

Consumption of Plastic and Sustainability Efforts of Nike towards Green Environment

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ABSTRACT

Over the recent year, the consumption of plastic in all sorts of organization has been rising to an alarming rate, especially as people now use plastic to wrap material, carrying goods in supermarket or even while drinking (straw). Additionally, plastic is also highly used in packaging and manufacturing industries, especially for furniture, electronic casing and more. Nike itself has a part to play to reduce the rate in order to sustain a safe rate of plastic consumption. Plastic consumption is highly inequitable, with extremely high and wasteful levels in some countries contrasting with vanishingly small consumption levels in others. It is undeniable that people have to start reducing their consumption levels in order to achieve a low overall demand.

Keywords: Plastic, sustainability, environment, waste, industries, consumption

INTRODUCTION

The company began as Blue-Ribbon Sports, by Bill Bowerman and Phil Knight on January 25, 1964 near Beaverton, Oregon, in the Portland metropolitan area and officially named as Nike, Inc. on May 30, 1971. The Company named from Nike which means The Greek Goddess of Victory. The Company handles in around 160 countries and employs over 44000 people across 6 continents.

The total revenue of NIKE \$20.862 billion in 2011 with total equity of \$9.843 billion. At earlier stage, the company operated as a distributor for Onitsuka Tiger, the Japanese shoe maker.

It's an American Corporation Multinational that is completed settled in the design, development, manufacturing, and marketing in global and sales of footwear, accessories and services. The goal of business is to provide high quality of Sports equipment and innovative retail activities and lastly the satisfaction of customers. A student athlete whom Bowerman coached at the University of Oregon is known as Otis Davis, who later went on to win two gold medals at the 1960 Summer Olympics, Bowerman made the first shoe of Nike for him, contradicting a claim that they were made for Phil Knight.

In 1964, First year in business, BRS sold 1300 pairs of shoes to Japan country in \$8000. By 1965 the company had acquired a full-time employee, and sales had reached \$20000. In 1966, BRS finally opened its first retail store at 3107 Pico Boulevard in Santa Monica, California and later, they expanded their retail and distribution operations on the East Coast, in Wellesley, Massachusetts. The relationship between BRS and Onitsuka Tiger was ended in 1971 then BRS launches its own footwear, which was designed by Carolyn Davidson. The Swoosh was first who used Nike on June 18, 1971. In 1972, the jump was made to manufacturing company's

own brand of athletic shoes and the “Swoosh” brand mark was created and registered with the U.S. Patent and Trademark Office on January 22, 1974.

In 1976, the company hired John Brown and Partners for its first advertising agency. The following year, the agency made the first brand advertisement for Nike with tag line “There is no finish line”, in which no Nike product was shown. By 1980, Nike got 50% market share in the U.S. athletic shoe market, and the company went viral in public in last month of that year.

Nike along with Wieden+Kennedy have created many print and television advertisements, and Wieden+Kennedy became Nike’s primary Adv. Agency. It was agency co-founder Dan-Wieden who coined the famous slogan “Just Do It” for a 1988 Nike Advertisement campaign, which was chosen by Advertising Age as one of the top five advertisement slogans of the 20th century and enshrined in the Smithsonian Institution. Walt Stack was presented in Nike’s first “Just Do It” advertisement, which first appearances on July 1, 1988. Wieden credits the inspiration for the slogan to “Let’s do it”, the last words spoken by Gary Gilmore before he executed. In 1980s, Nike expanded its product line to encompass many sports and regions throughout the world. In 1990, Nike moved into its eight-building World Headquarters campus in Beaverton, Oregon. The initial Nike retail store, dubbed Niketwon, opened in downtown Portland in November of that year. Niketwon was opened in 1992, then they launched their Jordan Brand footwear in market.

