

Starbucks Verismo Environmental Product Analysis

The Verismo by Starbucks is a home coffee machine designed to make any type of the customers favorite Starbucks drink with the push of a button. A Verismo owner has access to many different Verismo pods, each with a different blend of coffee. There are 13 different options for Verismo pods so that the customers have a wide variety of different coffees to choose from. The machines themselves are reasonably priced at 150 dollars for the standard model. The pods needed to brew coffee are also relatively inexpensive too. They average 12 dollars a box, but most of them contain 12 servings. This makes a cup of coffee from the Verismo roughly $\frac{1}{4}$ the price of a cup of coffee in the Starbucks store. Customers can even make their own Verismo account and become part of the Verismo community, it also enables Starbucks to keep track of warranty and service history. The machine also has purchasable accessories like an electric frother that can be purchased separately. Starbucks promises that any cup of coffee made from their machine will be as satisfactory as a cup of coffee made in the store.

Starbucks is a global coffee company and coffeehouse chain. It is the largest coffeehouse company in the world with 20,366 stores in 61 countries and over 160,000 full time employees. The first Starbucks opened up in March 30, 1971 by three partners, Jerry Baldwin, Zel Siegl, and Gordon Bowker. Starbucks does not have a narrow target market as they appeal to the majority of the population. Although coffee is not exactly for younger children, the cookies and cake pops are definitely appealing to young kids. They have also expanded their range of items from just coffee, to include juices, teas, pastries, sandwiches, and apparel items like

Starbucks mugs and tumblers. Starbucks evening locations will also serve an array of wines and beers after 4pm. They have even developed their own brand of ice cream. Starbucks stock trades on the New York Stock Exchange under the ticker symbol SBUX. They are in the services sector operating under the special services industry. While prices fluctuate daily, Starbucks shares generally sell for around 60 dollars. Their fiscal year ends on September 29th and for the 2012 year Starbucks earned total revenue of 13,299,500 dollars. 3% of Starbucks shares are held by insiders and 5% by owners and 74% of shares are held by institutional and mutual fund owners. Starbucks main competitors are Dunkin Brands Group Inc., and McDonalds. Both of these companies operate in the same sector and industry.

There is no information pertaining to how the Verismo is made so information about the construction portion of its lifecycle will not be able to be included. The pods that are used with the Verismo are constructed from polypropylene. This means that the pods can be recycled, but not all recycling plants are designed to handle this material. The machine itself is relatively energy efficient, using only 1.45 watts an hour. Most of the environmental friendliness for the Verismo isn't focused on the machine and its production, but on the pods it uses and their impact on the environment. However even though Starbucks makes an effort to have recyclable pods, they are still far behind their competitors. Keurig k-cups have a whole new packaging and development plan in order that decreases greenhouse gasses from production by 20% and decreases overall packaging by 30%. In terms of distribution, Starbucks ships their machines purchased online and to be sold in stores, by truck, like any other company. Starbucks does have a warranty

where you can send them a broken machine and they will attempt to fix it and send it back to you. This is a good idea to help reduce waste from machines being thrown out if their overall lifespan is increased. Starbucks also offers fair trade and organic options for their pods, however those options are fairly limited.

I. Rulemakers and Watchdogs

Global Exchange has stated that Starbucks is “not doing enough”. Starbucks is now the largest US purchaser of Fair Trade Coffee increasing its purchase from 653,000 to 1.1 million pounds in 2003 (Starbucks: Responsibility). Most of it was co-certified as organic and shade grown as well. Conservation International has been helping Starbucks develop buying guidelines that address principles of ethical sourcing. The program, C.A.F.E. (Coffee and Farmer Equity Practices), focuses on product quality, economic accountability, social responsibility, and environmental leadership. Starbucks often receives class action lawsuits for customer or employee problems like scalding burns from a spilled drink to discrimination of an employee but have not recently had any environmental related lawsuits. Starbucks attempts to stay clear of political leaders and the CEO of Starbucks often encourages his peers not to give political contributions. Starbucks is also a corporation along with many others in the Northwest of the United States that support gay marriage, especially in Washington.

