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Marketing Project: E-ink car wrap

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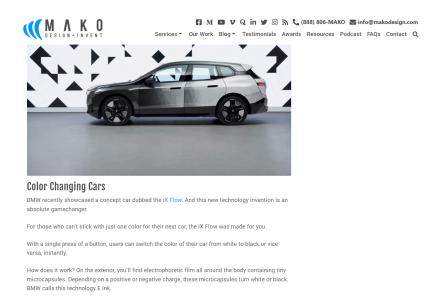
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Identification of a new product

A)

Source #1:

These two articles were taken from 2 reputable websites. Make Design is a company that focuses on technology. They have reviewed a wide range of products from different domains such as electronic engineering, industrial design, manufacturing, mechanical engineering, and soft goods design. Make Design provides up-to-date information and unbiased analysis of the product.



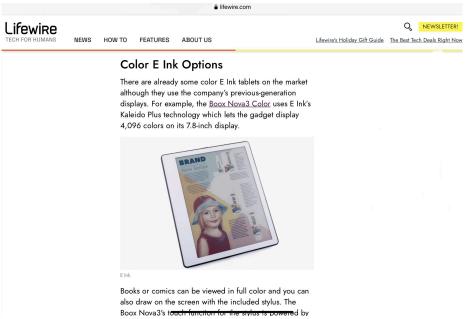
https://www.makodesign.com/

Article:

https://www.makodesign.com/blog/2022/03/08/new-technology-inventions-mako-wants-in-2022/

Source #2:

Lifewire is a top-10 technology news and information site. Articles on this website have been written by an array of different experts-in-their-field authors who give a detailed analysis of a topic, particularly what is new in the world of technology. They do so with clear and easy-to-find citations from other sources.



https://www.lifewire.com

Article:

https://www.lifewire.com/what-is-e-ink-2740879

B)

The E-ink technology, in the form of a car wrap with customizable features, is the new innovative product that we would like to bring to the Canadian market. What is it? Well, the material is called E-ink, which is the same material used for screens of e-readers. It is a display technology that can take many shapes and forms that all provide bistable images that significantly reduce power consumption in comparison to other screened devices. When used in the form of a car wrap, it allows the driver to change the vehicle's color instantly, from 50 different shades of gray (from black to white). This customizability will provide a distinct service never before seen in the market, that is universal to all drivers. This capacity to change the color of the car will also create the ability to regulate the temperature within the vehicle making it more battery efficient.

C)

It contains technology that has never appeared before in the vehicle market. The E-Ink car wrap is out of the ordinary and exciting, which will definitely catch the attention of the public. For certain regions, this might be very useful as it can change the temperature of the vehicle with minimal effort and less energy. Moreover, the color-changing system can also be used as an aesthetic feature for drivers who wish to enjoy more than one color on their vehicle, perhaps an individual shares a car with their partner or family and have different tastes. This car will enable people to easily keep up with each individual's wants with the click of a button. Personalization of a product is a popular commodity and more brands and companies are using this to their advantage to gain customers, therefore this is why we believe this product will be successful.

Macro-environmental Impact (2 pages)

Technological

E-ink technology has already been used by kindle readers, which means that this technology is inexpensive to recreate as a car wrap. This makes it easier to produce and distribute. It also does not require a lot of battery life from the car, making it very efficient in energy costs. The car wrap allows the vehicle to be more efficient with its battery when it comes to regulating temperature. This allows the car wrap to be relatively affordable to produce.

Natural Forces

While the technology is easy to make as it uses the same concept as kindle readers, it will most likely also come with its drawbacks. A study done in 2020 shows that a single kindle reader will produce about 168 kg of CO2 which makes it one of the most eco-friendly products over the course of a year. By being able to change the exterior of the car at a whim, owners will be less inclined to buy other car wraps as they are static.

Socio-Cultural forces

The car wrap will primarily be sold to high-end garages and car manufacturers who work on luxury cars or above-average-cost vehicles. This will enable the car wrap to also gain some sort of status as it will only be applicable to certain cars. Garages tend to do a lot of custom orders for clients when the latter wants their car to be different, which is why they will be our main market priority.

