

BUSINESS PLAN: GROUP 5

SKYVION

MSc ENGINEERING MANAGAEMENT

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EXECUTIVE SUMMARY

Bicycle injuries due to loss of balance has always been a big reason of concern for people. With the increasing trends in the electric bike market, Skyvion pvt ltd. combined the issue of loss of balance and growth of electric bikes to launch the first ever “Self-Balancing” road bikes. We are a small company based in the rural areas of York, United Kingdom who have the motto “Cycling so smooth, feels like flying”. The company’s main aim is to provide the safest road bikes along with an autonomous driving feature that provides reduces efforts and increases leisure. These bikes use a continuously trained AI model which is linked with electronic circuits and this system is fed data from unnatural movements and heavy weight.

Since our bikes are advanced in technology, we chose our primary customer base to be Young Single Workers, Young Families and Students because the younger crowd gets attracted and accustomed to new technology very quickly. Since our bikes serve the purpose of commuting and fitness, our sub-segments i.e., Road Commuting and Rod Fitness fit perfectly with our customer base.

The USP of our bikes are:

- Self-balancing
 - Drastically reduces the risk to injuries
 - Riding the bike becomes easier during tough weather conditions because even if the bike skids on slippery roads, it will be able to find the right angle to balance the rider
 - Increased motivation for beginners because a lot of people give up after falling down a few times
- Self-driving
 - Significant reduction in the effort to ride bikes
 - Commuting becomes easier due to the object detection
 - Increased leisure for casual riders

Our business has great potential in the present road bike market because no other company manufactures such bikes or even makes use of these features. Thus, our self-balancing technology is our blue ocean strategy and entering an untapped market will prove to be highly profitable for our business.

Our upper management consists of the CEO, Director of Organization, Director of Finance, Director of Operations, Director of Sales and Marketing, and Director of Research and Development. All of them are highly experienced and skilled professionals who have a lot of hands-on experience in the field of their respective departments. We hire the best employees and provide them with continuous training and a good salary, which keeps them highly skilled and boosts their morale. Thus, the efficiency of our company is always high.

We had set targets for average net profits, average sales and net assets for the years 2, 4 and 5. Due to the expertise in decision making of our management team, we were able to meet the minimum financial targets as well as surpass the upper-level targets as well. As of now, we are five years into running our company with an accumulated net profit of £1,093,672, net assets worth £1.43M, sales count of 1799 and a total company value of £2.07M.

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1. INTRODUCTION

1.1 BUSINESS BACKGROUND

After several years of relative stagnation in the UK cycling market, COVID-19 has brought new opportunities to the cycling industry. There has been a significant rise in the number of consumers trying to avoid public transportation due to concerns about contracting the virus. In addition, as consumers are becoming more health conscious, cycling is becoming an increasingly reliable and healthy travel option. In 2020, 170,000 E-bikes were sold in the United Kingdom and this market was expecting a 70% rise year-on-year (Sutton, 2021). From figure 1, it is visible that loss of control is a major reason as to why accidents and casualties occur in the UK (Transport, 2021). This gave our company the opportunity to grow our business in this market by developing bicycles with utmost safety. We at Skyvion pvt ltd. introduce self-balancing bikes that drastically reduce the possibility of users to lose their balance while riding. We launched our company in 2018 in York, made a net profit of £1.09 million between 2019 to 2022, and our current net worth is £2.07 million. We continuously aim to give our customers the safest riding experience.