In the mid of the year 2015, Phil Knight announced that he would step down as chairman of Nike in 2016, he officially stepped down from all duties with the company on June 30, 2016. Parker said to Trevor Edwards in a company public announcement on March 15, 2018 that a top Nike executive who was seen as a successor to the Chief Executive, was given up from his position as Nike’s president and would retire in August. The products of Nike are manufactured in all over the world. The data analyses say that there are 554 Manufacturing Factories located in 42 countries.

Major manufacturing factories of Nike are located in Vietnam, China, Sri Lanka, Japan, USA, Brazil, Indonesia and many more. Environment impact through Nike has made a few positive changes to its environmental practices and is a member of the Sustainable Apparel Coalition, it still has a way to proceed before it can exactly be sounded of a ‘sustainable’ brand. Nike uses some environment-friendly substance comprising organic and reprocessed cotton and polyester, minimises off-cuts in component of its manufacturing process and has a waste and water reduction strategy in place in most of its supply chain. It has also made a public commitment to reduce its carbon emissions by over 50% till 2025.

RESEARCH METHOD

The research framework was created as the guidance for the researcher to have a fine picture on the relationship of independent variable to the dependent variable. Prospective research framework has been shown in Figure 1. As adorned in Figure 1, independent variable has dimensions which included plastic recycle bin, offers made by Nike, reuse of the plastic as

Nike’s material and reduction of plastic bag use while dependent variable is customer awareness about the usage of plastic bag.

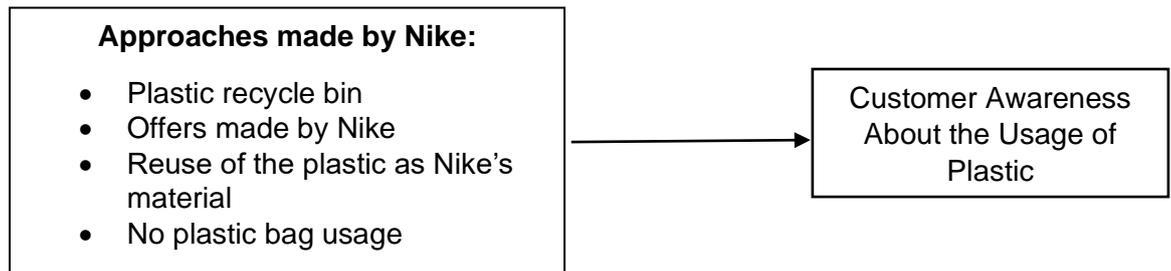


Figure 1. Adopted research framework

Sample and Data Collection

In this research, we had used the accessibility way of getting the data from the Nike company by conducting online survey. We made few questions related to Nike company and plastic usage. By using this kind of way, we can collect data research through in easy way and more efficient. We also think it is one of the finest ways to get all the information as the respondents just need to fill in the survey form using their smartphones and other gadgets.

The respondents are from Malaysia and India. This is because our group members also are from both India and Malaysia. Mukesh is from India while others from Malaysia. Other than that, it was quite easy for us to get the data as we are from different countries. Therefore, we can save the traveling money if we decide to have interview session.

Instead of conducting the online survey form, we also did find and collect the data from articles too. The data related to the usage of plastic mostly captured from the internet, newspaper, books, and library. The articles were collected from journals and some of the articles were found through internet research as we all know it is the easiest way to find. All the things that need to be done just use your smartphone.

Research Instrument

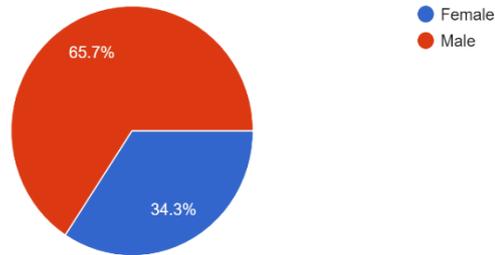
In this research, in the survey form, we have decided to divide into two sections accordingly to achieve the objective of the research. About 70 respondents were involved in this survey. For the first section which is Section A, respondents need to fill in their email address, name, gender and age group as this is for the demographic data.

