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Individual International Business Plan Report

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Executive Summary

Nowadays, technology influences every aspect of our lives. One of these things is a smart helmet with growth potential over the next few years. This smart helmet will provide travel-enhancing features and increase motorcycle riders' safety. It is named "Hi-mate" and its tagline is "Not just a helmet" to demonstrate that, in addition to protection, it has numerous innovative features. There will be two versions of the product: basic and premium. The basic version includes a helmet detection sensor, an alcohol detection sensor, a rash driving alert, and an SOS detection sensor. The premium version would include the aforementioned features in addition to integrated headphones and hands-free access with voice control. This product will be introduced in India, which has the largest market for helmets in the world.

In 2021, India's GDP was standing strong, demonstrating its potential to provide leading markets in the coming years. To manufacture helmets in India, however, the company must comply with Bureau of Indian Standards (BIS) regulations and the helmets must bear the ISI mark. Moreover, Tamil Nadu is the southern Indian state responsible for the greatest number of accidents, and would therefore be an ideal location for conducting business. Chennai, the capital of Tamil Nadu, controls one-third of the country's automobile industry, which will facilitate networking with motorcycle companies. The target audience consists of young adults aged 18 to 45 who want to improve their safety. In addition, the B2B market includes motorcycle companies who wish to sell helmets as a byproduct. The unique selling proposition of Hi-mate is its alcohol detection sensor, which prevents unintentional driving under the influence of alcohol. Additionally, demo sessions will be utilized to interact with customers. To attract customers, social media promotions and a replacement strategy will be utilized. The price of the basic version will be \$70, while the price of the premium version will be \$140. Using an average pricing strategy, the pricing is determined. To enter the Indian market, the business will form a joint venture with Hero MotoCorp. Everything, including expenses, profits, and taxes, will be split evenly between the two businesses. As an initial investment, a \$375,000 bank loan with a 10% interest rate and 5-year repayment period will be obtained. The company is projected to incur losses for the first two years; however, once its market presence is established, it is anticipated that sales will increase in the third year, resulting in an annual profit after taxes of \$201,596.22. In addition, there may be risks such as market risk and foreign exchange risk, but they can be mitigated by conducting thorough market research and implementing techniques such as currency diversification or hedging. Taking into account the growth rate of the helmet market in India over the next few years, the proposed product could be an effective investment and generate profits in the future.

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1. Introduction

1.1 Business Idea

The idea entails a smart helmet for motorcycle riders who intend to enhance their safety and journeys on a daily basis. It will be available in two versions: basic and premium, and will include travel-enhancing features. The basic version would include a helmet-wearing detection sensor to determine whether the rider is wearing a helmet, an alcohol detection sensor to determine whether the rider is drunk, a rash driving alert if the driver is speeding excessively, and an SOS sensor that sends the nearest location to the emergency contact person in the event of an accident. The premium version would include all of the previous features in addition to integrated headphones for listening to music and hands-free access with voice control for navigation and phone calls. In addition to the helmet, an ignition key cover will be provided and placed on the ignition switch. When both conditions for helmet usage and alcohol detection are met, the ignition cover will open, allowing the rider to insert the key and start the motorcycle. This will help the rider enhance safety by mandating the use of helmets, limiting drinking and driving, and keeping them informed when engaging in reckless driving. The helmet would also be connected to a mobile application that would enable the aforementioned features. In addition, the helmets would be coated with Line-X, an environmentally friendly and waterproof material (Linex, 2019). The helmet will therefore be waterproof. In addition, an anti-glare visor is attached. Furthermore, the helmet would be available in a single black color and three sizes (Bair's Powersports, 2023): small (55-56 cm), medium (57-58 cm), and large (59-60 cm). Its brand name is "**Hi-mate**" and its tagline is "Not just a helmet," indicating that it provides more than just protection during accidents. The image below depicts the prototype for the premium version.

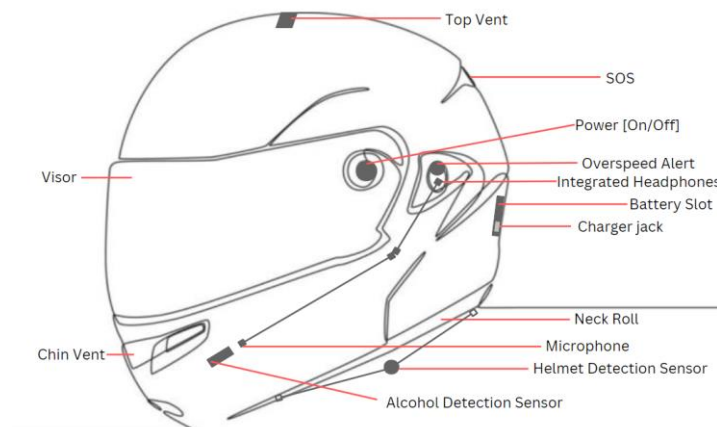


Figure 1: Prototype

1.2 Intended Customers

The target customers comprises both B2B and B2C segments. The B2C segment is comprised of commuters between the ages of 18 and 45 who are interested in either enhancing their safety while commuting daily or seeking innovative features to make their commutes more

enjoyable, or both. The B2B segment is comprised of motorcycle companies interested in selling smart helmets as a byproduct.

1.3 4Ps Marketing Mix

The image below demonstrates the 4Ps Marketing Mix model for Hi-mate.

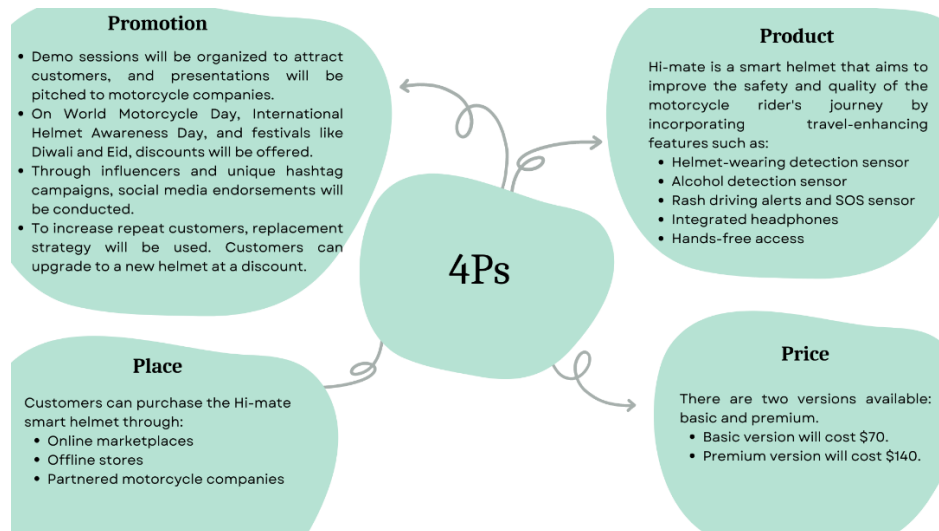


Figure 2: 4Ps Marketing Mix

1.4 Financial Goals

One of the financial goals is to increase sales. The aim is to start selling 500 units per month by the end of the second year. The second goal pertains to profits. The expectation is to reach break-even output in the first quarter of the second year, and then to achieve profitability. Profits of around \$50,000 per month are anticipated by the end of the third year.

1.5 Internalization

As the world's largest two-wheeler market, India also has the world's largest helmet market (Mobility Foresights, 2023). According to Bonafide Research (2023), the Indian helmet market is anticipated to grow at a CAGR of over 6.5% between 2023 and 2028. In addition, India was estimated to have 190 million two-wheeled vehicles on the road (Wood, 2021). Furthermore, approximately 60% of people only wear helmets. As a result, more than 80 million people still require helmets for safety (Panday, 2020). Therefore, the Indian market for smart helmets appears profitable.