Demographic Forces

One strength of the product is that a car is almost universal to all age groups, ranging from teenagers who recently got their license, to adults who get on to their day-to-day lives, and old folks who want to visit their family members. It will also be mostly marketed in areas where the population is decently wealthy, as they are more likely to purchase the car wrap.

Political Forces

E-Ink corporation is a subsidiary of E-Ink Holdings, which is a Taiwanese electrophoretic display distributor. Relations between Canada and Taiwan will play an instrumental role in the marketing and distribution of the E-Ink car wrap. As a color-changing vehicle that is able to be personalized, The government will put strict regulations on how it is used. This can range from preventing offensive and explicit messages, and laws regulating distribution. We should then

Economic Forces

As the car wrap is easy to create, there isn't a lack of supply for it. This can help with distribution as we can easily produce enough to satisfy demands. However, if production costs rise it will affect the amount that is being produced, which can then lead to a shortage.

Covid-19

Negative: The new E-Ink technology with BMW had planned a full program of in-person events at the annual consumer electronics show in Las Vegas however was canceled and later done all online due to the coronavirus cases. It has also reduced production as workers were either being laid off by their companies or they quit in fear of the virus.

Segmentation, Targeting, and Positioning

A)

The first potential target market for our product would be young and middle-aged consumers who are part of the middle and upper class. Geographically, we wish to focus on the provinces with the highest average household income and the cities that contain the wealthiest neighborhoods. These provinces include Quebec, Manitoba, Ontario, and Alberta. Statistically from recent studies, these provinces are at the top when it comes to household income in Canada. Although the product will start by being sold and applied on luxury cars, it is envisioned that it will become more generalized, and become affordable and possible for the general public to use on their own vehicles. For a more accurate selection, choosing the cities of Montreal, Toronto, Calgary and Vancouver are the most optimal geographical targets for the release of this car wrap. Since these locations contain a high population density and contain the most rich neighborhoods in our country. As our product demonstrates features out of the ordinary compared to the current vehicle wraps in the market, we hope to attract the attention of the populace of these areas because they are the most likely to be the most up-to-date with new trends and technology. Thus allowing us to popularize the product more efficiently and easily.

The second potential target market would be automotive designers of legal age, whether they are beginners or professionals. As long as they have a passion for designing and customizing, they will be good candidates as customers. Since our wrap mainly features the ability to create more opportunities for users to personalize the look of their cars. People who practice this lifestyle will be attracted to this new technology as it is capable of changing the color of the external layer of their vehicle. Not to mention, it has the potential of becoming a trend among young and middle age car designers because this product showcases futuristic characteristics, which is very enticing.

B)

We believe that young and middle-aged consumers who are part of the middle and upper class are the target market that we should pursue. Mostly due to the fact that the population density of this group of people is considerably larger than the automotive designers. Based on a study in the United States in 2019 by SEMA, only around 7.9 million people customized their cars. Taking into account the population at that time, the percentage of individuals who modified their automobiles is 2.4%. If we consider these statistics and apply them to Canada, which has a population of around 9 times smaller than the United States. We can conclude that the likelihood of us being more successful by pursuing car designers is significantly lower.

C)

E-ink shares a link

Our product is unique and can easily be differentiated from other competitors due to our innovative approach towards car wraps. We developed the E-ink car wrap with the mindset of abandoning the static and traditional way of using automobile wraps. Our goal is to allow individuals to change the appearance of their vehicles on a whim without going through the tedious process of replacing the external layer. We wish to connect with our consumers and let them know that no matter the place and time, the look of their car can be changed by a click of a button. Thus, illustrating the title of this positioning statement "E-ink shares a link".

For our positioning statement, it would be as follows:

"To individuals who wish to get a taste of innovation and of change, the E-ink car wrap is a new technology that allows you to switch the color and appearance of your vehicle with the tap of a finger. No matter where you are and where you go, personalize your car and enjoy new features never seen before."

