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SEEK 915: Sustainability Lab

Spring 2013

Course Website

Go Directly to List of Projects

NOTE: S-Lab is entirely project based and I meet with each team once a week at a mutually convenient time. There generally are <u>no class sessions</u> during the times shown in the course catalogue (Tue & Fri, 3:30-5pm), with the exception of three Tuesday sessions in week 1 (introduction), week 5 (mid-term workshop) and week 10 (final presentations).

Overview

Sustainability Lab is an experiential learning course in which Kellogg students work on a "real-world" sustainability project with a client organization, under the supervision of a mixed academic and business management team. Teams of 3-6 Kellogg students work with a client organization that has requested Kellogg's help in addressing an issue related to environmental sustainability.

The hallmark of S-Lab projects is the integration of sustainability and business goals through innovation. This can involve, for example, the design and marketing of green products, the development of metrics and management systems, the transformation of operations and supply chains, the development of investment strategies, entrepreneurship and business model innovation.

Sustainability, defined broadly to include environmental, social and economic practices that sustain the Earth's resources for future generations, has become an increasing concern for businesses and non-profit organizations alike. Through this course, you will develop practical know-how in transforming businesses for environmental sustainability or developing business opportunities related to sustainability. Each Kellogg student team works under the guidance of the faculty advisor, and in direct collaboration with a client project manager. During the term, you are expected to contribute 8-10 hr./week to the project. The class is structured around the project work. It includes weekly team meetings with the faculty advisor as well as three full class sessions in weeks 1, 5 and 10 (Tuesdays, 3:30-5pm). At the end of the quarter, students give presentations to the client and to the class.

Bidding and Applying for Projects

S-Lab is open to students in all Kellogg programs, and to students outside Kellogg with permission of the faculty. There are no pre-requisites. The projects for the spring quarter 2013 are listed below. You need to bid for the S-Lab course [there is no enrolment constraint, so a minimal bid is sufficient]. In addition, you need to apply to work on a particular project of interest. To do so, please send an email to Prof. <u>Klaus Weber</u> by March3. Include in your application a preference of project(s), rank ordered if applicable, and a current resume. Students can bid as teams, though we cannot always guarantee first project choices. Please contact Prof. Weber with any questions.

Learning Goals

By the time you complete this course, you will have gained skills in identifying and prioritizing green and social business opportunities for green businesses, and in implementing the changes to core business processes that are needed to sustain the lasting health of natural, social, and economic systems.

The course is ideal for students seeking:

- experience with managing business and sustainability in an integrated fashion
- an general introduction to sustainability issues in target industries or functions
- to build a marketable resume and contacts in sustainability management
- looking to work in a sustainability related industry or job after graduation

SEEK 915 can serve as an introduction or a capstone experience that integrates concepts and skills from a variety of courses in the MBA curriculum in the context of a business challenge centered on sustainability. The course is open to all students. Since each project team requires a variety of skills, there are no individual prerequisites to taking this class. It is advisable for at least some team members to have taken one or several courses in Kellogg's sustainability and social impact curriculum prior to S-Lab.

Format

SEEK 915 is an experiential learning course. The course is centered on a project with a corporate or non-profit client organization. Most of the work will occur in your own time, in team meetings and client calls. Occasionally, work may be carried out on the client site, but that is not normally required. In addition, you will have weekly meetings with your faculty advisors.

Within the first week of the quarter you will negotiate and sign an agreement of understanding with the client organization that defines the scope, timeline and deliverables of the project. A mid-term progress presentation to the class is due in week 5. At the end of the quarter you will present the results of your work to the class and to the management team of the client organizations. In most instances, the client presentation will be to members of the senior management team.

Weekly Team Meetings

The purpose of the team meetings with the faculty advisor is to review progress, share ideas and insights, solve problems, and review deliverables. The entire team is expected to participate in each meeting in a timely and prepared fashion. Lateness or absence will negatively affect your grade. The scheduling of these meetings is flexible. If no other time can be agreed, the default is during the designated class time, Thursdays, 6:30-9:30pm. It is your responsibility to schedule team meetings and to organize work as necessary.

The Role of Faculty Advisor

You are expected to manage the project independently in collaboration with the client project liaison. The faculty advisor's role is to help you structure and solve problems, to help avoid and remove roadblocks, to intervene in the case of conflicts within the team or with the client, and to suggest appropriate resources, such as experts and materials applicable to the project. The faculty advisor is not a project manager – you own the project and are ultimately responsible for progress and deliverables.