The report will cover the following topics to explore internalization in India:

- Country Analysis will involve relevant laws pertinent to the product.
- The marketing plan will include the alcohol detection sensor as a unique selling point.
- The Entry Strategy will entail a Joint Venture approach.
- The Financial Plan will include cash flow projections for the initial three years.

2. Country Analysis

2.1 Economic System

According to the World Bank (2023), India's Gross Domestic Product (GDP) in 2021 was \$3.18 trillion with an 8.7% growth rate. This demonstrates India's resilience even after experiencing a pandemic, and it is anticipated that India will continue to outperform other nations in the coming years. India's GDP growth rate relative to that of the United Kingdom is depicted in the image below. Considering GDP by sector and based on data for 2020-21, the industry sector accounts for 29.34% of India's total GDP, with manufacturing accounting for the most at 16.92% (Statistics Times, 2021). It is comparable to the contribution of manufacturing to the world's GDP and greater than the contribution of manufacturing to the UK's GDP, which is only 8.78% of the country's total economic output (Macrotrends, 2023).

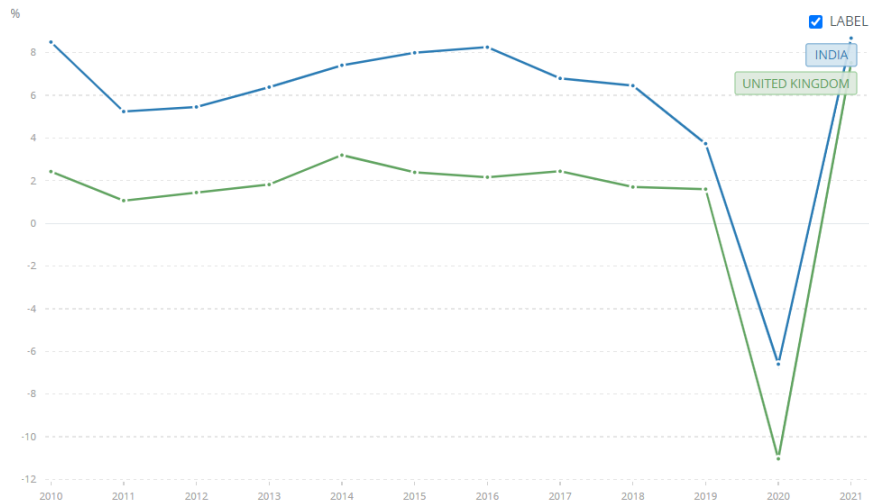


Figure 3: India's GDP Growth Rate (World Bank, 2023)

Moreover, India's inflation rate decreased from 6.6% in 2020 to 5.1% in 2021 (World Bank, 2023). This decline will cause people to spend more money on goods and services, increasing demand and sales for the business. India's Gini coefficient, which indicates the distribution of income within the country, was 35.7 and ranked 86th out of 163 countries, implying a medium level of income inequality (Wisevoter, 2023). India's Ease of doing business ranking is lower than that of the United Kingdom, but it has steadily improved over the past few years. India's rank rose to 63 in 2019 from 77 in 2018 (Trading Economics, 2023). In 2021, India imported approximately \$572.91 billion worth of goods and exported approximately \$395.42 billion worth of goods. These significant figures indicate that India is one of the fastest-growing economies in the world and will therefore provide leading emerging markets (O'Neill, 2022). Moreover, India is one of the most popular destinations for Foreign Direct Investment (FDI) in 2021, ranking as the seventh largest recipient in the world. In fiscal year 21-22, India received its highest annual FDI inflows of \$84.83 billion. In addition, FDI equity inflows in the manufacturing sector increased by 76% in FY 2021-22 (\$21.34 billion)

compared to FY 2020-21 (\$12.09 billion) (Invest India, 2023). These statistics appear to be a promising sign for internationalization in India.

2.2 Government Structure

India is a federal nation consisting of 28 states and 8 union territories, governed democratically by a parliamentary system (Know India, 2023). The Indian Constitution divided power between the states and the central government. This increases the government's stability and reduces the political impact on business. Additionally, India offers a multitude of investment opportunities, however there are risks associated with fraud and corruption. India has the highest rate of bribery in the Asia-Pacific region. In a 2017 survey by Transparency International, nearly seven out of ten individuals in India admitted to having paid a bribe to gain access to public services (Private Equity Wire, 2020). To address this, the Indian judicial system has three court levels: the supreme court, high courts, and district courts. Civil and criminal cases are heard by all courts, but the Supreme Court is the highest (Dalmia, 2022). Anyone may appeal to a higher court by petitioning the current court for permission.

Additionally, the Indian government offers numerous incentives to attract foreign investment. Regarding capital-linked incentives, 20%-25% of the project's cost may be returned to the business as an incentive (within specified maximums). In terms of tax-based incentives, taxes paid to the state government over a period of 10 to 12 years will be returned to the company as a subsidy, up to a maximum of 60 to 70 percent of the project cost (Smith, 2021). In addition, Private Limited companies have the lowest tax rate, at 25%, and it is easy to transfer shares (Business Setup, 2019).

2.3 Relevant Laws

Many states' Regional Transport Office (RTO) helmet regulations derive from Section 138 (4) (f) of the Central Motor Vehicles Rule (CMVR). According to this rule, manufacturers of two-wheeled vehicles must provide protective headgears at the time of sale (Tere, 2022). If the dealer does not provide the required helmet, the buyer may encounter registration difficulties. Therefore, this rule may help the business target motorcycle companies for large-scale orders. In addition, the helmet's weight, material, and shape are crucial considerations. Manufacturers of helmets must adhere to Bureau of Indian Standards (BIS) regulations. Some of the guidelines (Acko, 2023) are as follows:

- The helmet's weight limit is 1.2 kilograms.
- The helmet's minimum thickness should be 20-25 mm, and it should be made of high-quality foam.
- Helmets must bear the ISI mark as a requirement. Without the ISI mark, it is illegal to sell helmets.
- The portion of the helmet that covers the rider's eyes should be constructed of a durable, transparent material so as not to obstruct their vision.

- The protective headgear must also pass the prescribed BIS tests; these tests evaluate the impact absorption under varying weather and speed conditions.

In addition, per the Factory Act of 1948, factory owners are required to obtain a factory license from the local government authority prior to beginning business operations. According to India's Foreign Trade Policy, all exporters and importers must utilize the Import Export Code (IEC) (Tyagi, 2021).

The currency of India is the Rupee (INR). There is no minimum wage nationwide. The federal and state governments can establish minimum wage rates for various jobs. However, the federal government recommended that the minimum wage in India be set at INR 176 (approximately \$2.15) per day. Some regulations pertaining to employment (Velocity Global, 2023) are as follows:

- The 1946 India Industrial Employment Act allows for a three-month probe period. Some states even provide until 6 months.
- A 30- to 90-day termination notice is required for employees who are not supervisors, administrators, or managers.
- The severance package usually consists of fifteen days of pay.
- The Maternity Benefit Act of 1961 provides pregnant women with paid leave and protects them from termination.
- The workweek is limited to 48 hours, with a daily limit of 9 hours and a 30-minute break after five hours.
- The Employees' State Insurance Act of 1948 provides subsidized health insurance for employees earning up to INR 21,000 (approximately \$256.81) per month.

2.4 Geographic and Demographic Information

Tamil Nadu is a southern Indian state with 41 Special Economic Zones (SEZs) that can provide exemptions from a variety of taxes, including sales tax, excise duty, and others. In addition, its proximity to the Bay of Bengal facilitates exports, and it is renowned as a manufacturing hub in India (Kapur, 2021). In addition, Tamil Nadu had the highest accident rate in India, accounting for 13.1% of all accidents (Ministry of Road Transport and Highways, 2022). Furthermore, the state's demographic profile indicates that roughly half of the population is young (Government of Tamil Nadu, 2023), and it has been observed that young adults (18-45) are the most susceptible to these accidents. Chennai, the capital of Tamil Nadu, is also known as "Detroit of India" due to the fact that it controls one-third of India's automobile industry. This would help the business network with major motorcycle companies. In addition, Chennai is known to be one of the wealthiest cities in India; therefore, a relatively higher price for smart helmets may be acceptable here, as residents have higher incomes (Kohli, 2023). Hence, Chennai can be a good place for the business.