II. Idea Generators and Opinion Leaders

Starbucks must handle the media relations with great care in order to keep up their green image. Not only must they handle newspapers, magazines, tabloids, and Television they also must worry about the Internet and bloggers. Starbucks

must also worry about research centers especially with their Coffee “fair trade” and pod developments.

III. Business Partners and Competitors

Industry Associations for the Coffee and Tea trade have mainly been discussing fair trade coffee. Starbucks’ competitors tend to encourage one another to make more environmentally friendly changes in their companies. Starbucks is building more eco-efficient stores, LEED certified stores, and even free coffee grounds that customers can use for composting. Coffee Bean and Tea Leaf, one of Starbucks’ competitors, does not have Fair Trade Coffee but have a more efficient way of production as well as a large community based philanthropy called Caring Cup with donates money to various global as well as local organizations. Another one of Starbucks’ competitors is Green Mountain Coffee which designed the K-cups. Green Mountain Coffee is dominating the single cup coffee system right now but Starbucks is making its way up in the single cup industry with the Verismo system. Green Mountain Coffee is also served at McDonald’s chains making McDonald’s another competitor for Starbucks outside the coffee maker industry. But each of these companies first must figure out how to make the cups or pods more recyclable.

IV. Consumers and Community

Consumer support has a huge role in how Starbucks functions. Starbucks has a large number of organic coffee choices, which appeal to many consumers.

Customers are now looking to be more “eco” friendly and Starbucks is taking this into account with many activities including reducing its packaging waste to LEED

lighting to free compost from coffee beans.

V. Investors and Risk Assessors

Employees see first hand each and everyday changes that must be made and fit into almost every category in the Stakeholder's Analysis. Starbucks' needs value driven employees on their side to help give Starbucks an environmental advantage.

Employees can help improve efficiency and productivity in a positive way for the environment. Starbucks must be aware of shareholders that prefer socially responsible investing in companies that show environmental responsibility.

Stakeholders are now viewing companies with good environmental management translating to an indicator of good general management.

AUDIO Analysis of <u>Verismo</u> System					
Challenges	Aspects	Upstream	Downstream	Issues	Opportunities
1. Climate Change	Emissions from production process	Distribution emissions	Emissions from Customers driving to their local Starbucks or Retailers	Carbon emissions	Create a more eco-friendly production system
2. Energy	Energy Consumption and rising costs	Choices in energy for production for production and suppliers	Energy use in Starbucks, markets and other retailers	Cost of energy/ too much reliance on grid	Energy consumption techniques when producing <u>Verismo</u>
3. Water	Water over-consumption and water quality	Water quality in coffee-growing communities	Customers wasting products that contain water	Improving Water quality, water efficiency	New water efficiency techniques (rinsing, exterior landscaping, etc) in Starbucks stores
4. Biodiversity	Land use for factories and stores	Increase in Distribution centers, products that rely on biodiversity	Consumption that causes harmful damage pods are not <u>recyclable</u>	Pods are not recyclable in the U.S	Starbucks is building more eco-efficient stores, make recyclable pods
5. Chemicals/Toxin	n/a	n/a	n/a	n/a	n/a
6. Air pollution	Air emissions from stores	Emissions from suppliers and distribution factories	Customers driving to stores	Improving air quality with regulations	Increase all-around efficiency to reduce emissions
7. Waste Management	Pods are not recyclable and are only one use	Waste from suppliers and distribution	Customers disposal of drink containers, pods (cups, glass bottles, etc)	Recycling programs becoming more efficient	<u>recycling</u> bins, reduce packaging, make pods <u>multiuseable</u>
8. Ozone layer	Carbon emissions from production and distribution	Carbon released by supplier production	Emissions from the <u>verismo</u> customers are using	Similar to climate change	Eco-friendly production techniques
9. Oceans	n/a	n/a	n/a	n/a	n/a
10. Deforestation	Cups and bottles for their products	Reliance on materials to make cups, lids, covers, etc. for suppliers	n/a	Risk of consumer protest	Promote reusable pods, suppliers utilize more efficient packaging methods

Although Starbucks is extremely successful, there are definitely some threats in the sense that companies are coming out with cheaper prices for their products. These cheaper prices are becoming more and more appealing to customers especially because of the economic hardship that many are facing nowadays as a result of the poor economy. Dunkin Donuts is their main competitor simply because of their low prices. Even though this is a valid threat, the economy is on the upswing, which is comforting to Starbucks. Thinking in terms of sustainable business, Starbucks suffers. While the environment has gotten lost somewhere between the economy and health care, Starbucks has been devising a way to cut their energy costs by one quarter by the end of next year, according to a Reuters news article. So far they have a two-pronged approach to energy efficiency and cost reduction that will benefit the coffee powerhouse, the consumers, the environment, and to start a movement of a global franchise going green.

