LINK TO WEBSITE – http://ecliu.ca/comm390/index.html

PROJECT MISSION:

"To help companies realize that sustainability is a benefit for them and our Earth. By creating a software that seamlessly connects business operations to sustainability efforts, we aim to improve the environment we live in."

We realized the continuous innovation and high growth in companies in a variety of industries, but we also noticed the ways this negatively affected the environment. Ecological threats such as climate change, deforestation, overgrazing, fisheries collapse, and food insecurities were issues that were hard to neglect. SAP provides a software that encourages growing companies around the world to take environmentally sustainable approaches for sustainable growth. Industries are a significant producer of ecological footprint, and our company's mission is to find a solution that eliminates the footprint, while also supporting their profitability goals.
We realized that companies were uneducated with ways to track their ecological footprint but also unaware of the long-term benefits they can experience from being sustainable. Our software will clearly display data that accurately tracks a company's ecological footprint. This way, they can identify trends and recognize opportunities to reduce their environmental waste. Implementing such practices in organizations, we believe, will help the environment but also reduce unnecessary costs and expenses for companies, and therefore improve their profits.

IMPLEMENTATION STRATEGY:

The implementation of EcoCloud will have five different stages: product design, product development, quality assurance, market launch & promotion, and government integration. EcoCloud will be designed in partnership with environmental specialists and entities, and it will be developed by SAP and Bench. The developed product will then be integrated with Lululemon's current business framework for beta testing and further understanding required business specifications. After the beta testing phase, EcoCloud will be launched publicly and will be promoted by CAA. Finally, once EcoCloud obtains a sizable customer size, we will try to collaborate with the Canadian government and use EcoCloud as a regulatory platform that rewards or penalizes businesses based on their carbon footprint.

Product Design
A project as ambitious and impactful as EcoCloud requires input from experts in a variety of industries. SAP, Bench, Lululemon, and CAA will invite some of the industry's brightest minds, such as Ryan Boudens and Rod Dagneau to design the project collectively. We will consult with experts in the environmental industry to truly understand the impact of carbon emission, methods of curtailing carbon emission, and methods for quantifying reduced emissions into dollar values. Businesses that produce the most carbon emissions are mainly in the primary and secondary industries.

Therefore, we will consult and collaborate with professionals from different manufacturing and natural resource disciplines to understand their specific needs. EcoCloud will be customized for each industry, so our platform can accurately track and reduce carbon emissions.

Quality Assurance
Once the project design is completed, developers at Bench and SAP will develop and implement EcoCloud. There should be a deliverable sprint every two weeks, and a working prototype should be completed within half a year. Quality assurance teams from Bench and SAP will constantly test project features and avoid bugs or bad implementations.

Market Launch
After a working prototype is developed, Lululemon will utilize our platform for roughly half a year for beta testing. We will closely monitor Lululemon's usage and make constant updates and develop new features based on feedback. We hope to visibly reduce Lululemon's carbon footprint in its clothing production, and quantify the dollars saved from increased operating efficiency. These values can then be used as advertising materials for attracting new companies.

When beta testing is completed, EcoCloud will be available to the public. The goal of our product is corporate social responsibility, and not profitability. Therefore, we will only charge a small annual fixed cost and a percentage of money saved from reduced emissions to cover our development cost. The exact fees will be determined after EcoCloud's completion based on projected market demand, as well as research and development costs.