Interactions with The Client

Each client organization has one or two dedicated project liaisons, who are available for regular progress meetings, normally once a week, and who facilitate additional contacts and access to information in their organization. You are expected to work closely with the client liaison and be timely, prepared and professional in all communications. Most clients invite the project team to visit on site on one or two occasions, but you are not

required to travel as part of the projects. Reasonable expenses for travel and other items (e.g., access to databases) are reimbursed by Kellogg.

Full Class Sessions

In addition to the weekly meetings with the project team and faculty advisor, there will be three sessions with the entire class:

- Week 1: Introduction and logistics, the business case for sustainability, implementation issues
- Week 5: Project update presentations, problem solving workshop
- Week 10: Final presentations

Assignments and Grading

The grade in this course is heavily weighted to the quality of the final team report delivered to the client. The team's performance will be evaluated based on the depth and comprehensiveness of research and analysis, skillful application of business tools and concepts, practicality of the findings and recommendations, and the overall quality of deliverables. Deliverables will be evaluated by the faculty advisor and by the client companies via a confidential project assessment survey. Client relationship management is part of the client survey. Each group also performs a peer evaluation of members' contribution and individual grades are adjusted accordingly.

Grade Component	<u>Weight</u>	Due
Signed off LOU & work plan	10%	Friday of week2
Mid-term progress review	15%	Tuesday of week 5
Final recommendations report	60%	Friday of week 10
- Faculty advisor grade 30%		
- Client assessment 30%		
- Peer evaluation adjustment* +/-10%		
Team meeting and class participation	15%	continuous
Total	100%	

* Note: 10% is equivalent to a full letter grade. Project teams evaluate the quantity and quality of each team member's contribution at the end of the quarter. The default is equal contributions, and the group average adjustment is 0, hence upward adjustments for one member lead to automatic downward adjustments for others.

<u>Letter of Understanding, Work Plan</u>: Developing a focused and well-structured letter of understanding and work plan early on is crucial to the team's success. The letter of understanding outlines the project charter, scope and success criteria. It is finalized with the client based on the project abstract, and hence allows for some fine tuning at the start of the project. Work plans must clearly state the questions that the team is trying to answer, and disaggregate the issues to be explored in answering that question. Each issue should be associated with a set of activities (e.g.: research, interviews, modeling), and with a primary responsibility and a deadline. The work plan needs to be signed off by the client and the faculty advisor.

<u>Progress Review</u>: Each team will prepare a progress review presentation that can be presented to the class and the clients in week 5. This is the chance for teams to share their initial findings with management and remind the client of what work remains. Initial hypotheses and preliminary recommendations can also be floated for client reaction at this time. It is important to use this opportunity to get specific feedback from the clients on how things are going. Are they satisfied with the results so far? Do they wish to focus the remaining time on one or two specific things you've identified? Are there issues that need to be addressed?

<u>Final Recommendations Report</u>: The final project presentation to the class should be a concise, well-structured PowerPoint document which synthesizes the team's research and analysis and answers the client's core questions

with logical, well-supported arguments and a set of actionable recommendations. Detailed documentation of research, analyses, recommendations and other deliverables referred to in the presentation can be documented either in the PowerPoint document or in a supplementary detailed report. Client deliverables may take additional formats. The advisor grade is based on the presentation submitted to the class and the client deliverables. The client feedback is based on an evaluation survey after the final deliverable is turned in to the client. The in-class presentation is on June 4, 3:30-5pm. The final presentation and deliverables to the client are due at the latest on June 7.

<u>Team meeting and class participation</u>: Regular and high quality participation in team meetings is an important learning channel. While the project team is free to organize and divide work as needed, team members are expected to show up and contribute to the overall project in weekly team meetings. In addition, everyone is expected to provide feedback and suggestions to other project teams in the three class sessions.

Resources and Readings

There is no course packet for the class. Project related materials and resources will be distributed in the team meetings as needed.

Adding and Dropping the Class

Due to the project-based and client-facing nature of S-Lab, students should bid and apply only if they are 99% certain they will take the class and work on a project. If students drop out during the quarter, not only do they leave their teammates under-resourced for the project, they also disappoint corporate client expectations and damage the Kellogg brand with potential recruiters. For these reasons, students will be asked to sign a "Commitment Letter" on the first day of class promising to work together throughout the term and to drop the course only in the event of a significant, unforeseen personal or professional obligation. If you are unsure about your commitment to the course when applying, please clearly indicate so in the application letter.