3. Marketing Plan

3.1 Target Customers

The demographic and economic details of the targeted commuters are as follows.

- **Age:** Although helmets can be worn by anyone over the age of 18, we are targeting young adults between the ages of 18 and 45 since, according to the Ministry of Road Transport and Highways (2022), they were involved in 67.6% of all accidents that occurred in India in 2021.
- **Income Level:** Given that Hi-mate is a smart helmet, its price would be higher than that of conventional helmets. As a result, the targeted customers will be middle-class people with annual incomes ranging from INR 5 lakh (\$6700) to INR 30 lakh (\$40,000). In addition, the percentage of people belonging to the middle class has increased from 14 percent in 2004-2005 to 31 percent in 2020-21 (Moneycontrol, 2023).
- **Population Estimate:** Approximately 49.7% of households owned a two-wheeled vehicle by 2022 (Kukreja, 2022). Therefore, they can be assumed to be a market for helmets. India has the world's largest youth population, with approximately 66% of its population under the age of 35 (ILO, 2023). Taking into account these figures and the total population of India, which the World Bank (2023) estimates to be 1.408 billion, the estimated target population is approximately 461 million.
- **Consumer Behavior:** The consumers are motorcycle riders seeking to enhance their safety beyond the protection provided by helmets. They have a habit for forgetting to wear a helmet, driving under the influence of alcohol, speeding unintentionally, handling phone calls while driving, listening to music, or navigating for directions.

3.2 Product Message

Hi-mate is not just a helmet. It is a rider's mate who reminds them to wear a helmet, not to drive under the influence of alcohol, and not to drive too fast. It also facilitates travel by providing music and simple navigation.

3.3 Unique Selling Proposition (USP)

The unique selling proposition of Hi-mate is its alcohol detection sensor. It consists of a transmitter placed within the helmet and a receiver placed within the ignition cover. The alcohol sensor MQ3 will be positioned near the rider's mouth and will detect the presence of alcohol. The alcohol detection data is encoded using a radio frequency encoder and then transmitted using a radio frequency transmitter. The proposed system is intended to ensure that the motorcycle will only start if the condition is met. The MQ3 alcohol sensor is depicted in figure 4.



Figure 4: MQ3 Alcohol Sensor (Techbazar, 2019)

In addition, wearing a helmet is required for the bike to start. Similar functionality is achieved with the aid of a vibrating sensor. The motorcycle will only start if both conditions are met. Therefore, this will help users remember to wear a helmet and prevent them from drinking and driving.

3.4 Marketing Channels

Customers will be reached through the following channels:

- **Company website:** The website will be promoted with Search Engine Optimization, and customers will be able to connect and provide feedback through the platform.
- **Social Media Marketing:** Social Media channels such as Instagram will be utilized to connect with the target audience, and creative Q&A sessions will be held to answer queries from consumers.
- **Events:** To increase customer interaction, the company will host in-person demonstrations to educate people about Hi-mate's smart features.

3.5 Pricing, Promotion, and Delivery Strategy

3.5.1 Pricing

The price of the helmet was determined by factoring in various costs, including rent, utilities, insurance, salaries, contracts, marketing, mobile application research and development, and manufacturing. To maintain market competitiveness, the prices of competitors were also considered. Altor Smart Helmet, whose lite version costs INR 5,000 (approximately \$61.18), is one of the major competitors in India (Altor, 2021). Furthermore, the product intends good quality at a fair price. Since it is also aimed for people of the middle class, a moderate price was considered. Therefore, the average pricing strategy was utilized to determine the price of the helmet. Taking everything into consideration, the basic version will cost \$70, while the premium version will cost \$140.

		Price		
		HIGH	MEDIUM	LOW
Quality	HIGH	Premium	High value	Superb value
	MEDIUM	Over charging	Average	Good value
	LOW	Rip-off	False economy	Economy

Figure 5: Average Pricing Strategy

3.5.2 Promotion

Some promotional strategies include the following:

- **Social Media Endorsements (Get):** Unique hashtag campaigns like #notjustahelmet will be promoted, and influencers will be hired to create original content and advertise the products.
- **Festive discounts (Keep):** India's sales are known to increase during festivals such as Diwali and Eid; therefore, discounts will be offered to attract more customers. Additionally, on World Motorcycle Day and International Helmet Awareness Day, special discounts will be offered to raise awareness of the significance of helmets.
- **Replacement (Grow):** Customers will be offered new helmets at a discount in exchange for their old, previously purchased helmet.

3.5.3 Delivery

The helmet would be available to customers through the following pathways:

- **Online website and marketplaces:** Customers can buy the helmet directly from the website or through online marketplaces such as Amazon, Flipkart, and India Mart.
- **Offline stores:** Customers can also purchase helmets from physical stores in nearby areas. This will aid them in obtaining a hands-on demonstration and determining what best fits their needs.
- **Partnered Motorcycle Companies:** Customers can also receive demos and purchase helmets from our partnered motorcycle companies that are looking to sell helmets as a byproduct and receive a special discount.

4. Entry Strategy

4.1 Best Entry Strategy

Global Standardization Strategy appears to be the most beneficial strategy for entering the new market in India, as it will gain more global recognition than local marketing strategies. The product name Hi-mate and its tagline "not just a helmet" will be marketed globally in the same manner to demonstrate that the smart helmets provide more than just protection during accidents. However, the product will undergo minimal localization, such as the addition of an alcohol detection sensor, in response to market research and customer demand. Additionally, this strategy will aid in reducing production and marketing expenses, which will be more advantageous.

Furthermore, the entry mode that will be ideal and reduce the risk of internalization is Joint Venture.

4.2 Business Model

Joint venture is the beneficial entry node for the business to manage risk in fluctuating markets. The greatest risk in the Indian helmet market is competing with regional unorganized players who sell helmets for 60 to 70 percent less than branded helmets and have a pan-Indian presence (Mobility Foresights, 2023). Therefore, leveraging resources and forming a joint venture with an established company will benefit from a well-established manufacturing process or an existing distribution network that is more efficient. In addition, the cost of large-scale capital investments will be shared, and expertise can be pooled to create an even larger organization.

The company would form a joint venture with Hero MotoCorp, one of the largest two-wheeler manufacturers in India and the world. Hi-Hero, a new private limited company, will be formed to sell smart helmets. It will have its headquarters in Chennai. The company's name is negotiable, but the name of the initial product, Hi-mate, cannot be modified. The goal of the joint venture is to gain a competitive advantage by reducing the risk of large investments, leveraging the distribution network, and reducing the cost of manufacturing the product. Everything, from expenses and profits to taxes, will be split evenly between the two companies. In addition, new manufacturing plant and machinery will be purchased to manufacture smart helmets, and all costs will be equally distributed. The joint venture's exit strategy will be the sale of the company.

4.3 Capital Assets Required

The following are some of the capital assets that may be required:

- Manufacturing Plant
- Machinery
- Office equipment such as computers

- Licenses
- Intellectual Property (IP)

4.4 Product Realization

The necessary raw materials and components will be acquired from Indian suppliers because their prices are lower than those in the United Kingdom. In addition, the newly opened manufacturing facility will be utilized for the manufacturing process with the aid of the latest machinery. Regular quality control checks will be conducted to ensure that the product is of good quality, and the fish bone diagram will be used to improve quality. Skilled laborers will be employed to complete the operations process. Gati Limited will be hired as a subcontractor for supply chain management and logistics services.