Secondary Data & sales potential (1-2 pages)

A) Source #1:

Transparency Market Research offers syndicated market research reports that cover the entire market and provide customizable research services. It is one of the top five most promising market research organizations in India. Their reports provide industry insights and use industry-leading software and expertise to provide past performance data and future projections. Their research covers chemicals and materials, energy and natural resources, food and beverages, heavy engineering equipment, packaging, automotive and transport, consumer goods and services, electronics and semiconductors, factory automation, healthcare, IT and telecom, and pharmaceuticals.



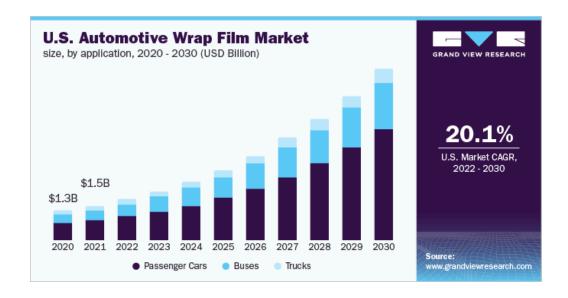
From this data we notice that the vehicle wrapping market is expected to experience significant growth in the coming years. In 2020, the market volume for vehicle wrapping was 7.181 million units. By 2031, this is expected to increase to 26.992 million units, representing a compound annual growth rate (CAGR) of 12.65%. This growth indicates a strong demand for vehicle wrapping services and suggests that the market will continue to expand in the coming years.

Source#1 link: https://www.transparencymarketresearch.com/vehicle-wrap-market.html

B)

Source #2:

Grand View Research is a market research and consulting company based in the US and India. They supply individuals with research reports, customized research reports, and consulting services. Their database is used by academic institutions and Fortune 500 companies to understand the global and regional business environment. Grand View Research helps clients make informed business decisions with market intelligence studies across various industries. They offer strategic objective insights based on their deep understanding of various business environments. They complete over 300 multi-country market studies annually.



Source#2 link: Automotive Wrap Films Market Size Report, 2022-2030

From the above source, the demand for automotive wrap films is expected to increase. In terms of application, passenger cars accounted for the largest revenue share of 53.81% in 2021, and this is expected to continue due to the decreasing prices of car wraps and growing customer interest in vehicle customization.

C)

The market size of the car wrap industry in 2020 was around 7.181 million units based on 23 countries in the first source. If we calculate an estimated size for Canada then the market size of the car wrapping industry would be around 312 217 units. This is the average amount each country would receive if the total were evenly distributed among the 23 countries listed. However, it is important to note that this calculation is purely hypothetical and does not necessarily reflect any real-world situation or data. If we want to capture 10% of the total market then we have to sell 312 217 units at the price of around 6000 dollars each. Total revenue for the 1st year would be 187 million CAD. E-ink technology is very unique in the market. There are many factors that affect wrapping in cars like the installation of these films on the exterior of a vehicle allows the dirt to form a layer between the vehicle's surface and the outer wrap. This prevents the public from using the wrap, which poses a challenge to the vehicle wrapping market. Temperature is another major challenge, as temperature rise may lead to overstretching of the film, and lowering of the temperature may result in shrinking of the film. To overcome this problem e-ink wrapper technology is the best solution.

The marketing mix

Price

Introduction

As our product is about exterior car customization, it will have to compete against other similar products such as Lumilor or different car wraps. The appeal of these options is that they are quite inexpensive to acquire (Lumilor bottles cost around 600\$+tax per 80x bottles while car wraps for luxury cars can range from 10 000\$ to 12 000\$), which can be quite challenging since E-ink is decently pricey due to manufacturing costs. Since our product is comparable to the kindle paperwhite displays, as they use the same technology, we must price it at least above 60\$ per 6.2X4.3 inches as that's how much it costs to manufacture a single display. There will be quite a gap between our product and its competitors, however, our car wrap offers on-the-fly customization, which will justify its price point. It will also be primarily sold to other businesses which have clients who are usually able to afford luxury vehicles.

Growth

The product will stay at the same price during the growth phase, as long as there are no influences affecting the economy. In the case that there is a recession or a raise in production costs, the product might experience a slight increase in pricing. Additionally, this would also apply if the demand is too high and we are incapable of producing and supplying the quantity expected by all of our clients.