Kellogg Honor Code

All students are expected to adhere to the Kellogg honor code which can be found at <u>http://www.kellogg.northwestern.edu/stu_aff/policies/honorcode.htm</u>. In particular, students are reminded to provide complete citations for all research, data, graphs and quotations taken from other sources. This includes documenting sources on PowerPoint presentations as well as other written reports and client correspondence. Remember – plagiarism is a serious breach of the Kellogg honor code. For more information on how to avoid pitfalls, please visit <u>http://www.northwestern.edu/uacc/plagiar.html</u>.

Client Confidentiality and Conflict of Interest

The information you will receive from client companies is considered proprietary and strictly confidential. Students are expected to sign confidentiality agreements requested by the client organization, and to make all reasonable efforts to protect non-public client information and to destroy or return all information at the conclusion of the course if the client so requests. If team members wish to share confidential information among them, it is recommended that they use a shared workspace that is password protected. In addition, students are required to disclose upon applying or whenever it arises, any conflict of interest due to past or future employment for competitors or other reasons.

Project Clients 2013

The following clients sponsor S-Lab projects in 2013. Click on the links to access full descriptions.

Client	Project Name	Keywords
Autodesk	Evaluate utilities as a channel for sustainability solutions	greentech marketing, market research, channel strategies
Autodesk	Green building software Go To Market plan	greentech marketing, marketing strategy (pricing, channels)
Autodesk	Cloud based green building workflow automation prototype	engineering design, software development
Baxter	Strategic review of sustainability priorities for 2020	sustainability strategy, stakeholder and policy analysis, healthcare
Chicago Botanic Garden	Sustainability goals, measurement and communication plan	sustainability strategy, footprinting, reporting, communications
Chicago Food Co-op	Market scoping and business plan for food coop	business plan, start-up, coops, sustainable food retail/markets
CNT Energy	Maximizing the benefits of the smart grid for residential electricity customers	energy markets, product design, marketing research and strategy
CO2 Bambu	Amphibian housing for climate change adaptation	social enterprise, climate change policy, market research, Latin America
Enphase	Monetize and/or securitize solar module data for solar energy sustainability	solar energy, business development, entrepreneurship
Ogena Solutions	Market entry strategy to the US consumer market for pet grooming products	business strategy, entrepreneurship, impact investing
Sweet Beginnings	Business plan for Chicago-based social enterprise	social enterprise, business strategy / development, stakeholder analysis
Voltaic Systems	Competitive analysis and marketing plan for photovoltaic charging systems	solar energy, competitive analysis, social media marketing
Watershed Capital	Consolidation strategy for renewable energy company	renewable energy, mergers & acquisitions, impact investing, strategy
Woodward, Inc	Carbon footprint calculation and reduction recommendations aerospace plant	footprinting, eco-efficiency, operations strategy

Autodesk, Inc.: Utilities as a Channel for Sustainability Solutions

Saving the world isn't easy. But that is exactly what we are doing at Autodesk Sustainability Solutions! Autodesk's vision is to help imagine, design and create a better world. We make hundreds of products that are used by millions of architects, designers, engineers, contractors and asset owners, who in turn influence billions of people globally who live in the homes, drives the cars or work in the office towers designed using Autodesk tools. The influence that we can have on the future of the built work, literally everything made on the planet, is exponential.

At Autodesk Sustainability Solutions, we are working hard bringing to market exciting solutions that help make sustainability easy, insightful and cost-effective for everyone in the Real Estate, Infrastructure and Manufacturing industries. Learn More at www.autodesk.com/sustainabledesign

Project Background:

Objective: Evaluate Utilities as a channel for driving adoption of our <u>Building Information Modeling</u> based Sustainable Building Solutions.

Project Scope:

- Market attractiveness (TAM)
- Competitive mapping
- Potential customers and personas
- Potential Revenue Streams
- Positioning, value prop

Final Deliverables:

Presentation and all supporting documents

Desired Skills of the Project Team:

Marketing, Technology Marketing, Market Research Methods, Channel Strategies

Autodesk, Inc.: Green Building Software Go To Market Plan

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Project Background:

Objective: Develop a GTM plan for a cloud-based Green Building Software that will drastically accelerate the greening of buildings

Project Scope:

Develop a GTM plan that includes competitive positioning, pricing, target market segments and channel strategy. Synergies with other cloud based project management systems in place at many of our customers' sights will also be explored. We have done the market research, we have evaluated the TAM, built a business plan and now we have a product. We need your help figure out how to go to market with it (aka the 4Ps!)

Final Deliverables:

Presentation and all supporting documents

Desired Skills of the Project Team:

Marketing, Technology Marketing, Market Research Methods, Channel Strategies, Pricing

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Autodesk, Inc.: Cloud based Green Building Workflow Automation Prototype.