For section B, we started to ask them the questions related to Nike and consumption of plastic. We asked them to identify either they concern about green environment, the effect of plastic towards ocean, and such more questions about plastic consumption. These questions were asked in order to know they are concern with the current issue or not.

Data Collection Based on Google Survey

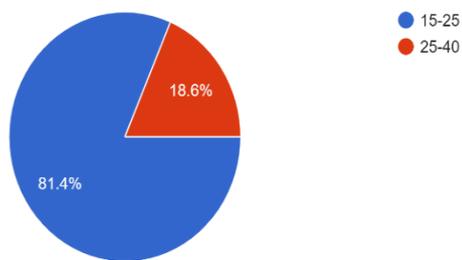
Gender

70 responses



Age Group

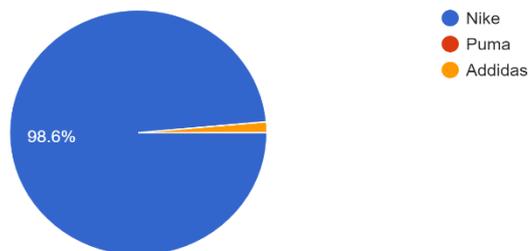
70 responses



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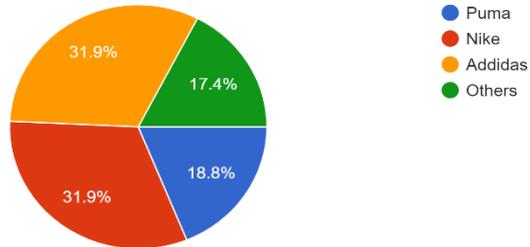
Identify Logo

70 responses



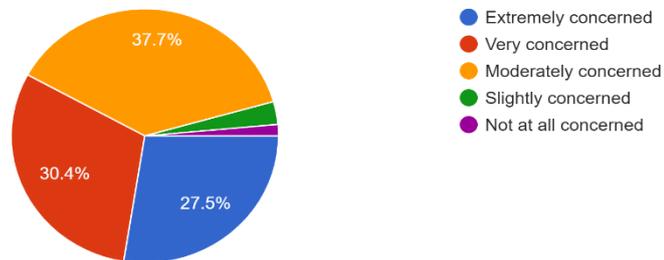
which brand you prefer?

69 responses



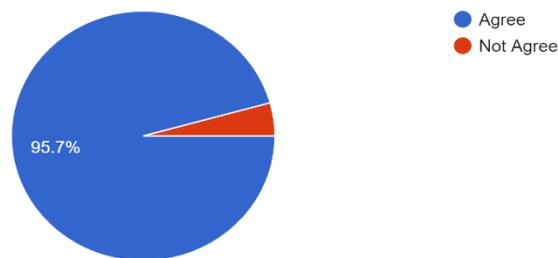
How concerned are you about Green environment

69 responses



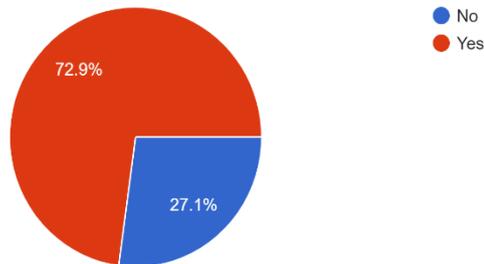
Do you think plastics will affect on our ocean ?

70 responses



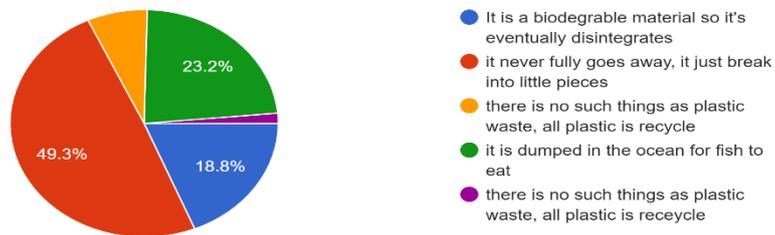
Do you think ban on plastic is justified, although it is recyclable?