Maturity

During this stage, we will offer special promotions and discounts to existing customers, while also reaching out to other unchanged businesses in order to convince them to migrate to our product. This will serve to retain our existing customers as much as possible and a way to thank them for their business with us. We might also try and go after smaller businesses by giving them the option of getting our product in smaller quantities, and giving different payment options.

Decline

During the decline, the price will see some changes. Mainly the incorporation of certain discounts, to entice past or new clients to purchase the E-ink wrap. Since the product is in decline, there will be an excess quantity that will need to be sold at a cheaper price.

Product

Introduction

Our product will mainly target car manufacturers or garages that offer car wrapping services. The main problem our product is solving is the need to stand out and to do it without having to pay a certain price every time. It offers eye-catching results at an affordable price, which definitely will give businesses an edge over their competitors. It removes the need for drivers to have to spend money and time at a garage in order to change how their cars look. Other competitors also offer some customization options, especially Lumilor, but they aren't as modifiable as E-ink. Since it is a display, it offers much more fluidity and eases when it comes to changing its style and patterns.

Growth

During this period, we should expand the technology to be able to upgrade our product in a way that will benefit its existing customers or interest new ones. We can change and modify the product based on the feedback we will have from businesses that currently affect our product. It is also a good time to start looking for ways to reduce production costs as demand increases.

<u>Maturity</u>

During this stage, our product should be able to stand on its own and still rake in a couple more customers, such as different customization options or product improvement regarding the wrapping. In this stage, we should focus on finding ways to increase production efficiency by lowering costs and finding material substitutions in order to further maximize revenue.

Decline

During this stage, production will slow down as demand decreases. The company will want to focus on other products that are able to stand their ground more. If demand becomes too low and stops covering manufacturing costs, the company should discontinue the product entirely.

Place

Introduction

In order to maximize the efficiency in which we promote our product and create some reputation for our product, we must focus on locations in which the population is decently wealthy. Cities such as Ontario's Toronto, British Columbia's Vancouver, Alberta's Calgary, and Quebec's Montreal cities all house some of the richest neighborhoods. We should then focus on the car manufacturers and garages that do a lot of business with customers from those areas as they will also promote our product to their customers.

Growth

As the product is kicking off and is getting more and more popular, we should start expanding our business to other parts of Canada such as Richmond in BC, Kirkland in QC, and Vaughan and Markham in ON. These cities are also one of the richest cities in Canada which lets us know that they are able to integrate our product into their lives.

Maturity:

In this stage, our product is being sold to multiple different areas, most notably any major city in Ontario, British Columbia, Quebec, and Alberta. We should then assess which cities our product is more popular in and which ones where it is not. It is also important to reduce or stop any marketing in areas with no potential marketing possibility or revenue potential. This will enable us to maximize our resources and avoid waste.

Decline:

As demand goes down and the product starts selling less, we should stop production from areas in which the least amount of revenue is being made first.

Promotion:

Introduction:

The car wrap will be a new idea that will be unique on the market. We will also get some promotions thanks to BMW who already has implemented the technology on one of their upcoming vehicles. We should use this opportunity to use it as an example and seek out other brand manufacturers that might be interested in standing out. It isn't something that has ever touched the Canadian market beforehand, so it will be easier to reach new customers.

Growth:

During this phase, several businesses will have adopted our product. We should then try to market our product to other businesses that haven't yet been converted. Either by getting car brands to show off the car wrap during car venues and on social media (to get recognition from the public and convince businesses that it is what the people want).

Maturity:

During this time, the product will have a stable source of demand and presence in the market. We will have to make sure our product is featured both in real life and in media in order to remind people that our product still exists. We must also contact existing customers during these times and get them to give us any updates and feedback regarding the utility they are getting from our product. We should also be looking at customers who haven't transferred to our product yet and determine if there is a way to win them over.

Decline:

Any promotion of the product will have to cease as it is not beneficial for the company to continue marketing the product. It will have been considered outdated or not innovative enough anymore as more competitors might've entered the market with their own products with similar or better features.

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Appendix