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Project Background:

Objective: Create templates based on our novel, user configurable, cloud based <u>Autodesk PLM360</u> that will drastically accelerate the greening of buildings

Project Scope:

- 1. Build a 'tenant' app on our Autodesk PLM360 app based on a prototype developed for another green building software
- 2. Develop a middleware that connects the tenant with the 'outside world' (Excel mapping files, some C coding and REST and SOAP API calls

Final Deliverables:

- A 'tenant' consisting of 20-30 workspaces (depending on team's size)
- Mapping files for the 20-30 workspaces
- Product and workflow documentation (Word)

Desired Skills of the Project Team:

- Strong programming skills in C++/C# and Java Script
- Excel

Optional Desired Attributes:

- Knowledge of XML, HTTP Web Programming, WSDL & SOAP-based web services
- Experience with web development technologies (Java script, HTML, Flash)
- Experienced with development on mobile platforms such as iOS and Android

Baxter: Strategic Review of Sustainability Priorities and Goals for 2020

Baxter has been working on sustainability-related activities since the mid 1990s and for each of the last six years has been recognized as one of "<u>The Global 100 Most Sustainable Corporations in the World</u>." Baxter publishes an annual Sustainability Report and has an active executive-level Sustainability Steering Committee. Over the past three years Baxter announced nine global sustainability priorities and a number of supporting 2015 sustainability goals (<u>www.baxter.com/sustainability</u>).

This year (2013) we are working on some strategic planning for 2020. We want to re-evaluate our Baxter sustainability priorities and set new sustainability goals for 2020.

Project Objectives and Tasks:

- 1. Assess our current sustainability priorities and goals
- 2. Research projected long term trends/forecast in three areas global, healthcare, sustainability (try tro obtain from the most reliable/reputable sources as possible)
- 3. Benchmark what other leading healthcare companies are doing with strategic planning and goals like out to 2020
- 4. Develop recommendations to Baxter for sustainability priority areas and goal areas

Deliverables:

- Mid-point project presentation/report to determine progress made towards project goals and confirm the direction of the project recommendation(s)
- Final PowerPoint presentation and project report to Baxter with findings and recommendations. The Team will formally present to Baxter at their corporate headquarters in Deerfield, IL.
- The Team will also provide a project report. The report will document details about:
 - objectives,
 - methodologies used,
 - results and analysis of research and benchmarking,
 - specific project deliverables as agree to
 - final recommendation(s)

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Chicago Botanic Garden: Sustainability Measurement, Goals and Communication Plan

Company and Project Background

The mission of the Chicago Botanic Garden is to promote the enjoyment, understanding, and conservation of plants and the natural world. Free to the public, the Chicago Botanic Garden annually serves over 950,000 visitors, including 50,000 member households, and over 100,000 participants in education and community programs. Open 365 days each year, the Chicago Botanic Garden is first and foremost a vibrant living collection museum that maintains internationally recognized plant science research , conservation, and education programs that address global environmental threats. The Botanic Garden has, over the years, become more adept at saving energy. The Garden currently receives solar credits from solar panels, has a recycling program for its offices, compost program for its food service and outdoor landscape operations, has changed lighting fixtures to save energy, and our newest building is a LEED Gold building with a 16,000-square-foot rooftop garden, open to the public. The Chicago Botanic Garden and Northwestern University are partners in delivering the foremost graduate programs in plant conservation biology in the world. For an overview of the Garden's strategic plan, please visit http://strategicplan.chicagobotanic.org/strategic-plan-overview.

Objectives of the Project and Key Tasks

The Garden wants to create a system that will allow it to quantify current efforts at sustainability, efficiently track its progress toward greater sustainability, identify areas where it can improve, how it can measure payback from its efforts, and communicate sustainability efforts and progress to the public. In an ideal world, the results of this system will lead the Garden toward a new, highly ambitious goal for lowering consumption and giving back resources to the environment. The scope of the project will be refined with the team according to intersts, manpower and expertise.