4.5 IP Issues

In India, it can take months or years to register a patent, trademark, or copyright, which is one of the most significant IP issues. The alcohol detection sensor, which is Hi-mate's unique selling proposition, should be patented. A patent is valid for 20 years after filing. Until the patent office grants ownership, patent holders are required to pay annual renewal fees. Fees that are not paid on time may expire (Intellectual Property Office, 2017). In addition, an international patent application must be filed with India as the designated country in order to reduce the expense and effort associated with filing patent applications in multiple countries (Intellectual Property Office, 2022).

The business name and logo of Hi-mate should be registered as trademarks to prevent infringement. The issue with trademarks is that registration can take up to two years and direct filing requires a local address (Intellectual Property Office, 2017). Moreover, copyrights should be filed for the helmet's product design. As a member of the Berne Convention, India's copyright framework provides all of the basic protections mandated by international law; therefore, Copyright holders are automatically protected by Indian law (Intellectual Property Office, 2022).

5. Financial Plan

5.1 Projected Cash Flow

The image below depicts the expenses considered when creating a forecast for the first three years.

Office and offline store premises	One off payments	Salaries & Contracts	Other costs
<ul style="list-style-type: none"> •Rent •Utilities •Maintenance costs 	<ul style="list-style-type: none"> •Manufacturing Facility •Latest Machinery •Office Equipments •Website & Mobile Application Development •Licenses •IP costs 	<ul style="list-style-type: none"> •Sales staff •Sales & Marketing Manager •Operations Manager •Finance Manager •Design Engineer •Assembler Enginner •Business Manager •Packaging & Logistics Contracts 	<ul style="list-style-type: none"> •Material cost •Labour cost •Insurance •Maintenance of website and mobile application •Marketing Expenditure

Figure 6: Expenses

As mentioned previously, a manufacturing facility was established and modern machinery was acquired. The headquarters was rented, but office equipment was purchased to provide operational resources. In addition, the business began with 10 laborers and grew to 30 laborers by the end of the third year. In addition, four sales personnel were hired in the first year, with the number gradually increasing each year. Furthermore, inflation was taken into account, and the cost of expenses was gradually increased for the years that followed. Additionally, the only source of income was sales revenue. The overview of cash flow for the three years is depicted in the table 1, and detailed cashflow data for each year is presented in Appendix.

Table 1: Cashflow forecast for first 3 years

Cashflow Forecast	Year 1	Year 2	Year 3
Bank Loan	\$ 3,75,000.00	\$ -	\$ -
Sales revenue	\$ 85,890.00	\$ 3,71,560.00	\$ 9,83,150.00
Total Cash In	\$ 85,890.00	\$ 3,71,560.00	\$ 9,83,150.00
Material cost	\$ 22,780.00	\$ 97,920.00	\$ 2,52,050.00
Gross Profit	\$ 63,110.00	\$ 2,73,640.00	\$ 7,31,100.00
Office and store costs	\$ 31,200.00	\$ 32,400.00	\$ 33,900.00
One off payments	\$ 1,54,900.00	\$ -	\$ -
Salaries & Contracts	\$ 85,882.50	\$ 1,21,318.40	\$ 1,84,932.00
Other costs	\$ 42,660.00	\$ 60,240.00	\$ 79,980.00
Total Overheads	\$ 3,14,642.50	\$ 3,58,251.80	\$ 4,43,105.40
Total Cash Out	\$ 3,37,422.50	\$ 4,56,171.80	\$ 6,95,155.40
Net Cash Flow	\$ -2,51,532.50	\$ -84,611.80	\$ 2,87,994.60
Net Profit	\$ -2,51,532.50	\$ -84,611.80	\$ 2,87,994.60
Taxation	\$ -	\$ -	\$ 86,398.38
Net Profit after Tax	\$ -2,51,532.50	\$ -84,611.80	\$ 2,01,596.22

The company will not be profitable in its first two years, but due to an increase in sales in its third year, it will not only be able to recoup its expenses but also generate a profit. Therefore, in the third year, it will have an annual net profit after taxes of \$201,596.22

5.2 Statement of Capital Cost Requirements

The required capital expenditures consist of constructing a manufacturing facility, which would cost approximately \$100,000 and acquiring modern machinery, which would cost an additional \$50,000. In addition, office equipment and website development cost approximately \$2500 and \$1500, respectively. The Licenses and IP would incur additional expenses of approximately \$600 and \$300, respectively. To cover these and other expenses, including rent, utilities, salaries, and more, a \$375,000 bank loan was taken out with a 10% interest rate and a 5-year repayment period, with the interest rate beginning in the second year. Thus, approximately \$12024.45 was paid to the bank each month beginning in the second year. The initial investment capital was obtained through a bank loan due to the fact that banks typically offer better interest rates and the added security of working with a well-established lender. Additionally, it would be advantageous from a tax perspective, as the interest paid on bank loans is tax-deductible.

5.3 Trading Risks & Exposure Protection

Some of the trading risks that the company faces are as follows:

- **Market Risk:** It is the risk associated with market fluctuations. Due to safety regulations, economic conditions, or changes in consumer preferences, helmet demand can fluctuate.
- **Supply Chain Risk:** Various factors, such as natural disasters, transportation problems, and political instability, can cause supply chain disruptions. These disruptions may result in delivery delays and increased production costs.
- **Foreign exchange risk:** The risk of incurring losses due to fluctuations in foreign exchange rates. This includes both transaction risk, which occurs when a payment is received after the transaction time has been agreed upon, and translational risk, which occurs when the business's financial statements are translated into a different currency.

To protect against these risks, the company can concentrate on conducting exhaustive market research to recognize possible market risks and develop strategies to mitigate these trends. In addition, it can consider diversifying its product line to satisfy consumer demands. For supply chain risks, the company can plan ahead of time to address unexpected events such as supply chain interruptions, natural disasters, or other unanticipated situations. To protect against currency fluctuations, a particular approach is to diversify the currencies used in transactions to reduce transaction risk. A company may, for instance, accept payments or issue invoices in different currencies or conduct transactions in local currency. Hedging is an alternative strategy that involves using financial instruments such as forwards to protect against potential exchange rate-related losses. Using a forward contract, a company can, for instance, lock in an exchange rate for a future transaction.

6. Conclusion

Hi-mate is a smart helmet designed to increase the safety of motorcycle riders and make their journeys more enjoyable through the incorporation of travel-enhancing features. There are two versions available: basic and premium. The basic version consists of a helmet-wearing detection sensor, an alcohol detection sensor, a rash driving alert, and an SOS sensor. The premium version would include all of the preceding features, as well as integrated headphones and hands-free access with voice control. A cover for the ignition switch will be provided for installation. The rider will be able to enter the key when the conditions for the helmet-wearing detection sensor and the alcohol detection sensor are met. This reminds them to wear a helmet and to avoid drinking and driving.

The product is made available in India, which has the largest helmet market in the world. In addition, the target market consists of young adults between the ages of 18 and 45 who wish to increase their safety while riding motorcycles. In addition, the product is also sold in the B2B market by approaching motorcycle companies who wish to sell helmets as a byproduct. Furthermore, the unique selling proposition of Hi-mate is its alcohol detection sensor, which prevents the rider from unknowingly driving under the influence of alcohol. Additionally, the company's website and demonstration sessions will be utilized to reach customers. The price for the basic version will be \$70, while the price for the premium version will be \$140. In addition, a joint venture is used as the entry strategy to launch this product in India. The company will form a joint venture with Hero MotoCorp and establish its headquarters in Chennai. Everything, including expenses, profits, and taxes, will be split evenly between the two companies. Moreover, initial funding is obtained through bank loan. A loan of \$375,000 is obtained with a 10% interest rate and a 5-year repayment period. Meanwhile, the company is not profitable for the first two years, but with increased sales, it will become profitable in the third year, with an annual profit of \$201,596.22.