70 responses



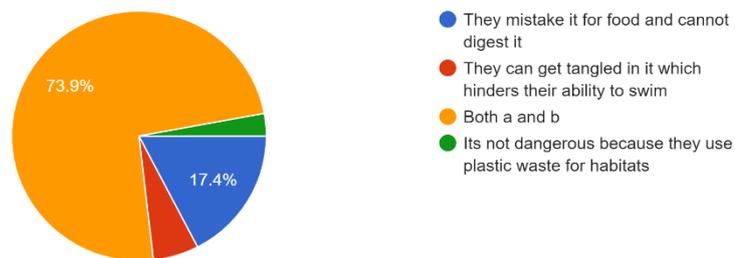
what happens to plastic waste?

69 responses



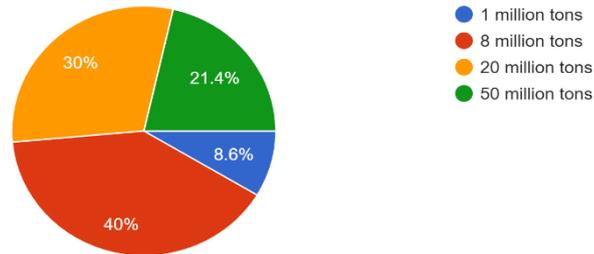
Why is plastic dangerous for marine life?

69 responses



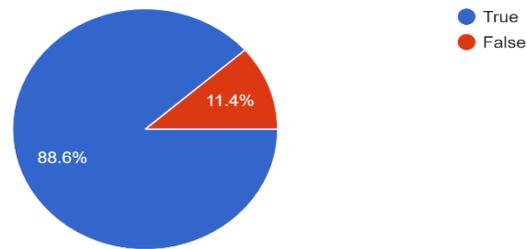
How many million tons of plastic are dumped in our oceans every year?

70 responses



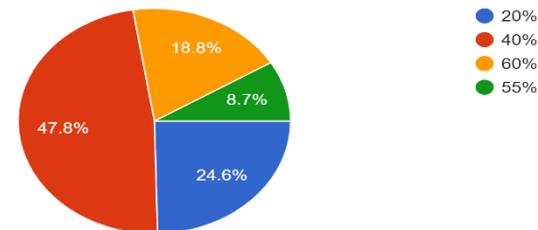
there are many alternatives to single use plastic

70 responses



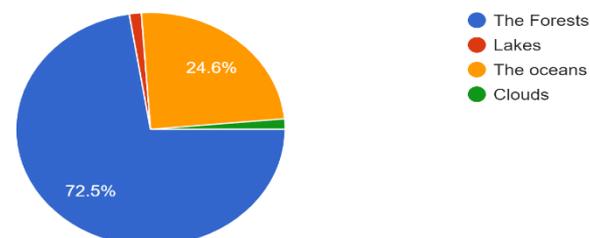
What percentage of emitted carbon dioxide is absorbed by ocean?

69 responses



More than half of the breatheable oxygen in the world comes from _____?

69 responses



Do you think world is ready to avoid the use of plastic

69 responses



LITERATURE REVIEW

Challenges

Micro plastics, the tiny particles that are released into the ocean from washing polyester and other form of petroleum-based fabrics is one of the issue fashion brands are facing in this current era. These particles are very hard to be eliminated and are damaging the environment silently.



In response to their growing demand for environmentally responsible, sustainable fashion, the fashion industry as a whole has largely lagged behind consumers. Business research firm Plastic Insights says polyester accounted for 55% of the global fibre business, led by cotton in 2016 with just over one-quarter share. In that year alone, 76 million tons of stuff were produced worldwide, with only a small share being recycled (about 10 percent from EPA estimates).