Work tasks could include:

- Interview Garden leaders, including Kellogg graduate President and CEO Sophia Siskel and Medill graduate Vice President Jim Boudreau, as well as the staff at the front-lines of Garden conservation;
- •Organize the Garden's efforts to identify all its sustainability projects (waste reduction, energy conservation, water usage, cleaning operations and maintenance, procurement, etc.), show how to organize them, and show how to quantify them. This underpins everything else and would be invaluable;
- Produce an evaluation of the effectiveness of the Garden's food service composting program and a plan for its expansion;
- Create a tracking system to show the Garden's progress in increasing its sustainability;
- Identify funding sources to move the Garden's conservation efforts forward (such as funding conversion to LED lighting, solar panels, etc.);
- Create a program to improve the Garden's recycling and composting program;
- Create a carbon footprint for the Botanic Garden;
- Organize data coming from seven sensors on our Living Roof to facilitate reports on the effectiveness of the roof and how to best report this information on a public monitor screen in our science building lobby;
- •Outline ambitious future goals for the Garden and its 385-acre campus.

<u>Expertise:</u> The ideal student team would include individuals who complement each other, holding quantitative skills in data analysis, understanding of operations/engineering, and experience in marketing/delivering information to a general audience.

Deliverables

The Garden would like:

- A working grid or matrix that can change over time that allows the Garden to track its progress in sustainability;
- A set of sustainability goals for the future;
- Advice on marketing results of the Garden's sustainability programs to the public.

Chicago Cooperative: Business Plan/Market Research for Food Coop

Project Background: Chicago Cooperative is building a large-scale, full-service, community-focused, localand-organic-food-and producer-devoted food co-op. Chicago Cooperative will be structured as a consumer cooperative, and will be organized for the purpose of purchasing and selling organic, natural or local groceries and other consumer goods and services to members and others at such reasonable prices over cost to enable the members to obtain the goods and services at the lowest practicable cost.

The co-op will be located on the north side of Chicago approximately between Foster Avenue and Irving Park Road and Clark Street and Western Avenue. It will be approximately 15,000 to 25,000 square feet and will feature organic, local, and natural produce, organic meat and dairy products, butcher service, prepared foods, canned, dried, and frozen foods, bulk foods, local beer, wine and liquor products, dry goods and groceries, and other services including salad bar, juice bar, coffee service, workshops, and classes. The co-op will be built to be environmentally responsible, with recycled and natural materials used wherever possible. High-efficiency or alternative methods of heating and cooling will be considered for green building certification. The co-op will employ full and part-time workers—the co-op will not be reliant on volunteer workers—and will provide job training for veterans and other under-employed people.

Project Scope: This is a unique project; we are building a business in a crowded urban market which has never before had a business like this. We are requesting a business plan which incorporates market research and includes the following:

- A description of the cooperative business, including its purpose and strategy
- A description of the market niche the cooperative is seeking and the products and services the co-op will offer to serve that niche. This is where the cooperative is distinguishable from other start-ups: in the first four days after the project was launched, it reached more than 3,000 people on Facebook. There is tremendous excitement about—and need for—this type of business.
- An analysis of food industry trends, emphasizing organic food trends and cooperative trends
- An analysis of the Chicago market and the competition facing the cooperative
- An analysis of other key internal and external factors affecting the business, including a historical financial analysis of similar businesses
- A description of how the cooperative will address the major strengths, weaknesses, threats and opportunities outlined in the analysis
- A capital, cash and operating budget, with assumptions

Final Deliverables: The final deliverable should be a well-organized document ready for distribution and a brief presentation.

Desired Skills of the Project Team: Business development, market research; interest in businesses based on cooperative ownership, social and environmental impacts, and sustainable food production.

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CNT Energy: Maximizing the benefits of the smart grid for residential electricity customers

Project Background:

- As Illinois electric utilities roll out the smart grid in the coming years, consumers will have opportunities to save money, reduce pollution, and increase home comfort if: 1) appropriate products and services are available, 2) these products/services are understood and embraced by consumers.
- CNT Energy is a "think and do" organization that works with all local utility companies to develop, market, and manage energy efficiency programs. We helped design two of the first hourly electricity pricing programs in the country for ComEd (Residential Real Time Pricing) and Ameren (Power Smart Pricing), grew the user base to 25,000 customers, and have an active role in shaping other smart grid initiatives. Variable hourly pricing provides significant savings opportunities for customers and uses market signals (higher prices) to reduce peak energy use and pollution. In the near future, a ubiquitous smart grid and "the internet of things" will have the potential to exponentially increase the benefits to customers and the environment.

Project Scope:

Using existing data from CNT Energy, additional primary research with electricity customers, and other sources, the Kellogg team will seek to understand: What do Illinois residents know about current electricity products and services? What are their future expectations? What are the primary benefits that a smart grid could create for residents? What products or services could provide these benefits? How can we engage customers effectively?