The Company's first green initiative is to replace traditional, energy-consuming incandescent halogen light bulbs with more efficient LEDs (light emitting diodes). Starbucks expects a 7% reduction in energy costs from the lighting changes, which ties into the cost benefit analysis by proving that being sustainable can also reduce costs of operation. Many companies need sustainability to be put into this perspective in order for them to make the first steps towards being environmentally friendly. Starbucks' second green initiative is to have all new, company owned locations LEED certified. Not only will Starbucks benefit from this decision, as their energy costs will decrease dramatically, but their customers will

breath cleaner indoor air, the environment will be less impacted, and other businesses will now have an example of a major company turning green, to follow.



As mentioned above, Dunkin' Donuts is Starbucks' biggest competitor, and they too have been making moves towards improving the sustainability of their business. "New York State Comptroller Thomas P. DiNapoli announced on March 7, 2013 that Dunkin' Brands Group, owner of Dunkin' Donuts, has agreed to set a date for sourcing 100 percent of the palm oil used to make its products from sustainable sources." DiNapoli explains how consumers may not realize that they eat products that were produced in ways that are severely detrimental to the environment, and that this step of using 100% sustainable palm oil in their foods, will increase shareholder value. Shareholder value is definitely increased when a company is making strides to address the risks associated with environmental movements that promote climate change. This is definitely a threat to Starbucks, because although Starbucks is trying to make their actual buildings run more sustainably, they have

not mentioned anything about the contents of their food products being more sustainably harvested. These two extremely closely related businesses are beginning their initial steps toward sustainable business in two different sectors of their business. This is a good technique for two competing businesses because the consumers can choose the aspect of sustainability that appeals most to them.

Although the Keurig Company is not one of Starbucks' main competitors, they were the first to come out with the idea that propels the Verismo machine. We assessed the environmentally friendly attributes of the Keurig machine, and compared them to the Verismo.



The Keurig Social Responsibility page on their website stated the environmentally friendly steps that are being taken to reduce the environmental impact of the Keurig brewing system. Those steps include:

- “Introducing nested packaging for their K-Cup® packs, which they estimate will reduce distribution-related greenhouse gas emissions by more than 20%, and decrease volume of packaging by 30%.
- Launching two pilot programs in their Away From Home channel that divert brewed K-Cup® packs from landfills.
- Offering the My K-Cup® product, a reusable filter assembly that can be refilled by the consumer. My K-Cup® is easily cleaned and compatible with all home K-Cup® brewing systems sold today.
- Piloting a K-Cup® pack for tea made with paper, a renewable resource, in 2010.
- Including recycling codes in their brewers to facilitate responsible disposal of the recyclable parts of their home brewing systems and to ensure compliance with the RoHS Directive, a set of European regulations designed to reduce the effect of electronic equipment on the waste stream.
- Providing considerable energy savings through Auto-Off features for our At Home brewing systems (excluding the MINI and MINI Plus).”

Hopefully Starbucks can create environmentally friendly ways to have their Verismo system operate so that the Keurig does not out compete them. Also, we were not able to find any information on Starbucks producing their foods with environmentally harvested ingredients. Dunkin Donuts has been doing that so if Starbucks continues to not make an effort in cooking with sustainably harvested ingredients, then Dunkin Donuts will possibly out compete Starbucks as well.

