MEMBERS: LYNN HA, COURTNEY KOBREN, BROOKE WILLIAMS
Business Metrics and Marketing to Monitor and Drive Growth

The capstone team helped Sprout, a recently launched co-working space in Providence, identify new target markets to grow its base of members and develop a set of business and marketing metrics to gauge progress and manage the business. Offering flexible and dedicated work and meeting space on a month-to-month or an as-needed basis with no long-term commitment, Sprout members are freelancers, independent workers, entrepreneurs, remote workers, small startups and anyone who needs a work or meeting space but doesn’t want to work in their living room or a café all the time. The BEO team initially helped to clearly define differences between incubator, accelerator, co-working and flexible work-space business models in order to match the right target market with Sprouts offerings. The team developed and administered a customer survey to better understand what current members like and dislike about Sprouts offerings. The team also recommended 10 key management metrics that will help drive business growth.

*Sponsor: Sprout  
*Mentor: Zachary Weinstein, Founder  
*Project Advisor: Brendan McNally

TEAM MEMBERS: ALEXIS ALSTON, SARAH BELL, ALI MUJTABA LAKDAWALA, JOYCE OK, GUILIA RICCI