Most common pairs of contributory factors reported together, Great Britain 2020			
		Number/ percentage	
Factor with lower code ^{1,2,3}	Factor with higher code ^{1,2,3}	Number	Per cent
Vehicles			
Driver/Rider failed to look properly	Driver/Rider failed to judge other person's path or speed	5,164	5
Driver/Rider failed to look properly	Driver/Rider careless, reckless or in a hurry	3,150	3
Poor turn or manoeuvre	Driver/Rider failed to look properly	2,594	2
Driver/Rider failed to judge other person's path or	Driver/Rider careless, reckless or in a hurry	1,525	1
Exceeding speed limit	Driver/Rider careless, reckless or in a hurry	1,444	1
Poor turn or manoeuvre	Driver/Rider failed to judge other person's path or speed	1,299	1
Loss of control	Driver/Rider careless, reckless or in a hurry	1,236	1
Slippery road (due to weather)	Loss of control	1,133	1
Poor turn or manoeuvre	Driver/Rider careless, reckless or in a hurry	1,105	1
Aggressive driving	Driver/Rider careless, reckless or in a hurry	1,044	1
Exceeding speed limit	Loss of control	1,041	1
Travelling too fast for conditions	Loss of control	1,003	1
Slippery road (due to weather)	Travelling too fast for conditions	992	1
Driver/Rider impaired by alcohol	Driver/Rider careless, reckless or in a hurry	878	1
Travelling too fast for conditions	Driver/Rider careless, reckless or in a hurry	804	1
Disobeyed Give Way or Stop sign or markings	Driver/Rider failed to look properly	803	1
Poor turn or manoeuvre	Loss of control	764	1
Exceeding speed limit	Driver/Rider impaired by alcohol	763	1
Following too close	Driver/Rider failed to judge other person's path or	761	1
Loss of control	Driver/Rider impaired by alcohol	747	1

Figure 1: Common casualty reasons

1.2 COMPANY DESCRIPTION

MISSION STATEMENT: To provide our customers with the utmost safety by drastically reducing the possibility of loss of balance while riding through our self-balancing technology

LEGAL STRUCTURE: Skyvion pvt ltd. is a private limited company based in York, United Kingdom, that is owned by the shareholders and directors. The board of directors are the shareholders of our company, and the shares are distributed equally.

MANAGEMENT STRUCTURE: We at Skyvion pvt ltd. are highly skilled professionals from diverse backgrounds who have a lot of experience in their respective backgrounds. We have a conventional organizational structure with the CEO as level 1 management followed by the board of directors as level 2 management.

- **Level 1: Chief Executive Officer (CEO):** Top-level management of the company who manages the board of directors, takes key decisions and controls the company.
- **Level 2: Board of Directors:** Consists of Organization, Operations, Sales and Marketing, Research and Development, and Finance directors of the company. They have control over their departments and their work contributes to generating revenue for the company. The final decisions are signed off by the CEO.

Figure 2 shows our management team structure.