Project Promotion
EcoCloud will be available for purchase online at its website, ecliu.ca/comm390. We will partner with CAA, a leading entertainment and sports agency, to promote and sell the product. CAA will create a diverse team with talent from marketing, public relations, and sales divisions, as well as experts from SAP, Lululemon and Bench. This team will be able to create a pitch that accurately describes the product and shows the benefits of adopting EcoCloud for that specific company. This team is vital to spreading awareness of EcoCloud to large and mid-sized firms, while building its reputation and turning EcoCloud into a recognizable brand.
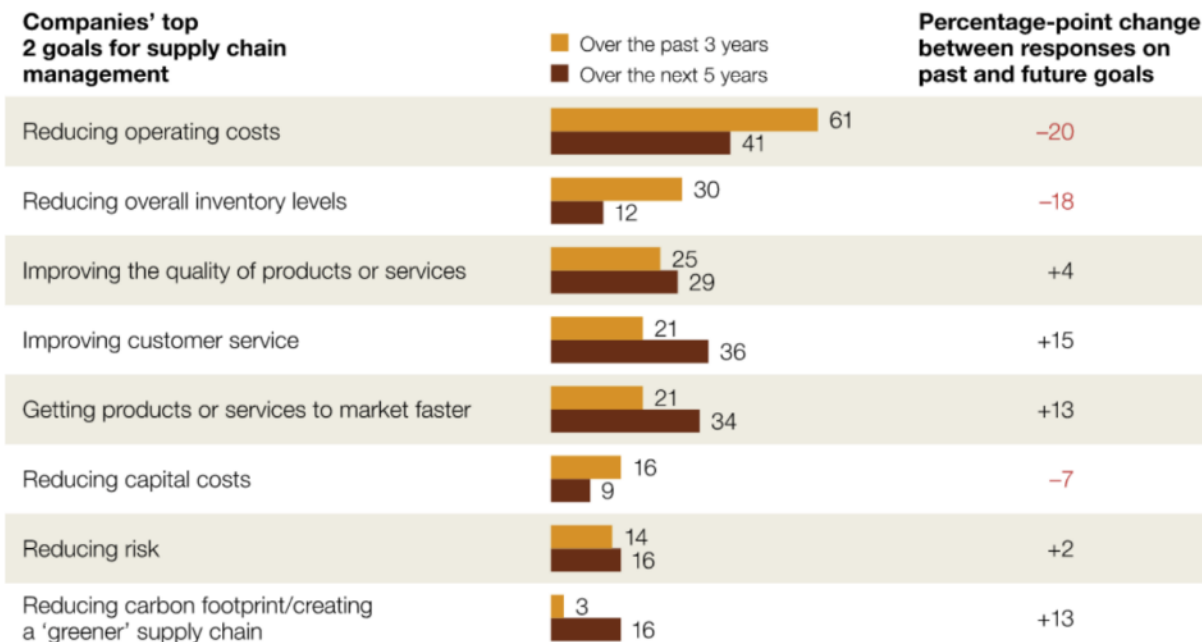
Government Confirmation
Lastly, once EcoCloud gains a sizable consumer size, we will attempt to partner with the government by showing the positive impact EcoCloud has had with multiple companies. A reduction in carbon emissions is a reduction in negative social externalities. For example, reduced carbon emission will likely result in reduced demand for healthcare, as less people are getting sick from pollution. With a variety of laws and regulations, we hope the Canadian government will use EcoCloud to regulate various industries, by using the software to compare company results to Government regulations. To achieve this, we need to partner with influential environmental lobbyists to convince the

government. EcoCloud allows your company to ensure it is meeting all laws and regulations. EcoCloud covers both provincial laws, such as Ontario's Environmental Bill of Rights, and federal laws, such as the Environmental Protection Act. Having quantitative data will help your company avoid fines by meeting government standards.

ECOCLOUD SOFTWARE:

The Database
A decentralized datahub for companies and consumers to view the organization's operational environmental impact. This includes energy usage, carbon emissions, waste management, fresh water usage, forest resource demand, and change in air quality. The application will provide organizations with data to give them insights on ways to use their resources more efficiently and reduce overall waste. These companies can make more environmentally conscious decisions with this information and provide their customers with this data so that they can measure their contributions to our planet. The bar chart states that operating cost are one on the main concerns for Lululemon, revealing the need to track and analyze operations data.

Companies' top 2 goals for supply chain management	■ Over the past 3 years ■ Over the next 5 years	Percentage-point change between responses on past and future goals
Reducing operating costs	61 / 41	−20
Reducing overall inventory levels	30 / 12	−18
Improving the quality of products or services	25 / 29	+4
Improving customer service	21 / 36	+15
Getting products or services to market faster	21 / 34	+13
Reducing capital costs	16 / 9	−7
Reducing risk	14 / 16	+2
Reducing carbon footprint/creating a 'greener' supply chain	3 / 16	+13

The product will dive further by collecting data on third party suppliers and functional areas that are outsourced. Our software will track resource extraction emissions from third parties and suggest possible substitutes or methods of improvement. With machine learning and AI, we can predict future environmental impact, generate predicted increase or decrease in waste from partnerships, and calculate the overall benefits of working with EcoCloud.

Environmental specialists involved in the design process will suggest features for the application. They know what data is most important and will help the AI algorithm develop strategies to predict future reduced impact. Below are a list of representatives included in the planning process.

Elon Musk
CEO at Tesla
A passionate tech enthusiast that has worked on sustainable projects in the past. Most recently developing solar panel roof tiles that collect solar energy to power your home. Elon has shown interest in renewable energy and is an expert in technology. His practical experience allows us prevent issues during implementation. His fame will help the project to gain exposure.

Ryan Boudens
Environmental Technician at BGM
BGM is gold mining company. Ryan focuses on using technology to reduce mining waste. Mining destroys habitats, wastes a lot of water, and the heavy machinery used expends a lot of carbon emissions. His work at BGM deals with large scale projects and will support EcoCloud's endeavours to expand to larger corporations.

Cost Per Product

We will provide environmental impact per product through an API service given to companies to present to their customers. This data will include carbon, energy, and resource consumption data. Businesses can then choose to display this information in-store or online for their customers.

Benefits

As part of our focus on efficiency, we will use route optimization software to minimize transportation inefficiencies. Deliveries occur hundreds of times a day and taking long, busy paths could increase air pollution and operational costs. Our service will take a list of locations and provide the most optimal path, considering traffic, accidents, turns, stop signs, and more. From Lululemon's fuel consumption shown below, is it clear to see the benefits on reducing driving time.

Page: Local Government - Energy Data

LGO1.5
Please give the total amount of fuel (refers to Scope 1 emissions) that your local government has consumed this year.