The effect is that we are swimming practically in plastic waste. "Every year, eight million metric tons of plastic waste reaches the oceans where it joins an estimated 150 million metric tons already floating there," the Ocean Conservancy reports. Not to mention the 26 million tons of plastic that ends up in U.S. landfills.

"As of FY18, 19% of the polyester used in our products was recycled," Nike shared in its FY18 Nike Impact Report. And it asserts Nike Air soles have been collected from 50% reprocess wastage since 2008.

Given these high-profile moves towards sustainability, a recent assessment of the environmental quality of the fashion industry found that it is not doing enough. The study, entitled Pulse of the 2019 Update Fashion Industry, conducted by the Boston

Consulting Group, the Global Fashion Agenda and the Sustainable Apparel Coalition, reports the industry has taken baby steps when giant steps are crucial.

Ann Cantrell, an assistant professor of fashion business management at the Fashion Institute of Technology says “The biggest cost of goods in clothing is the material. If a company can move billions of reprocess clothes and plastic bottles toward substance for new clothing that is moving to save a large amount of money all over the supply chain and help out to save the planet”.

One of the challenges that are currently faced by fashion brands are transparency which are highly demanded by consumers. This is the result from the 2013 factory collapse which happened in Bangladesh. Consumers nowadays are requesting fashion brands to expose the whereabouts of the fashion brand resources so that there will be no illegal or unethical form of production of goods.

Other than that, the resources required for fashion brands to maintain all the factories and research are very costly. Keeping up with the current trend as well of maintain brand’s sustainability is no easy work for any brands in the current fashion world. Nike continues to invest in research and development efforts on textile-to-textile recycle technology with a goal of scaling them in upcoming seasons, they are also increasing their focus on efficiency to contract fabric weight increases while continuing to develop a portfolio of sustainable cotton options such as organic cotton and recycled cotton. It takes up a lot of cost to build a team of researchers to work on the brand’s sustainability vision such as building labs and factories to do research all over the world as being done by Nike.

Solutions

Plastic pollution is a leading threat to our planet and oceans. As an entrepreneur, there are plenty of ways Nike can combine their idea to create successful environmentally conscious business. There are even some opportunities out there that can allow Nike to offer eco-friendly products and services to their customers. We find out that Nike got their own innovative solutions and how they can contribute to stop it.

Firstly, recycler. With all the different recyclable materials out there, including paper, plastic, cardboard and aluminium, there are plenty of opportunities for you to collect those materials from consumers and recycle them into usable materials. For example, Nike company can create their own dustbin and put in any Nike’s outlet that they have. With this alternative, Nike’s can also help consumers by offering a service that picks up large trash items and disposes of them properly. Actually, Coca-Cola has also launched its worldwide campaign ‘World Without Waste’, where the company has promised to collect and recycle the equivalent of 100% of its packaging worldwide and incorporate the use of recycled plastic in the manufacturing of its bottles by 2030.



Next, for retailers' sport items like Nike's, they can start a clothing line or retail store that uses sustainable or recycled materials in clothing, shoes or any other sport items. For example, like Adidas company. Adidas is turn off plastic ocean misspend into sneakers and sportswear. Adidas is also evolving a 100% recoverable shoe is known the Futurecraft Loop. This shoe is made to be remade. Because it can be returned and broken down to create a brand-new pair. Adidas is utilizing willingly obtainable material to manufacture new products. Which is a big step towards a sustainable future and it's also good for Nike company to take the same step as Adidas to create a sustainable product. Other companies are also working together to recycle plastic waste collected from the oceans; Bureo is working with these companies to produce new products with the use of 'Netplus' materials which are made from discarded fishing nets. Since 2013, over 185,000 kg of Netplus materials have been assembled cover Chilean coastal communities and are all set for repurposing.