Goal: Design a program that incorporates some of the following elements: hourly pricing rates, solar/wind net metering, in-home electricity use feedback, electric vehicles, smartphone applications, social/gaming elements.

Final Deliverables:

Present a proposal for an electricity program, its product and service offerings, and marketing approaches for residential energy customers. Summarize research methodology and conclusions. Provide a written version of the final presentation, along with source data and any additional supporting information.

Desired Skills of the Project Team:

One or more of: Marketing research, statistical methods, product development. A basic understanding of the energy marketplace is helpful.

<u>CO2 Bambu</u>: Launch Low Cost Amphibious Housing Product in Latin American Markets

CO2 Bambu designs, manufactures and assembles ecologically sound bamboo shelters, low-cost housing and schools. CO2 Bambu's bamboo based housing supports post disaster reconstruction efforts, uses renewable bamboo resources, and addresses housing deficits in Latin America and Haiti.

One current project is an amphibious housing line that offers solutions for areas increasingly affected by flooding as a result of climate change. Amphibious housing can be a superior strategy for climate change adaptation in some regions that experience repeated flooding, compared to repeated disaster recovery and reconstruction. We have successfully established a technical baseline offering and are in the process of a prototype R&D phase in Nicaragua. Amphibious housing is a 'disruptive technology' compared to conventional housing solutions.

Project

The focus of the project is on clarifying the market for amphibious housing, with a focus on Latin America. The project deliverables can be flexibly agreed on with the project team according to interest and backgrounds. Possible tasks include:

- Identify and map country specific or international private, public and non-governmental customers
- Examine funding models and options, e.g., within climate adaptation, disaster resilience and urban renewal ecosystems of actors
- Exploring insurance industry angle on amphibious housing
- Analyze impact of policy initiatives on climate change adaptation and
- Make recommendations for launch priorities and establish a roadmap for entry strategy
- Analyze valid international certification options and strategies, work on certification if the team has relevant background (US, EU, LATAM)
- Develop country specific sourcing and alliance strategies

The team will work directly with the CEO of CO2 Bambu on scoping and executing the project.

<u>Useful skills</u>: business development and market entry strategy; public policy analysis; in depth country knowledge in Latin America; housing and real estate industry;

Enphase Energy: Monetize and/or securitize solar module data for solar energy sustainability

Project Background:

Enphase Energy is the pioneer in microinverter technology and the market leader in providing solar inverter solutions in residential and small commercial solar systems. Enphase pioneered a revolution in the way Solar systems are deployed and managed through a unique combination of power, microprocessor (ASIC), communications technologies and the cloud. The unintended result of this is that Enphase now can see the data being produced every 5 minutes by millions of solar modules around the world – serving not only to help us manage our systems, but also act as points measuring solar irradiance forming a network like no other in the world. We believe this data is extremely valuable, not only to Enphase Energy, but also renewable policy makers, researchers, academic institutions, and 3rd party solar system financiers. Enphase is looking for the team's insight in applications both to improve World Wide global warming understanding and prevention as well as potentially commercializing this data.

Project Scope:

Identify ways to for institutions to use and Enphase to commercialize this data. Scope includes:

- 1. Understand in detail who can benefit from such data,
- 2. Quantify the benefits
- 3. Proposals/business plans on how to go forward

Final Deliverables:

- 1. Final report in both presentation and document format, including details such as research methods used, customers interviewed, financial models, and findings.
- 2. Final presentation to the executive staff.

Desired Skills of the Project Team:

Creative, out of box thinking, passion for sustainability

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Ogena Solutions: Market Entry Strategy for US Consumer Market for Pet Products

Ogena Solutions is a leading provider of non-toxic, proprietary biocides, disinfectants, and cleaning products for the companion animal (ie. pet) industry in North America. The company's products are a safer and more environmentally-friendly alternative to traditional disinfectants which employ toxic chemicals as the primary active ingredient. In contrast, Ogena's hydrogen peroxide based products quickly and safely break down into water and oxygen, posing no threat to animals, their handlers, and water supplies. The companion animal sector represents a compelling market opportunity in the US, with products and professional services in the veterinary and retail over-the-counter channels collectively representing over \$79 billion in sales in 2009. Based outside of Toronto, Canada, Ogena has made great strides selling its non-prescription products and accessories to veterinarians and shelters in the US. Seeking new growth opportunities and backed by a US investment group, the company plans in 2013 to launch a suite of products marketed to pet owners in the United States.