Source	Fuel	Amount	Units
Municipal vehicle fleet	Biodiesel	195330	L
Municipal vehicle fleet	Diesel/Gas oil	3490030	L
Municipal vehicle fleet	Motor gasoline (petrol)	2300257	L
Municipal vehicle fleet	Ethanol	255584	L
Municipal vehicle fleet	Propane	14561	L
Municipal vehicle fleet	Natural gas	16995	GJ
Buildings	Natural gas	398495	GJ

LGO1.6
How much electricity, heat, steam, and cooling (refers to Scope 2 emissions) has your local government purchased for its own consumption during the reporting year?

Source	Type	Amount	Units
Buildings	Electricity	151388214	kWh
Buildings	Steam	5034	Short tons

We will also track the effect a business's daily operations has on our ecosystem. Day-to-day costs such a lighting, water usage, and materials thrown out during production will be accounted for. Of course, large scale inefficiencies and operational modifications are a more serious issue, but daily expenses are measured to help track the status of any extensive changes we implement.

Our application wishes to suggest large scale changes and measure the potential gain that follows. To help companies recognize a need for change and give them the tools required to implement them.

Currently, Lululemon handles manufacturing fairly well. When working with Lululemon we will meet with their tech consultants and find ways to incorporate IT to streamline their production process.

RELATIONS:

Having a team of industry experts to build long-term relationships with environmental lobbyist groups and the government.

EcoCloud will have a team of individuals who can provide vital information on areas such as environmental rights, as well as laws and regulations. In addition, we should have experts who can provide insight on the process of partnering with environmental lobbyist groups and the Canadian government. These are industry experts who can help to build the credibility of EcoCloud while providing important perspectives on how to grow the software to a national level.

John Baird
Mr. Baird was the Minister of the Environment serving in both 2007-2008 and 2010-2011 in the cabinet of Stephen Harper. The Minister of Environment and Climate Change is responsible for overseeing the federal government's environment department, Parks Canada, and the Canadian Environmental Assessment Agency. Currently, Baird serves as a Senior Business Advisor with Bennett Jones LLP, a premier Canadian law firm and makes regular publications and speeches on national issues. With a strong background in federal politics, Mr. Baird can help to bring EcoCloud to the government's attention, while offering well-informed insights on environmental regulations.

Mary Polak
Mrs. Polak was the Minister of Environment of British Columbia from 2013 to 2017 and is currently the MLA for Langley. Mrs. Polak can provide insight on laws and regulations, while also being a link to the BC government.

David Suzuki Foundation
Headquartered in Vancouver, British Columbia, this organization aims to strike a balance between quality of life and protection of the environment. Partnering with this organization would introduce EcoCloud to a variety of experts. Specifically, Tom Green, a Climate Solutions Policy Analyst, who is an expert in ecological economics, climate solutions, renewable energy and clean transportation.

Canadian Environmental Law Association
CELA is a non-profit organization that seeks to establish environmental law reforms and aims to protect the environment. Theresa McClenaghan is the Executive Director and Counsel of CELA. She focuses on environmental safety, specifically energy and water. With a strong background in law and environmental issues, Theresa would be a great member of the team to provide information on environmental laws and regulations.

COMPANY INTRODUCTIONS

Lululemon
Lululemon is a company founded by Chip Wilson in Vancouver, Canada in 1998. It is a technical athletic apparel company aimed towards yoga-inspired individuals. Their vision is to inspire people to stay active and create a healthy and mindful community. They do so through their clothing that enforces quality, style and functionality. Lululemon's goal for their customers is to empower them as well as encourage leadership, optimism, and personal responsibility. Their core values are quality, product, integrity, balance, entrepreneurship, greatness and fun, which they hope to spread through their unique culture. Lululemon is driven by social impact and innovation, and aims to continuously evolve. With their goal towards making the community better, they are also conscious about their environmental impact. Their environmentally conscious efforts are part of their unique culture, and they are always aiming to leave the community better than they found it.

SAP
SAP is a software solutions company based in Germany with locations all over the world. They have expertise in building software specific to each client and can offer their skillset to develop EcoCloud and ensure its success. Their agile approach to software development is key to making sure our product best fits the clients needs. They have a

large supply a experienced engineers that can help kickstart the project and guarantee that the quality of code used is on par with the demands on techlogy today.

Bench

Bench Accounting was founded in 2012 as 10 Sheet Inc. by several UBC alumni's. Bench is dedicated to offering smart bookkeeping solutions to small and medium sized businesses in Canada. Unlike traditional bookkeeping platforms, Bench utilizes a smart digital platform that users can use to log, track, and analyze their own financials.

Creative Artists Agency

Creative Artists Agency is the leading agency in the sports and entertainment industries. With an extensive roster of high-profile clients, CAA has a long history of building long-lasting, successful careers. CAA has the brand power and experience to build awareness of EcoCloud and to make the program popular among mid and large sized firms.

CAA's role is to create a team to pitch EcoCloud to executives at different companies. To do this, CAA executives will create a sales team comprising of public relations and marketing executives from CAA, SAP, Lululemon, and Bench. The pitch presentation will show the success of EcoCloud at Lululemon, how the program was made by SAP, and the financial benefits described by Bench.

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