Given that the market for helmets is anticipated to expand, particularly in India where it is projected to increase at a CAGR of 6.5%, this concept has a great deal of potential if it is continually updated to meet consumer demand. The cumulative balance for the first two years could be negative, but sales would increase in the third year due to establishing a market presence. Marketing strategies such as demonstrations would make people aware of the advanced functionality, and discounts on holidays such as World Motorcycle Day would entice customers. Additionally, by introducing new features and releasing new versions, the customer's interest in the product will be maintained. In addition to having an impact on sales, the replacement strategy would also have an influence on the environment. This would also enhance the brand's image. In addition, the financial goal was to sell 500 units per month by the end of the second year and to generate a monthly net profit of \$50,000 by the end of the third year. Considering the projections, it is likely that the product will be able to achieve these goals. Taking everything into account, this business idea appears to be a profitable proposal for the coming years.

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Appendix

Income	Month 1	Month 2	Month 3	Month 4	Month 5	Month 6	Month 7	Month 8	Month 9	Month 10	Month 11	Month 12
Selling Price of Basic Version	\$ 70.00	\$ 70.00	\$ 70.00	\$ 70.00	\$ 70.00	\$ 70.00	\$ 70.00	\$ 70.00	\$ 70.00	\$ 70.00	\$ 70.00	\$ 70.00
Sales Volume of Basic Version	10	15	20	25	35	50	75	90	105	130	150	170
Sales Revenue of Basic Version	\$ 700.00	\$ 1,050.00	\$ 1,400.00	\$ 1,750.00	\$ 2,450.00	\$ 3,500.00	\$ 5,250.00	\$ 6,300.00	\$ 7,350.00	\$ 9,100.00	\$ 10,500.00	\$ 11,900.00
Selling Price of Premium Version	\$ 140.00	\$ 140.00	\$ 140.00	\$ 140.00	\$ 140.00	\$ 140.00	\$ 140.00	\$ 140.00	\$ 140.00	\$ 140.00	\$ 140.00	\$ 140.00
Sales Volume of Premium Version	1	2	4	7	10	12	16	19	22	25	28	30
Sales Revenue of Premium Version	\$ 140.00	\$ 280.00	\$ 560.00	\$ 980.00	\$ 1,400.00	\$ 1,680.00	\$ 2,240.00	\$ 2,660.00	\$ 3,080.00	\$ 3,500.00	\$ 3,920.00	\$ 4,200.00
Total Sales Revenue	\$ 840.00	\$ 1,330.00	\$ 1,960.00	\$ 2,730.00	\$ 3,850.00	\$ 5,180.00	\$ 7,490.00	\$ 8,960.00	\$ 10,430.00	\$ 12,600.00	\$ 14,420.00	\$ 16,100.00
Cash Flow												
Opening Balance	\$ 3,75,000.00	\$ 2,06,597.50	\$ 1,94,910.00	\$ 1,83,640.00	\$ 1,72,890.00	\$ 1,62,872.50	\$ 1,53,697.50	\$ 1,45,995.00	\$ 1,39,237.50	\$ 1,33,425.00	\$ 1,28,982.50	\$ 1,25,697.50
Total Cash In	\$ 840.00	\$ 1,330.00	\$ 1,960.00	\$ 2,730.00	\$ 3,850.00	\$ 5,180.00	\$ 7,490.00	\$ 8,960.00	\$ 10,430.00	\$ 12,600.00	\$ 14,420.00	\$ 16,100.00
Total Cash Out	\$ 1,69,242.50	\$ 13,017.50	\$ 13,230.00	\$ 13,480.00	\$ 13,867.50	\$ 14,355.00	\$ 15,192.50	\$ 15,717.50	\$ 16,242.50	\$ 17,042.50	\$ 17,705.00	\$ 18,330.00
Net Cash Flow	\$ -1,68,402.50	\$ -11,687.50	\$ -11,270.00	\$ -10,750.00	\$ -10,017.50	\$ -9,175.00	\$ -7,702.50	\$ -6,757.50	\$ -5,812.50	\$ -4,442.50	\$ -3,285.00	\$ -2,230.00
Closing Balance	\$ 2,06,597.50	\$ 1,94,910.00	\$ 1,83,640.00	\$ 1,72,890.00	\$ 1,62,872.50	\$ 1,53,697.50	\$ 1,45,995.00	\$ 1,39,237.50	\$ 1,33,425.00	\$ 1,28,982.50	\$ 1,25,697.50	\$ 1,23,467.50

Figure A1: Income and Cash Flow with balance for Year 1

Cash Flow Forecast	Month 1	Month 2	Month 3	Month 4	Month 5	Month 6	Month 7	Month 8	Month 9	Month 10	Month 11	Month 12
Bank Loan	\$ 3,75,000.00											
Cash In												
Sales Revenue	\$ 840.00	\$ 1,330.00	\$ 1,960.00	\$ 2,730.00	\$ 3,850.00	\$ 5,180.00	\$ 7,490.00	\$ 8,960.00	\$ 10,430.00	\$ 12,600.00	\$ 14,420.00	\$ 16,100.00
Total Cash In	\$ 840.00	\$ 1,330.00	\$ 1,960.00	\$ 2,730.00	\$ 3,850.00	\$ 5,180.00	\$ 7,490.00	\$ 8,960.00	\$ 10,430.00	\$ 12,600.00	\$ 14,420.00	\$ 16,100.00
Cash Out												
Total Rent for Headquarters and offline store(s)	\$ 1,850.00	\$ 1,850.00	\$ 1,850.00	\$ 1,850.00	\$ 1,850.00	\$ 1,850.00	\$ 1,850.00	\$ 1,850.00	\$ 1,850.00	\$ 1,850.00	\$ 1,850.00	\$ 1,850.00
Utilities and Maintenance Cost for Headquarters and store	\$ 350.00	\$ 350.00	\$ 350.00	\$ 350.00	\$ 350.00	\$ 350.00	\$ 350.00	\$ 350.00	\$ 350.00	\$ 350.00	\$ 350.00	\$ 350.00
Cost of Office Equipments	\$ 2,500.00											
Total Cost of Manufacturing Facility and Machinery	\$ 1,50,000.00											
Utilities and Maintenance Cost for Manufacturing Facility	\$ 400.00	\$ 400.00	\$ 400.00	\$ 400.00	\$ 400.00	\$ 400.00	\$ 400.00	\$ 400.00	\$ 400.00	\$ 400.00	\$ 400.00	\$ 400.00
Marketing Expenditure	\$ 730.00	\$ 730.00	\$ 730.00	\$ 730.00	\$ 730.00	\$ 730.00	\$ 730.00	\$ 730.00	\$ 730.00	\$ 730.00	\$ 730.00	\$ 730.00
Website and Mobile Application Development Expenditure	\$ 1,500.00											
Maintenance cost of website and mobile application	\$ 300.00	\$ 300.00	\$ 300.00	\$ 300.00	\$ 300.00	\$ 300.00	\$ 300.00	\$ 300.00	\$ 300.00	\$ 300.00	\$ 300.00	\$ 300.00
Sales Staff Salaries	\$ 1,000.00	\$ 1,000.00	\$ 1,000.00	\$ 1,000.00	\$ 1,000.00	\$ 1,000.00	\$ 1,000.00	\$ 1,000.00	\$ 1,000.00	\$ 1,000.00	\$ 1,000.00	\$ 1,000.00
Sales and Marketing Manager Salary	\$ 1,200.00	\$ 1,200.00	\$ 1,200.00	\$ 1,200.00	\$ 1,200.00	\$ 1,200.00	\$ 1,200.00	\$ 1,200.00	\$ 1,200.00	\$ 1,200.00	\$ 1,200.00	\$ 1,200.00
Operations Manager salary	\$ 1,000.00	\$ 1,000.00	\$ 1,000.00	\$ 1,000.00	\$ 1,000.00	\$ 1,000.00	\$ 1,000.00	\$ 1,000.00	\$ 1,000.00	\$ 1,000.00	\$ 1,000.00	\$ 1,000.00
Finance Manager Salary	\$ 1,000.00	\$ 1,000.00	\$ 1,000.00	\$ 1,000.00	\$ 1,000.00	\$ 1,000.00	\$ 1,000.00	\$ 1,000.00	\$ 1,000.00	\$ 1,000.00	\$ 1,000.00	\$ 1,000.00
Design Engineer Salary	\$ 600.00	\$ 600.00	\$ 600.00	\$ 600.00	\$ 600.00	\$ 600.00	\$ 600.00	\$ 600.00	\$ 600.00	\$ 600.00	\$ 600.00	\$ 600.00
Assembler Engineer Salary	\$ 600.00	\$ 600.00	\$ 600.00	\$ 600.00	\$ 600.00	\$ 600.00	\$ 600.00	\$ 600.00	\$ 600.00	\$ 600.00	\$ 600.00	\$ 600.00
Business Manager Salary	\$ 1,100.00	\$ 1,100.00	\$ 1,100.00	\$ 1,100.00	\$ 1,100.00	\$ 1,100.00	\$ 1,100.00	\$ 1,100.00	\$ 1,100.00	\$ 1,100.00	\$ 1,100.00	\$ 1,100.00
Total Salaries	\$ 6,500.00	\$ 6,500.00	\$ 6,500.00	\$ 6,500.00	\$ 6,500.00	\$ 6,500.00	\$ 6,500.00	\$ 6,500.00	\$ 6,500.00	\$ 6,500.00	\$ 6,500.00	\$ 6,500.00
Licenses	\$ 600.00											
IP costs	\$ 300.00											
Insurance	\$ 1,500.00											
Total Material Cost	\$ 230.00	\$ 360.00	\$ 520.00	\$ 710.00	\$ 1,000.00	\$ 1,360.00	\$ 1,980.00	\$ 2,370.00	\$ 2,760.00	\$ 3,350.00	\$ 3,840.00	\$ 4,300.00
Total Labour Cost	\$ 2,400.00	\$ 2,400.00	\$ 2,400.00	\$ 2,400.00	\$ 2,400.00	\$ 2,400.00	\$ 2,400.00	\$ 2,400.00	\$ 2,400.00	\$ 2,400.00	\$ 2,400.00	\$ 2,400.00
Packaging & Logistics Contract	\$ 82.50	\$ 127.50	\$ 180.00	\$ 240.00	\$ 337.50	\$ 465.00	\$ 682.50	\$ 817.50	\$ 952.50	\$ 1,162.50	\$ 1,335.00	\$ 1,500.00
Total Cash Out	\$ 1,69,242.50	\$ 13,017.50	\$ 13,230.00	\$ 13,480.00	\$ 13,867.50	\$ 14,355.00	\$ 15,192.50	\$ 15,717.50	\$ 16,242.50	\$ 17,042.50	\$ 17,705.00	\$ 18,330.00

