Course - BA 850

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Organization - Apple, Inc

Apple Inc is an American based technology company based in Cupertino, California. The corporation was founded in 1976 by Steve Jobs, Steve Wozniak, and Ronald Wayne [1]. The company's main focus, per their official 2014 issued 10-K, is on the design, manufacturing, and marketing of mobile communication and media devices. Apple's business strategy is focused on providing the best user experience and leverages the company's ability to develop and maintain its own hardware, operating systems, and application softwares [2]. Apple's currently offers an annual Environmental Responsibility Report which takes the Global Reporting Initiative Sustainability Reporting Guidelines, G3/C, into consideration when reporting business related topics of economic functionality, product environmental impacts, human right provisioning and facility reporting, supplier conduct responsibilities, fair labor practices, and recycling [3]. With regard to environmental impact metrics, Apple released a 2012 Environmental Footprint Report for Apple Facilities which covered energy consumption, water use, waste recycling, transportation, and procurement among numerous facilities including Cupertino, Maiden, Newark, Prineville, Reno, and more [4].

Apple's latest 2014 Environmental Responsibility Report describes three priority issues the company believes would yield the most impact in the future.

- To reduce the company's impact on climate change through the use of renewable energy sources and focusing on energy efficiency in products.
- Lead the way in greener material development in their products and processes.
- Conserve resources so we all can thrive

Apple embraces clean source alternatives demonstrated by their commitment to transitioning all data centers to solar, wind, and geothermal power. Additionally, the corporation's aforementioned dedication to maximizing efficiencies has led to a 57% reduction in total power consumption among Apple products since 2008. The company's largest contribution to greenhouse gas emissions is related to its manufacturing operations (accounting for an approximate 70% of total 2013 carbon footprint). The second largest contribution is associated with product usage (accounting for an approximate 22%) [5].

Apple also holds a strategic advantage in its personnel. Lisa Jackson is the Vice President of the company's Environment, Policy, and Social Initiatives program combines two beneficial social realms and illustrates a particularly useful synergy between social thinking and environmental awareness which allows for the potential for fundamental growth and development in youth and cultural priorities.(ie, funding in educational programs or green career advancement) to raise environmental awareness [6]. These core values are further exemplified through Apple's empowerment of over 861,000 workers since 2008 through the Supplier Employee Education and Development or SEED program. The goal of SEED is to expand educational opportunities for supply chain personnel through free live courses or new iPad-based learning softwares [7]. 2.3 million workers were trained regarding their rights through mandatory code of conduct stipulations as a result of supplier partnership with Apple.

Apple's corporate social responsibility promise relies heavily on their authority to conduct audits on supplier work environment conditions. Every partnered supplier must adhere to the standards established in the Apple Supplier Code of Conduct and Supplier Responsibility Standards which covers labor and human rights, environment, management systems, and ethics. In 2014 Apple performed 633 audits encompassing 1.6 million workers and suppliers in 19 countries [7].

New Innovation - Apple Earth

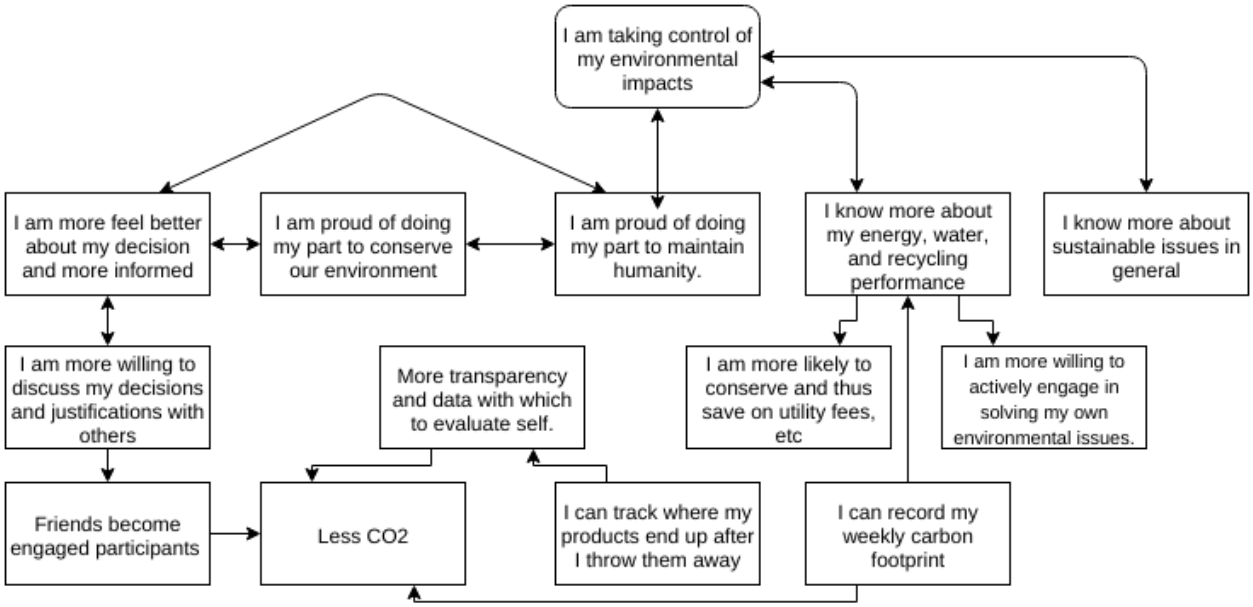
The concept for this innovation is rooted in a number of distinct, yet interconnected, factors. First and foremost, it is evident in the aforementioned research of Apple's corporate social responsibility platform that the company prides itself in technological innovation, both in the design process (one which unilaterally consumed public perceptions of the mobile phone industry for years) and in fostering a culture of progression. It does so while also maintaining a commitment to morally just operations and environmental stewardship. The idea behind Apple Earth is to develop a default application software, in the vein of the Apple Health application introduced in iOS9, the serves as a hub for personal environmental metrics, as well as, practical sustainable tools and substantive educational elements.