Project

Ogena is seeking a group of MBA students to design a market entry strategy and develop a business plan for a new consumer business that seeks to grab significant market share in the market for pet care and grooming products and services. Americans spent \$53 billion on their pets in 2012. Project participants will work directly with Ogena's CEO and an investor-appointed Director on the Company's board to develop a viable business plan for the consumer business. With a strong business plan, the company plans to launch its consumer business in late 2013 and plans to hire a team to grow and manage this exciting opportunity. Exceptional students may be considered for founding roles on the consumer team.

Ogena's consumer offering is poised to make a big splash in the pet grooming and bathing segment. Although it is widely known that many pet owners view their dogs as part of their family, it has been shown that the largest day-to-day complaint of dog owners is the smell of the dog and the hair in the house. This has led to high demand for grooming / cleaning services, as well as do-it-yourself options for the home. Example: sales of grooming products such as the Furminator line of brushes and grooming products (www.furminator.com) have grown dramatically and consistent sales in the market, and fully one third of pet owners have reported the purchase of an odor neutralizing product in the last six months.

To-date, no one has developed a system that makes it easy and fast to effectively bathe a dog to reduce odor, disinfect the skin, and remove loose hair, all while dramatically reducing the amount of water consumed in the bathing process. Ogena Solutions has been selling a commercial version of this system in Canada for years to veterinarians, shelters and horse lovers and is now ready to launch a product for the US consumer market. The company's offering is built around a revolutionary and patented design which:

- \Box Is virtually mess free and therefore does not require a wash tub.
- □ Can be performed in a small fraction of the time a normal bath takes. In fact a full sized Labrador Retriever can be thoroughly bathed in as little as 5 minutes.
- □ Unlike all traditional bathing methods, actually cleans the skin of the animal as well as the hair.
- \Box Consumes only a fraction of the water. (A Labrador will be thoroughly bathed with < $\frac{1}{2}$ gallon of water)
- □ Proprietary, non-toxic pet shampoos and deodorizer products which kill germs and eliminate stains and odors.

This project entails developing a market entry strategy and business plan for the development and sale of a consumer model of Ogena's commercial grade animal bathing / cleaning system for sale to both pet grooming retailers and individual pet owners. The project is about launching a business, as all aspects of the business model and strategy need to be considered. Students will gain first-hand experience in entrepreneurial marketing, branding, finance, strategy and operations, and will be mentored by Ogena's CEO and the board representative of the company's lead investor, a successful investor and entrepreneur. The project will likely involve one visit to either the company's headquarters outside of Toronto or to the office of the lead investor in Washington, DC.

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Sweet Beginnings: Business Plan

The Sweet Beginnings social enterprise has a triple-bottom line mission: social, economic, and product. The business's most important short-term goal is to employ 100 to 150 people a year, enabling most of them to transition to full-time, unsubsidized employment. This improves the lives of these individuals and their families, who benefit from improved social and economic stability, and the local economic development improves the communities where they live. Sweet Beginnings, LLC, is a wholly owned subsidiary of the North Lawndale Employment Network (NLEN), a nonprofit with the mission to improve the earnings potential of the community through innovative employment initiatives that lead to economic advancement and an improved quality of life. Designed as a social enterprise and located on the West Side of Chicago, Sweet Beginnings provides transitional jobs for people with multiple barriers to employment, especially the formerly incarcerated, while developing and selling high-end natural honey and honey-based skin care products, sold under the beelove® label.

Sweet Beginnings is at a critical juncture in the organization's development. Highlights of the past year:

- Partnered with The Chicago Department of Aviation O'Hare to install hives in the airport's significant green space
- Selling products at HMS Host and Hudson New Stands at O'Hare, Midway and Citi-Center in downtown Chicago, hiring our first sales manager
- Recognition on Chicago Tonight WWTW, Christian Science Monitor and Essence Magazine
- Since inception 314 jobs created hire average 30 and 40 annually
- Beelove honey served at the Ritz Carlton in room dining and on room service breakfast trays
- 75% retained those jobs for at least 90 days
- Provided financial education coaching; 25% improve credit rating and 50% open bank accounts Sweet Beginnings employs 40 people a year, transitioned 76% to unsubsidized jobs
- 67% of those who transition to unsubsidized jobs retained them for at least 90 days
- Maintained prison recidivism rate of less than 4% of Sweet Beginnings workers; nationally, approximately 65% of formerly incarcerated persons return to prison within three years of release

CURRENT CHALLENGES

While the organization moves forward, we still face operational and strategic challenges, as does any small business. Given the unique nature of the staffing model, SB has limited human capital resources available to implement its aggressive goals. To this end, the pro-bono Board of Directors has been acting as an Operating Executive Management Board and is involved in both the strategic and operational direction as well as many day to day consulting assignments. With limited resources (both in terms of personnel and working capital) the Board is looking to the business plan to guide our investments and growth. Other strategic and operational challenges to be vetted, addressed and included:

- This past year, the SB entered in a contract agreement with HMS Host and Hudson News based at O'Hare and Midway airports and at the Citi-Center in downtown Chicago. Strategic goals and operational strategies are key to implementing this relationship and looking ahead to expansion.
- SB needs a full time General Manager to run the business moving forward, but currently lacks the necessary funding to secure long term sustainability for the position.
- Production and manufacturing space is limited at the current NLEN location. As the operations grow, SB will need to address (in collaboration with NLEN) future physical needs.

PROJECT DESCRIPTION

At this time, the SB needs assistance to help guide the business planning process. The team will work with key stakeholders to facilitate a process that will incorporate feedback/input, a SWOT analysis and financial modeling with highlights of the decision points. After synthesizing this information, SB will look to the consultant to draft a plan that clearly articulates our strategic goals over the next 3 years, strategies for how to achieve those goals

and operational aspects to consider for implementation. The plan should include key performance indicators at specific milestones that will help the organization know if targets are met.

At a minimum, the business plan must include the following:

- Executive Summary
- Product Descriptions*
- Pricing-landscape/market analysis*
- Value Propositions
- Critical Success Factors
- Industry and Market Analysis**
- Target market
- Competitive Landscape/Advantages*
- Governance & Executive Leadership Plan
- High Level Marketing Plan
- Detailed Financial plan, including cash management strategies, profit margins-highlighting economies of scale, specific budget assumptions, revenue opportunities and Cost Drivers Identified.
- * Already partially developed

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Voltaic Systems: Competitive Analysis and Marketing Plan for Photovoltaic Charging Systems

We would like to greatly expand deployment of our solar lighting and phone charging systems to people without access to the electricity grid. The goal is replace expensive and unhealthy fossil-fuel alternatives with cleaner, less expensive sources of energy. We have completed our first implementation of our solar lighting kits in the Peruvian Andes (www.voltaicsystems.com/peru) and are trying to figure out how to scale this program. We would like to create a sales and marketing plan that would help us engage with and begin working with organizations working to address the needs of communities without power. We would like to evaluate 3-4 key competitors to understand their distribution strategy including details on International NGO and local partners, economics (product cost, end price to consumer, reliance on grants or other subsidies, microfinance funding etc.). We would then like to create a sales and marketing plan that grows our partner base and eventually, number of solar lighting systems installed. The plan should prioritize Voltaic's website and social media assets and efforts of staff over paid marketing items like advertising. We encourage students to experiment with and implement ideas in real time to test their effectiveness vs providing untested findings in a report.

Team expertise: Entrepreneurship, Web Marketing and Social Media, Sales

Deliverables: Choose competitors to research, competitive analysis, real-world tested marketing plan.

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Watershed Capital Group: Consolidation Strategy for Renewable Energy Company

Project Background:

In 2010, a group of 20 renewable energy integrators throughout the US came together and formed a consortium. Together they represent ~\$300 mm in annual revenues. They formed to create group purchasing power, share in best practices, and assist in capturing national accounts. With the successful IPO of SolarCity, they are considering the possibility formally consolidating into one company. This raises a classic tension, "how to create a national business with centralized functions without losing the local business with high attention to customer satisfaction. There are a number of issues this raises – 1) structure of the consolidation, 2) valuation of the respective companies, 3) the organization structure, 4) which functions to centralize, 5) incentive structure, 6) execution strategy.

Project Scope:

To assist in developing an effective consolidation plan which will include valuation model, org structure and incentive structure for the merged companies.

Final Deliverables:

Presentation that covers the above with a particular focus on lessons learned from consolidation for service industries.

Desired Skills of the Project Team:

Preferred to have at least one member with experience in mergers or acquisitions.

Woodward : Carbon Footprint Calculation and Reduction Recommendations (Skokie site)

Project Background:

Woodward Inc is a B2B company that supports the Aerospace and Energy markets with ~\$1.8 B in revenue. The Skokie site is Aerospace only and has a 5 building campus between Skokie and Niles, IL.

Project Scope:

The goal is to calculate the Scope 1 and 2 carbon footprint of the Skokie site.

Final Deliverables:

Initial deliverable is a Gant chart for the project Final deliverable is the carbon foot print and recommendations on how to reduce

Desired Skills of the Project Team:

Project skills required are project management and ability to calculate carbon footprints