Figure A2: Detailed Cash in and Out for Year 1

Income	Month 1	Month 2	Month 3	Month 4	Month 5	Month 6	Month 7	Month 8	Month 9	Month 10	Month 11	Month 12
Selling Price of Basic Version	\$ 70.00	\$ 70.00	\$ 70.00	\$ 70.00	\$ 70.00	\$ 70.00	\$ 70.00	\$ 70.00	\$ 70.00	\$ 70.00	\$ 70.00	\$ 70.00
Sales Volume of Basic Version	190	210	230	250	275	300	325	350	360	375	390	405
Sales Revenue of Basic Version	\$ 13,300.00	\$ 14,700.00	\$ 16,100.00	\$ 17,500.00	\$ 19,250.00	\$ 21,000.00	\$ 22,750.00	\$ 24,500.00	\$ 25,200.00	\$ 26,250.00	\$ 27,300.00	\$ 28,350.00
Selling Price of Premium Version	\$ 140.00	\$ 140.00	\$ 140.00	\$ 140.00	\$ 140.00	\$ 140.00	\$ 140.00	\$ 140.00	\$ 140.00	\$ 140.00	\$ 140.00	\$ 140.00
Sales Volume of Premium Version	35	40	46	52	60	66	72	79	85	89	95	105
Sales Revenue of Premium Version	\$ 4,900.00	\$ 5,600.00	\$ 6,440.00	\$ 7,280.00	\$ 8,400.00	\$ 9,240.00	\$ 10,080.00	\$ 11,060.00	\$ 11,900.00	\$ 12,460.00	\$ 13,300.00	\$ 14,700.00
Total Sales Revenue	\$ 18,200.00	\$ 20,300.00	\$ 22,540.00	\$ 24,780.00	\$ 27,650.00	\$ 30,240.00	\$ 32,830.00	\$ 35,560.00	\$ 37,100.00	\$ 38,710.00	\$ 40,600.00	\$ 43,050.00
Cash Flow												
Opening Balance	\$ 1,23,467.50	\$ 1,06,718.05	\$ 92,828.60	\$ 80,401.55	\$ 69,436.90	\$ 60,351.45	\$ 52,940.40	\$ 47,203.75	\$ 43,243.90	\$ 40,322.45	\$ 38,446.60	\$ 37,821.15
Total Cash In	\$ 18,200.00	\$ 20,300.00	\$ 22,540.00	\$ 24,780.00	\$ 27,650.00	\$ 30,240.00	\$ 32,830.00	\$ 35,560.00	\$ 37,100.00	\$ 38,710.00	\$ 40,600.00	\$ 43,050.00
Total Cash Out	\$ 34,949.45	\$ 34,189.45	\$ 34,967.05	\$ 35,744.65	\$ 36,735.45	\$ 37,651.05	\$ 38,566.65	\$ 39,519.85	\$ 40,021.45	\$ 40,585.85	\$ 41,225.45	\$ 42,015.45
Net Cash Flow	\$ -16,749.45	\$ -13,889.45	\$ -12,427.05	\$ -10,964.65	\$ -9,085.45	\$ -7,411.05	\$ -5,736.65	\$ -3,959.85	\$ -2,921.45	\$ -1,875.85	\$ -625.45	\$ 1,034.55
Closing Balance	\$ 1,06,718.05	\$ 92,828.60	\$ 80,401.55	\$ 69,436.90	\$ 60,351.45	\$ 52,940.40	\$ 47,203.75	\$ 43,243.90	\$ 40,322.45	\$ 38,446.60	\$ 37,821.15	\$ 38,855.70

Figure A3: Income and Cash Flow with balance for Year 2

Appendix (Continued)