Global population has just about doubled from the 1960s to today, a single generational gap for myself. Such rapid expansion requires more synergy between individuals, localities, nations, and continents. Mobile phones serve as an extremely useful tool in reaching an incredible number of end users. There are currently over 6 billion mobile phone subscriptions worldwide encompassing 75% of the world's population with access to a range of mobile applications having increased dramatically over the course of the last decade [8]. Furthermore, the continued dematerialization of modern societies facilitated through technological innovations and subsequent decreases in material-dependencies. Consider the implications of this technological development on Third and Second world countries that are still in the midst or just beginning significant development in infrastructure (as world population interconnected by a phone network that is not dependent on millions of tons of copper to maintain and operate) [8].

Mobile technology holds a unique advantage in that it is very refined and efficient solution to bridging the gap in an otherwise immense and expansive world. However, despite the incredible aforementioned penetration rates, there are still cases of limited uptake in certain demographics. A 2010 GSMA Development Fund report found that women are 21% less likely than a man from the same country to possess a mobile phone (23% for Sub-Saharan Africa, 24% Middle East, 37% South Asia) [9]. An additional concern is the associated e-waste produced by surging mobile consumers entering the newly interconnected global society. Despite these shortcomings, the reputation of Apple products serve as a power tool for raising awareness among individuals by giving them the tools (through applications) to educate themselves and evaluate their personal performances (perhaps even establish forums for sharing progress and rewarding sustainable life choices).

Mobile technology has been viewed as a very promising tool by private healthcare businesses in Bupa whose recent Be He@lthy, Be Mobile initiative is aimed at cutting incidents of NCD-related deaths by 25% by 2025 [10].

Cognitive Map and Paths



The above cognitive map was formed through the initial self through of control over ones actions and the subsequent results. The second tier of feelings all associate with an individual's happiness and sense of pride as a result of added awareness and a deeper understanding of his/her actions. The third outcome tier touches on the impacts that a sense of pride would have on communication and advocacy of the product. Additionally, the issue of fee reduction as a result of added awareness is addressed. Finally, the thing or service that is being produced, aside from the decreased pollution, is the added engagement of friend groups as personal data tracking becomes more culturally acceptable.

Organizational Fit

The Apple Earth application software opens the door for prototypical schemes. Apple's niche control in the application market demonstrates their inherent competitive advantage. Apple is in the position to be at the forefront of a paradigm shift which refocuses sustainability as more than just an appendix (read afterthought) to company deals. Apple holds many competitve advantages in regards to implementing these changes, a few are listed below:

Talent - Apple employees hundreds of competent and motivated employees with the skills needed to not only meet the current demands of the industry, but forge solutions to future complications.

Shared Mind-Set and Coherent Brand Identity - Implementing the Apple Earth default application in all future mobile devices is a means by which Apple can further align their track record with their already substantive discussions towards sustainable business development.

Collaboration - The name recognition currently associated with Apple allows for the corporations continued excellence in regards to collaborative efforts. They are currently engaged in well over 50 educational services in suppliers and schools across the world, as well as, in constant communication with a number of regulatory agencies.

Customer Connectivity - Customer connectivity enhances the workplace inherently through productive feedback and through the establishment of enduring and test relationships. Customers are not only more connected to the company, but directly to their immediate and local environemnts (globally too!).