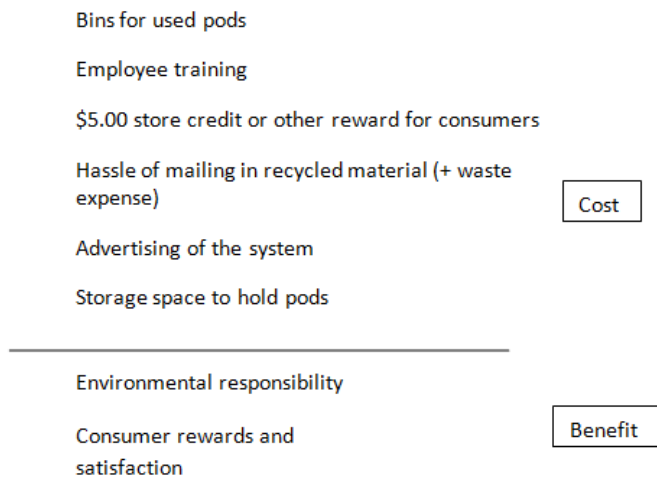
VI. Green Opportunities/Recommendations

In regards to the Starbucks Verismo device, several improvements can be made in order to maximize its environmental as well as marketing potential.

The coffee pods which contain the coffee grounds are made out of polypropylene, which can be recycled (Plastic Ingenuity). However, Polypropylene has a number 5 plastic recycling symbol, which can only be recycled at designated recycling centers, Whole Foods stores, or through mail-in programs (Starbucks Corporation). In other words, it is not exactly easy to recycle pods. The first step would be to separate the empty pods from the rest of the garbage. Then, bringing the pods to a designated location can be out of the way

for many consumers, which would not only discourage recycling but contribute to the waste stream.

A solid solution to this problem would be for Starbucks to accept used pods through Pod Recycling. With this system, consumers would bring in their empty pods and every bag they bring would count for a stamp. Once they reach 8 stamps, they can receive a \$5.00 store credit. With Starbucks stores in virtually every city in the United States, this reward system would make a connection between the product, consumers, environmental responsibility, and the Starbucks Company. However, the Green Team found that kick starting a recycling program would not ensure the responsibility of the consumer to do their share and manually bring in the drained pods. The entire system in general would be a win for customers that could contribute and for Starbucks on efforts to be more environmentally conscious, yet through an abstract Cost Benefit analysis, costs outweigh benefits by a great deal. This CBA is done in the perspective of one store but would have to be implemented in the millions of Starbucks stores in the US and worldwide.



In this diagram, costs are very black and white. In theory, a store wouldn't need much more than it already has in order to collect people's used pod containers. This is not far from the truth, as a recycling program would not add any increase to operational,

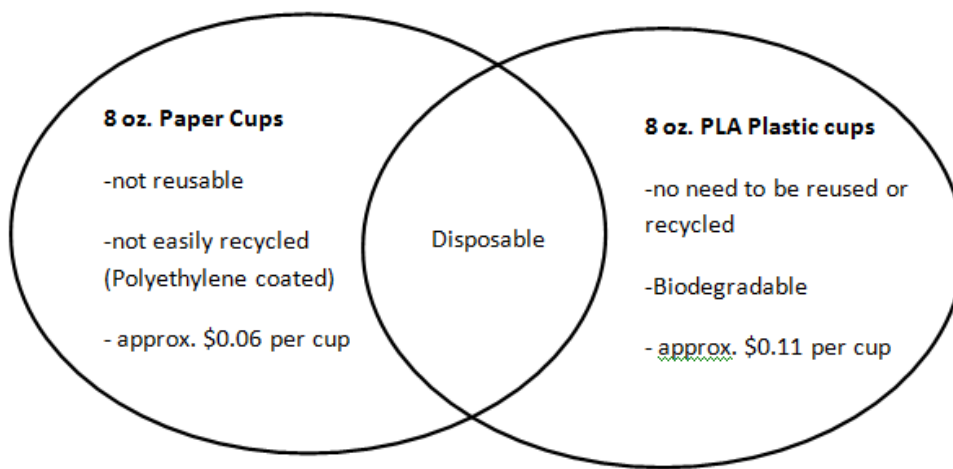
energy, or material and water expenses. The main problem with this plan is that the benefits are not only outweighed by costs, but they are intangible. And while intangible benefits should not be overlooked, these specific benefits, environmental responsibility and customer satisfaction, are not guaranteed. Therefore, the Green Team looked into more ways to *redesign* and *reimagine* the construction of Verismo pods.