Cash Flow Forecast	Month 1	Month 2	Month 3	Month 4	Month 5	Month 6	Month 7	Month 8	Month 9	Month 10	Month 11	Month 12
Closing Balance	\$ 1,23,467.50											
Cash In												
Sales Revenue	\$ 18,200.00	\$ 20,300.00	\$ 22,540.00	\$ 24,780.00	\$ 27,650.00	\$ 30,240.00	\$ 32,830.00	\$ 35,560.00	\$ 37,100.00	\$ 38,710.00	\$ 40,600.00	\$ 43,050.00
Total Cash In	\$ 18,200.00	\$ 20,300.00	\$ 22,540.00	\$ 24,780.00	\$ 27,650.00	\$ 30,240.00	\$ 32,830.00	\$ 35,560.00	\$ 37,100.00	\$ 38,710.00	\$ 40,600.00	\$ 43,050.00
Cash Out												
Total Rent for Headquarters and offline store(s)	\$ 1,925.00	\$ 1,925.00	\$ 1,925.00	\$ 1,925.00	\$ 1,925.00	\$ 1,925.00	\$ 1,925.00	\$ 1,925.00	\$ 1,925.00	\$ 1,925.00	\$ 1,925.00	\$ 1,925.00
Utilities and Maintenance Cost for Headquarters and offline store(s)	\$ 365.00	\$ 365.00	\$ 365.00	\$ 365.00	\$ 365.00	\$ 365.00	\$ 365.00	\$ 365.00	\$ 365.00	\$ 365.00	\$ 365.00	\$ 365.00
Cost of Office Equipments	\$ -											
Total Cost of Manufacturing Facility and Machinery	\$ -											
Utilities and Maintenance Cost for Manufacturing Facility	\$ 410.00	\$ 410.00	\$ 410.00	\$ 410.00	\$ 410.00	\$ 410.00	\$ 410.00	\$ 410.00	\$ 410.00	\$ 410.00	\$ 410.00	\$ 410.00
Marketing Expenditure	\$ 730.00	\$ 730.00	\$ 730.00	\$ 730.00	\$ 730.00	\$ 730.00	\$ 730.00	\$ 730.00	\$ 730.00	\$ 730.00	\$ 730.00	\$ 730.00
Website and Mobile Application Development Expenditure	\$ -											
Maintenance cost of website and mobile application	\$ 325.00	\$ 325.00	\$ 325.00	\$ 325.00	\$ 325.00	\$ 325.00	\$ 325.00	\$ 325.00	\$ 325.00	\$ 325.00	\$ 325.00	\$ 325.00
Sales Staff Salaries	\$ 1,560.00	\$ 1,560.00	\$ 1,560.00	\$ 1,560.00	\$ 1,560.00	\$ 1,560.00	\$ 1,560.00	\$ 1,560.00	\$ 1,560.00	\$ 1,560.00	\$ 1,560.00	\$ 1,560.00
Sales and Marketing Manager Salary	\$ 1,200.00	\$ 1,200.00	\$ 1,200.00	\$ 1,200.00	\$ 1,200.00	\$ 1,200.00	\$ 1,200.00	\$ 1,200.00	\$ 1,200.00	\$ 1,200.00	\$ 1,200.00	\$ 1,200.00
Operations Manager salary	\$ 1,050.00	\$ 1,050.00	\$ 1,050.00	\$ 1,050.00	\$ 1,050.00	\$ 1,050.00	\$ 1,050.00	\$ 1,050.00	\$ 1,050.00	\$ 1,050.00	\$ 1,050.00	\$ 1,050.00
Finance Manager Salary	\$ 1,050.00	\$ 1,050.00	\$ 1,050.00	\$ 1,050.00	\$ 1,050.00	\$ 1,050.00	\$ 1,050.00	\$ 1,050.00	\$ 1,050.00	\$ 1,050.00	\$ 1,050.00	\$ 1,050.00
Design Engineer Salary	\$ 630.00	\$ 630.00	\$ 630.00	\$ 630.00	\$ 630.00	\$ 630.00	\$ 630.00	\$ 630.00	\$ 630.00	\$ 630.00	\$ 630.00	\$ 630.00
Assembler Engineer Salary	\$ 630.00	\$ 630.00	\$ 630.00	\$ 630.00	\$ 630.00	\$ 630.00	\$ 630.00	\$ 630.00	\$ 630.00	\$ 630.00	\$ 630.00	\$ 630.00
Business Manager Salary	\$ 1,150.00	\$ 1,150.00	\$ 1,150.00	\$ 1,150.00	\$ 1,150.00	\$ 1,150.00	\$ 1,150.00	\$ 1,150.00	\$ 1,150.00	\$ 1,150.00	\$ 1,150.00	\$ 1,150.00
Total Salaries	\$ 7,270.00	\$ 7,270.00	\$ 7,270.00	\$ 7,270.00	\$ 7,270.00	\$ 7,270.00	\$ 7,270.00	\$ 7,270.00	\$ 7,270.00	\$ 7,270.00	\$ 7,270.00	\$ 7,270.00
Licenses	\$ -											
IP costs	\$ -											
Insurance	\$ 1,500.00											
Total Material Cost	\$ 4,850.00	\$ 5,400.00	\$ 5,980.00	\$ 6,560.00	\$ 7,300.00	\$ 7,980.00	\$ 8,660.00	\$ 9,370.00	\$ 9,750.00	\$ 10,170.00	\$ 10,650.00	\$ 11,250.00
Total Labour Cost	\$ 3,840.00	\$ 3,840.00	\$ 3,840.00	\$ 3,840.00	\$ 3,840.00	\$ 3,840.00	\$ 3,840.00	\$ 3,840.00	\$ 3,840.00	\$ 3,840.00	\$ 3,840.00	\$ 3,840.00
Packaging & Logistics Contract	\$ 1,710.00	\$ 1,900.00	\$ 2,097.60	\$ 2,295.20	\$ 2,546.00	\$ 2,781.60	\$ 3,017.20	\$ 3,260.40	\$ 3,382.00	\$ 3,526.40	\$ 3,686.00	\$ 3,876.00
Bank Loan	\$ 12,024.45	\$ 12,024.45	\$ 12,024.45	\$ 12,024.45	\$ 12,024.45	\$ 12,024.45	\$ 12,024.45	\$ 12,024.45	\$ 12,024.45	\$ 12,024.45	\$ 12,024.45	\$ 12,024.45
Total Cash Out	\$ 34,949.45	\$ 34,189.45	\$ 34,967.05	\$ 35,744.65	\$ 36,735.45	\$ 37,651.05	\$ 38,566.65	\$ 39,519.85	\$ 40,021.45	\$ 40,585.85	\$ 41,225.45	\$ 42,015.45

Figure A4: Detailed Cash in and Out for Year 2

Income	Month 1	Month 2	Month 3	Month 4	Month 5	Month 6	Month 7	Month 8	Month 9	Month 10	Month 11	Month 12
Selling Price of Basic Version	\$ 70.00	\$ 70.00	\$ 70.00	\$ 70.00	\$ 70.00	\$ 70.00	\$ 70.00	\$ 70.00	\$ 70.00	\$ 70.00	\$ 70.00	\$ 70.00
Sales Volume of Basic Version	430	470	500	550	600	650	700	750	800	875	950	1000
Sales Revenue of Basic Version	\$ 30,100.00	\$ 32,900.00	\$ 35,000.00	\$ 38,500.00	\$ 42,000.00	\$ 45,500.00	\$ 49,000.00	\$ 52,500.00	\$ 56,000.00	\$ 61,250.00	\$ 66,500.00	\$ 70,000.00
Selling Price of Premium Version	\$ 140.00	\$ 140.00	\$ 140.00	\$ 140.00	\$ 140.00	\$ 140.00	\$ 140.00	\$ 140.00	\$ 140.00	\$ 140.00	\$ 140.00	\$ 140.00
Sales Volume of Premium Version	115	130	150	170	200	220	250	275	300	325	350	400
Sales Revenue of Premium Version	\$ 16,100.00	\$ 18,200.00	\$ 21,000.00	\$ 23,800.00	\$ 28,000.00	\$ 30,800.00	\$ 35,000.00	\$ 38,500.00	\$ 42,000.00	\$ 45,500.00	\$ 49,000.00	\$ 56,000.00
Total Sales Revenue	\$ 46,200.00	\$ 51,100.00	\$ 56,000.00	\$ 62,300.00	\$ 70,000.00	\$ 76,300.00	\$ 84,000.00	\$ 91,000.00	\$ 98,000.00	\$ 1,06,750.00	\$ 1,15,500.00	\$ 1,26,000.00
Cash Flow	Month 1	Month 2	Month 3	Month 4	Month 5	Month 6	Month 7	Month 8	Month 9	Month 10	Month 11	Month 12
Opening Balance	\$ 38,855.70	\$ 37,669.75	\$ 41,210.30	\$ 48,065.85	\$ 59,082.40	\$ 75,282.95	\$ 95,644.50	\$ 1,21,190.05	\$ 1,51,408.10	\$ 1,86,298.65	\$ 2,26,919.20	\$ 2,73,269.75
Total Cash In	\$ 46,200.00	\$ 51,100.00	\$ 56,000.00	\$ 62,300.00	\$ 70,000.00	\$ 76,300.00	\$ 84,000.00	\$ 91,000.00	\$ 98,000.00	\$ 1,06,750.00	\$ 1,15,500.00	\$ 1,26,000.00
Total Cash Out	\$ 47,385.95	\$ 47,559.45	\$ 49,144.45	\$ 51,283.45	\$ 53,799.45	\$ 55,938.45	\$ 58,454.45	\$ 60,781.95	\$ 63,109.45	\$ 66,129.45	\$ 69,149.45	\$ 72,419.45
Net Cash Flow	\$ -1,185.95	\$ 3,540.55	\$ 6,855.55	\$ 11,016.55	\$ 16,200.55	\$ 20,361.55	\$ 25,545.55	\$ 30,218.05	\$ 34,890.55	\$ 40,620.55	\$ 46,350.55	\$ 53,580.55
Closing Balance	\$ 37,669.75	\$ 41,210.30	\$ 48,065.85	\$ 59,082.40	\$ 75,282.95	\$ 95,644.50	\$ 1,21,190.05	\$ 1,51,408.10	\$ 1,86,298.65	\$ 2,26,919.20	\$ 2,73,269.75	\$ 3,26,850.30