WGB Space Analysis

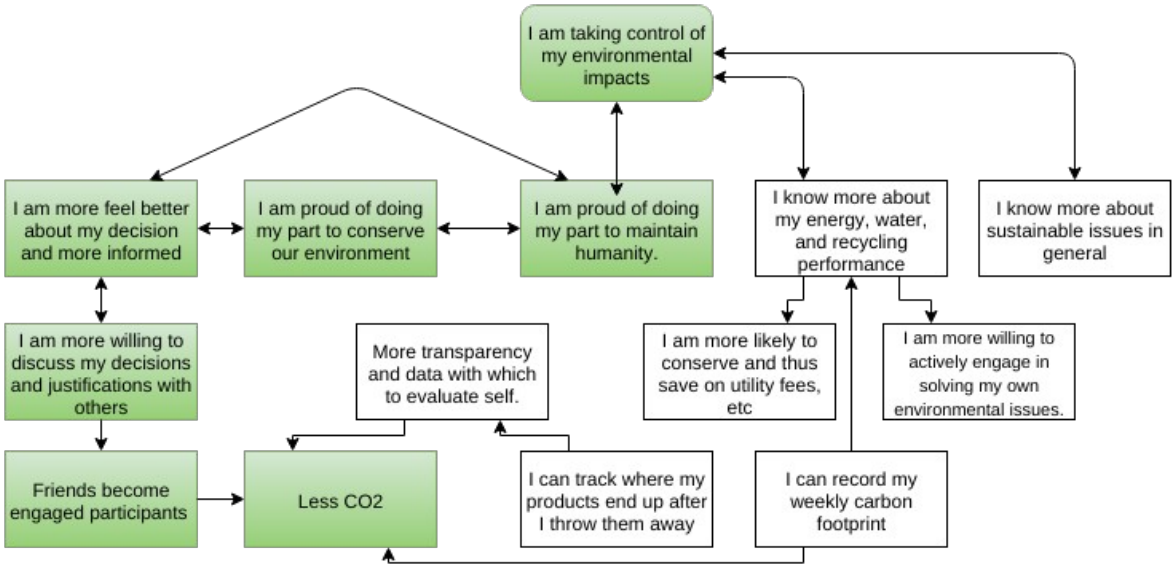
There are a number of apps that cover the principles. Oroeco is an example of one such app that provides detailed information on personal climate footprint and carbon offset indicators. Additionally, the app takes into account your choices and provides economic data based on those choices (i.e. cost savings, etc) [11]. This type of software also has a lot of potential to become "gamified", by which game mechanics can be applied to the system in order to further engage users and to establish and enrich conversation among communities regarding sustainability

The availablility of numerous sustainability apps in this market is not a cause for concern, but it certainly dictates the innovation would be labeled as a black space innovation due to the already crowded market nature. Third party apps don't necessarily serve as competition as much as they can be utilized as additional resources to better support and cover any deficiencies associated with alpha implementations of the software.

Research and Insight Plan

Research and insight will be completed with heavy focuse on surveying and focus group engagement. Customer engagement and satisfaction are two core values with Apple and these two means of insight seem the most logical in assertaining the product's serve these efforts. Heavy attention will be paid to the method by which surveys are administered and in the verbage used in an effort to offset possible survey fatigue. Additionally, these groups must be selected carefully in order to avoid poor participant screening and poor segmentation which may hide interesting results or skew data. Overt observational narratives may serve as great tools to truly getting a glimpse of the consumer mindset while interacting with the product. This method would also serve as a great reference for measuring graphical interface responsiveness.

Ten Types of Innovation



The aim of the illustrated path choice was to utilize a sense of community and nieghborly collaboration in an attempt to offset environmental issues and combat the tragedy of the commons type situation the world seems to be falling back on. In order for this path to succeed it would be wise to target the following types of innovation in future adaptions of the aforementioned product:

- Network Innovation - Included because of the synergies presented with increased transparency and commmunal involvement. Networking innovations may be yielded with more ease thanks to the significant boost such an app could provide to many different parties.

- Product System - Addressing the various degrees of envnironmental metrics beind recorded by individuals. Accessibility to a wide variety of topics and measuring categories allows for the development of an expansive and comprehensive system which better encapsulates issues surrounding individual impact and moral obligations.

- Brand Innovation - Very important as it is closely related to consumer recognition of the product and reflects heavily on the company responsibilities already set in place. Correctly branding the product will help to properly get a set of values across to users and promote transparency and consistency among established user networks.

- Customer Engagement - This is an area of weakness that must be properly evaluated. There is a tendency to lose authentic interactions when engaging in online communications, as opposed to in person experiences. Thus, more research is requred to further develop customer engagement strategies that help to eliminate potential issues of authenticity with the application.

Testing the Offer

Expert judgement can easily be obtained due to Apple's excellent personnel and networking capacities. Common cognitive bias should be combatted using structured elicitation methods. Additional customer surveys provides necessary insights and a platform for user interaction. Overall, pricing is not an issue in this regard as the application is intended to come pre-installed with the primary device and thus is free of charge. There is potential for additional features being added in the future to incentivize increased utilization and to provide some potential for revenue generation.

Iteration Path

Beta testing and microtesting are crucial tools to test functionality and user friendliness prior to launch or during introductory pilot phases of the application's implementation. Iteration techniques will be used to isolate dependent variables in regards to customer satisifaction and survey reviews. A schedule of feedback programs followed by iterative review and subsequent modifications to isolate potential key factors seems like a rational approach towards improving the software.

The importance in these steps is in the precision by which some factors can be controlled and the degree to which others can be modified and accounted for.

Citations

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