This more extensive solution would be to reconfigure the entire production of the pod, changing the package material from Polypropylene to Polylactic Acid, or PLA, which would not only change the product completely from extraction to disposal. PLA is developed from corn, unlike Polypropylene or other plastics which are drawn from petroleum and fossil fuels (Berry). The switch from petroleum based plastics to a material derived from natural sources would not only alleviate some dependence on fossil fuels, but also allow the materials to decompose naturally. This would mean that although pods would make their way to landfills, there would be no need for extra effort on the consumer's or company's part since bacteria would allow the product to decompose back into the earth.



The concern of virtually infinite disposable waste, which the Starbucks Company needs to address, is the frequent amount of paper cups used and thrown away. While the paper cups are recyclable, they are often not recycled because coffee seeps into the cups and soils them. If Starbucks could apply PLA plastic measures to their cups as well as their

Verismo pods, their coffee cups would not be an issue in consideration to the waste stream. Estimations on the substitution of Polypropylene pods with PLA plastic pods would be difficult to compute because the cost to manufacture the custom shape and size of the pods is unknown for both plastic and PLA plastic. So instead, the Green Team assessed the difference it would make between buying paper cups and buying PLA plastic cups for hot beverages. Although almost twice the price, PLA plastic would reduce waste by a long shot.



To minimize waste contribution and natural resources in general, the best opportunities lie in reusable products. For the Verismo, a reusable pod would be most ideal, as it would eliminate the need for continuous production of plastic pods, as well as the disposal of said pods. The new pod product would consist of a hard plastic pod which could be punctured repeatedly for each use and drained through the top within the Verismo machine. Consumers would scoop the coffee grounds of their choice into the device. After one use, the pod would be washed and reused for the next cycle of coffee. As a result, the consumer would save money and reduce garbage and waste. The same idea is represented by competitor Keurig's 'My K-Cup' design, which is already on the market and intended to allow customers to personalize each coffee beverage with whichever type of grounds they choose (Keurig Incorporated). With the production of a reusable pod, Starbucks Verismo

opens its target audience and market to those who are very strict about the personal products they use and their own environmental standards. The introduction of this new pod would also make the Verismo that much more competent with the popular Keurig machine. Starbucks would also be able to expect a price premium on selling the product, by advertising the money that will be saved by consumer from their decreased waste produced, the amount of money they will save from using just one pod instead of many, the reliability of a product that can be used over and over again, and the sustained belief and faith that Starbucks and, by consumption, its consumers are making conscious efforts to reduce their own footprint on the environment.

The last recommendation that can be made for the Starbucks Company is not directly in criticism to their disposable cups, but instead the system already in place for customers and reusable cups. When customers bring in their own reusable cups, Starbucks only gives them a \$0.10 discount, which is not even a 5% discount of a coffee order totaling \$3.00. Starbucks even has reusable in-store mugs and cups which are available to customers for in-store use only, yet many of them are unaware of this. The first correction I would add to this 'reusable cup system' would be to advertise in store about the non-disposable option and the discount customers would receive upon utilizing it. Advertisement wouldn't cost any money, as baristas could simply save a corner of a chalkboard to promote the deal. The discount is a small price for the company to pay considering the amount of money stores would save from waste removal expenses and material expenses (paper cups). The benefits only increase when consumers buy the reusable cups made and sold by Starbucks because they are inadvertently providing advertisement to their own environments at a negative cost to Starbucks. Starbucks also gains from this plan by selling the cups and gaining profit in the first place. For these reasons, reusable cups should be a more present marketing strategy as Starbucks benefits greatly just from the use and circulated exposure of reusable

cups. With this being said, the approach the Green Team would recommend would be to offer a 5% discount on drink orders with the use of a personal (non-Starbucks brand) reusable cup or in-store cup. A customer who utilizes a Starbucks brand reusable cup, on the other hand, would get the advantage of a 10% discount on their drink order.

Discount increased	Cost
<hr/>	
Reduced waste, therefore reduced waste expenses	
Reduced materials expenses (less paper cups to buy)	
Free or negative cost advertisement on branded cups	
Cup sales increase	Benefit
Customer satisfaction (from discount increased ~ \$0.15-0.30 per customer)	

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