Figure A5: Income and Cash Flow with balance for Year 3

Cash Flow Forecast	Month 1	Month 2	Month 3	Month 4	Month 5	Month 6	Month 7	Month 8	Month 9	Month 10	Month 11	Month 12
Closing Balance	\$ 38,855.70											
Cash In												
Sales Revenue	\$ 46,200.00	\$ 51,100.00	\$ 56,000.00	\$ 62,300.00	\$ 70,000.00	\$ 76,300.00	\$ 84,000.00	\$ 91,000.00	\$ 98,000.00	\$ 1,06,750.00	\$ 1,15,500.00	\$ 1,26,000.00
Total Cash In	\$ 46,200.00	\$ 51,100.00	\$ 56,000.00	\$ 62,300.00	\$ 70,000.00	\$ 76,300.00	\$ 84,000.00	\$ 91,000.00	\$ 98,000.00	\$ 1,06,750.00	\$ 1,15,500.00	\$ 1,26,000.00
Cash Out												
Total Rent for Headquarters and offline store(s)	\$ 2,000.00	\$ 2,000.00	\$ 2,000.00	\$ 2,000.00	\$ 2,000.00	\$ 2,000.00	\$ 2,000.00	\$ 2,000.00	\$ 2,000.00	\$ 2,000.00	\$ 2,000.00	\$ 2,000.00
Utilities and Maintenance Cost for Headquarters and offline store(s)	\$ 400.00	\$ 400.00	\$ 400.00	\$ 400.00	\$ 400.00	\$ 400.00	\$ 400.00	\$ 400.00	\$ 400.00	\$ 400.00	\$ 400.00	\$ 400.00
Cost of Office Equipments	\$ -											
Total Cost of Manufacturing Facility and Machinery	\$ -											
Utilities and Maintenance Cost for Manufacturing Facility	\$ 425.00	\$ 425.00	\$ 425.00	\$ 425.00	\$ 425.00	\$ 425.00	\$ 425.00	\$ 425.00	\$ 425.00	\$ 425.00	\$ 425.00	\$ 425.00
Marketing Expenditure	\$ 750.00	\$ 750.00	\$ 750.00	\$ 750.00	\$ 750.00	\$ 750.00	\$ 750.00	\$ 750.00	\$ 750.00	\$ 750.00	\$ 750.00	\$ 750.00
Website and Mobile Application Development Expenditure	\$ -											
Maintenance cost of website and mobile application	\$ 350.00	\$ 350.00	\$ 350.00	\$ 350.00	\$ 350.00	\$ 350.00	\$ 350.00	\$ 350.00	\$ 350.00	\$ 350.00	\$ 350.00	\$ 350.00
Sales Staff Salaries	\$ 2,200.00	\$ 2,200.00	\$ 2,200.00	\$ 2,200.00	\$ 2,200.00	\$ 2,200.00	\$ 2,200.00	\$ 2,200.00	\$ 2,200.00	\$ 2,200.00	\$ 2,200.00	\$ 2,200.00
Sales and Marketing Manager Salary	\$ 1,250.00	\$ 1,250.00	\$ 1,250.00	\$ 1,250.00	\$ 1,250.00	\$ 1,250.00	\$ 1,250.00	\$ 1,250.00	\$ 1,250.00	\$ 1,250.00	\$ 1,250.00	\$ 1,250.00
Operations Manager salary	\$ 1,100.00	\$ 1,100.00	\$ 1,100.00	\$ 1,100.00	\$ 1,100.00	\$ 1,100.00	\$ 1,100.00	\$ 1,100.00	\$ 1,100.00	\$ 1,100.00	\$ 1,100.00	\$ 1,100.00
Finance Manager Salary	\$ 1,100.00	\$ 1,100.00	\$ 1,100.00	\$ 1,100.00	\$ 1,100.00	\$ 1,100.00	\$ 1,100.00	\$ 1,100.00	\$ 1,100.00	\$ 1,100.00	\$ 1,100.00	\$ 1,100.00
Design Engineer Salary	\$ 700.00	\$ 700.00	\$ 700.00	\$ 700.00	\$ 700.00	\$ 700.00	\$ 700.00	\$ 700.00	\$ 700.00	\$ 700.00	\$ 700.00	\$ 700.00
Assembler Engineer Salary	\$ 700.00	\$ 700.00	\$ 700.00	\$ 700.00	\$ 700.00	\$ 700.00	\$ 700.00	\$ 700.00	\$ 700.00	\$ 700.00	\$ 700.00	\$ 700.00
Business Manager Salary	\$ 1,200.00	\$ 1,200.00	\$ 1,200.00	\$ 1,200.00	\$ 1,200.00	\$ 1,200.00	\$ 1,200.00	\$ 1,200.00	\$ 1,200.00	\$ 1,200.00	\$ 1,200.00	\$ 1,200.00
Total Salaries	\$ 8,250.00	\$ 8,250.00	\$ 8,250.00	\$ 8,250.00	\$ 8,250.00	\$ 8,250.00	\$ 8,250.00	\$ 8,250.00	\$ 8,250.00	\$ 8,250.00	\$ 8,250.00	\$ 8,250.00
Licenses	\$ -											
IP costs	\$ -											
Insurance	\$ 1,500.00											
Total Material Cost	\$ 12,050.00	\$ 13,300.00	\$ 14,500.00	\$ 16,100.00	\$ 18,000.00	\$ 19,600.00	\$ 21,500.00	\$ 23,250.00	\$ 25,000.00	\$ 27,250.00	\$ 29,500.00	\$ 32,000.00
Total Labour Cost	\$ 5,440.00	\$ 5,440.00	\$ 5,440.00	\$ 5,440.00	\$ 5,440.00	\$ 5,440.00	\$ 5,440.00	\$ 5,440.00	\$ 5,440.00	\$ 5,440.00	\$ 5,440.00	\$ 5,440.00
Packaging & Logistics Contract	\$ 4,196.50	\$ 4,620.00	\$ 5,005.00	\$ 5,544.00	\$ 6,160.00	\$ 6,699.00	\$ 7,315.00	\$ 7,892.50	\$ 8,470.00	\$ 9,240.00	\$ 10,010.00	\$ 10,780.00
Bank Loan	\$ 12,024.45	\$ 12,024.45	\$ 12,024.45	\$ 12,024.45	\$ 12,024.45	\$ 12,024.45	\$ 12,024.45	\$ 12,024.45	\$ 12,024.45	\$ 12,024.45	\$ 12,024.45	\$ 12,024.45
Total Cash Out	\$ 47,385.95	\$ 47,559.45	\$ 49,144.45	\$ 51,283.45	\$ 53,799.45	\$ 55,938.45	\$ 58,454.45	\$ 60,781.95	\$ 63,109.45	\$ 66,129.45	\$ 69,149.45	\$ 72,419.45

Figure A6: Detailed Cash in and Out for Year 3