Furthermore, Nike company also can make an offer to the customer such as discount for reusable that they used. So, to get the discount offer their customer need to bring their own bag to the Nike outlets. With this kind of method, Nike's actually encourage consumer to buy their product without wasting or using any plastic bag indirectly increase their sales and save our earth.

Reusable packaging also can be one of the methods that Nike can use to be reduce plastic consumption. Nike can commit and redesign their packaging to become reusable. Through platforms and delivery systems working with existing structures, consumers can now purchase products and send the empty packaging back for recycling. Overall, the CO2 emission of this deliver-back method is 50% less compared to using virgin plastics. This kind of actually program has debuted in Paris and in the U.S., in New York, New Jersey, and Pennsylvania, and is expected to reach other parts of the world by 2020 so it's a good opportunity for a big company like Nike to be more sustainable.



Lastly, maybe Nike company might need to replace their plastic bag with paper bag. The main part regards the paper bag making is its Eco-friendliness, paper bags are

reprocessed and biodegradable items, paper bags are necessary for each and every commercial avail for packaging their products

All we know that plastic bags rely on the harmful effect to the environment so the use of the plastic is ban by the government, also the government intention is to provide eco-friendly non-hazardous material, paper bags are one of the contributions for an evolution of eco-friendly vision. So, it's a good and new solutions for Nike to reduce the consumption of plastic that they've been using all this times.



Benefits

These days, all types of company in the economy are trying to do corporate social responsibility (CSR) or sustainability. There are tons of benefits for these companies, such as improving their brand image and competitive advantage. Studies proved that a lot of consumers nowadays are inclined to purchase goods that have positive impact on the society as well as the environment. They also favour brands that bring awareness to the community, especially brands that push sustainability in their advertising, campaign and production process.

By pushing brand's sustainability, the company can also increase their productivity and reduce costs. For example, Nike has been using recycled materials for their garments as a counterproductive move on saving the earth. They are aggressively trying to improve their productivity by transforming old materials into a newer one.

There are several ways of Nike doing the environmentally sustainable projects for their own benefit, one of that is being called Nike Grind Program. The post-consumer athletic shoes are used to create items like flooring weighs and baseball fields. This type of initiatives gives the opportunity to the manufacturer even the sports team management such as baseball to less down their expenses for maintaining the baseball field. The part of the unused shoes will be used to repair the certain part of flooring weight rooms as the original part are high in cost. The benefit of this is it can cut a lot of cost for Nike.

Nike Considered is one of the projects that lessen the use of transportation as we all know the transportation such as lorry would let out the carbon monoxide gas that can harm the environment. This is because they just use the materials that are found within 321km from the factory. Another fact is they used the organic based colours instead of artificial colour to their leather. The inorganic chemical has dangerous substances will harm the living thing such as aqua animals if accidentally or intentionally spilled in the water. So, using the vegetables-based colours are the most environmentally friendly way.

Nike once was able to shrink then carbon emissions through the shrinking carbon dioxide footprints. This is where they can focus on finding more energy efficiency and distributed the energy to increase the access of renewable energy. Too much carbon dioxide gases in the air could give people inhalation problem and so on. Next, Nike is a company that take the awareness about the environmentally friendly products. They

were able to create super type of quality product without neglecting the urgent things such as environment. For example, Nike used the 100% recycled polyester as it could save more than three plastic bottles. The benefit is Nike can reduce the use of polyester that can conduct to the pollution.

Nike, Puma, and Adidas will have released the joint roadmap to reduce the dangerous chemical throughout the supply chain by 2020. This plan creates a benchmark for the big companies to take part in the environmental issues. The big name such as Nike and Adidas will rise more and will be well-known as the companies that take the responsibility towards sustainability. Nike partnered with 30 retailers shop to expand the industry apparel products in Nike Aids in Creation of the Apparel Index. This collaboration can reduce the environmental impact such as cutted trees, the process time in the manufacturer and so on.

Another thing is Nike starts making the energy efficient concept by making the factories used the wireless monitoring devices as it could save many rubbers to use as the wires. Nike also has created a sustainable venture promoting green based and cutting cost. It known as backups for energy and focusing on the alternative and effective energy to be used in the factory. This way can be more effective, efficient and cut cost. It really shows the commitment of the Nike is so significant in order to ensure the sustain in this environment. These may also attract more employees and investors to their company. This is because a lot of people nowadays are keen on making a move to do their part on saving the environment so they might as well channel their resources into the right one.

RESULTS AND DISCUSSION

Based on a research in Western Europe, relatively 92 kilograms of plastic per capita are wasted, this quantity keeps rising with no full stop. Worldwide use per capita stands at about 35 kilograms. The largest number of plastics comes from the packaging industry: two-thirds generated by households and one-third by industry and commerce. Based on another research, worldwide nowadays, a single person uses plastic for only 12 minutes. For every 200 plastic bags used, we only manage to recycle about 200 plastic and it is estimated that 500 billion to 1 trillion plastic bags are consumed worldwide for every year. That appears to over one million per minute. Billions of plastics end up as litter each year. As stated by to **David Barnes**, a marine reseracher with the **British Antarctic Survey**, plastic bags have away "from existing rare in the late 80s and early 90s to existing almost all around." Plastic bags have been observed floating north of the Arctic Circle near Spitzbergen, and as a long way south as the Falkland Islands. Source: British Antarctic Survey Plastic bags are among the 12 items of debris most often found in coastal clean-ups, according to the non-profit Center for Marine Conservation.



From our study and results, we know that we are entering the critical era which is the used of plastic is rising continuously There are a lot of challenges faced by Nike company and others from all over the world to sustain the usage of the plastic bag as it has come to the alarming rate. The challenges are hard to encourage people to save the used plastic, hard to collect and sort all the type of plastic together, and plastic consumption increase continuously. These challenges can be eliminated if all of us give our best effort. Everyone that called people has to alert on the current situation to save the world not only by big companies like Nike but all of us.

Many ways can be used and already used by the Nike company to save and sustain the environment. From the discussion, we found new ideas and suggested a few new ways for Nike to accomplish its goal which is zero waste. The ideas are Nike can create its own recycle bin, start making cloth using recycle materials, and give a discount to the customers if they bring their plastic bag. We think these ideas are related to their goal as Nike envisions a future where waste doesn't exist and things live on from one product to the next. In other words, we are their life savior to keep them alive and continue their life for us to use them.

Next, there will be a lot of benefits waiting too if Nike's solutions and ideas can work effectively. The benefits are our next generation can still use plastic, save up customer's money and waste of plastic can be reduced and be used for the next outcome. So, the power is all on our hands either to keep the plastic alive or just leave it. Once again, all of us should be aware of the usage of plastic so that it can be sustained and be used for a long time to come.

CONCLUSIONS

We conclude that no use of plastic is a successful process where it has been reached to worldwide and already implemented in most of the outlets. The main reason Nike came up with this project is because the number of plastics being dumped is increasing gradually throughout this recent year, and banning plastics would bring a big difference to the environment worldwide. So, Nike has been using recycled materials for their garments as a counterproductive move on saving the earth. They are aggressively trying to improve their productivity by transforming old materials into a newer one. This process will take some time to be fully launched in all companies and yet still it is possible to be done for a healthier environment and for betterment of nature.

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Google Survey

<https://docs.google.com/spreadsheets/d/1D4ZGc05UL5jvxXcyjZT5tV6TkDhAcJ52tcahema2JZl/edit?usp=sharing>

From the google survey we found that people are moderately concerned about the environment. Some people give their effort in less use of plastic but their result could give any impact in environment because they are less in number. So, it's our responsibilities to spread awareness about the bad effects of use of plastic in Environment to the remaining people.