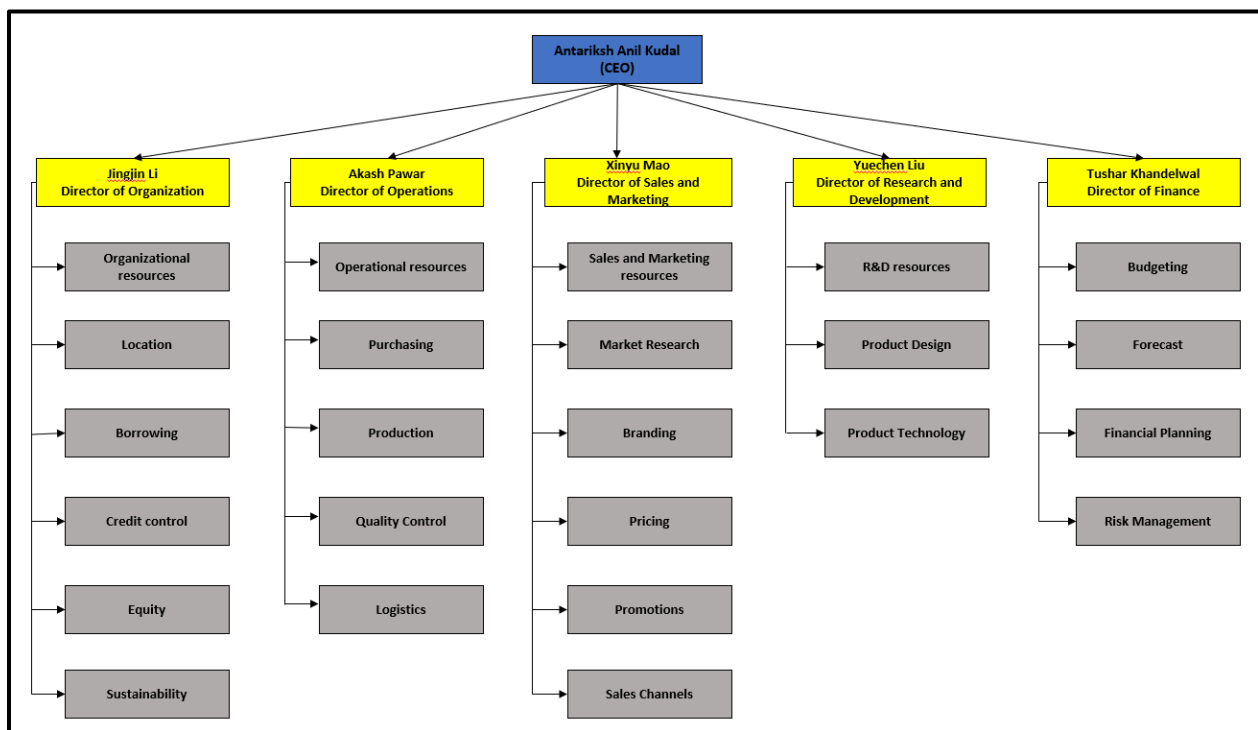


Figure 2: Team Management Structure

1.3 BUSINESS LOCATION

A. Location and Space: Our location throughout the 5 years was rural premises. As we started generating revenue, we increased our floor area to increase resources and production.

B. Quality and Term length: Initially, we started off with “good” quality company facilities and good sustainability for cost-cutting. Later as our revenue increased, we increased the quality standards of our company to “excellent” ensure the best working experience for our employees. The term length in our contract was always “rolling” because it gave us the freedom to terminate existing contracts and relocate to better premises without paying any penalties.

Table 1 shows how we relocated to different premises.

YEAR + QUARTER	LOCATION	FLOOR AREA (sq. meters)	QUALITY	LENGTH
Y1Q1 - Y2Q1	Rural Premises	100	Good	Rolling
Y2Q2 - Y3Q2	Rural Premises	200	Excellent	Rolling
Y3Q3 - Y4Q4	Rural Premises	450	Excellent	Rolling
Y5Q1 - Y5Q4	Rural Premises	800	Excellent	Rolling

Table 1: Business location (SimVenture Evolution)

1.4 RESOURCES

We hired employees and contractors based upon our activities. Most of the working force was assigned to the Operations department as it was essential for increasing production. Sales and Marketing, Organization and R&D workforce was brought into picture when we had to carry out their respective tasks such:

- Sales and Marketing – Promotions, market research and sales channels
- Organization – Relocation of premises, fund borrowing
- R&D – New product design, improvement of current product technology

We also gave our employees and contractors a lot of overtime in order to meet the order count because hiring more workforce would reduce our floor area.

Overtime				Equipment					
Amount:	25%	Rate:	Normal Rate	Units:	26 (+0)	100%	Good	0	£0
Workforce									
	Count	Hours	Ability	Morale	Equipment	Space	Overall	Effective Hours	Cost
Employees	20	13000	97%	91%	100%	100%	88%	11445	£133,828
Contractors	0.9	585	100%	100%	100%	100%	99%	583	£11,700
Totals								12029	£145,528
Recruitment									
Method:	Agency	Quality:	Above Average	Salary:	Average +3%	Recruitment Delay	0	0	£0
Training									
Policy:	Rapid Improvement	Method:	E-Learning	666				£20,000	

Figure 3: Operations resources (SimVenture Evolution)

1.5 ADDITIONAL FUNDS BORROWED

We were eligible to take a crowd-funding loan of £100,000 and an overdraft of £34,000, thus making our total additional funds borrowed to be £134,000. We paid this loan over a 5-year period with an interest rate of 7%. Figure 4 shows that we were successfully able to pay off the loan in the allotted time period.

Current Loans				
Source	Loan Amount	Balance	Remaining Term	Interest Rate
 Crowd Funding	£100,000	£0	0 years	7%

Figure 4: Loan status after Y5Q4 (SimVenture Evolution)

1.6 CREDIT CONTROL

Credit control had a direct impact on our fixed costs, cash flow and sales revenue. Initially, our credit control was “gentle” with all the sales channels that sold our products, but later when the debt started increasing, we switched to a “firm” credit control strategy to increase our revenue. Figure 5 shows the credit control strategy of Skyvion pvt ltd. after Y5Q4.

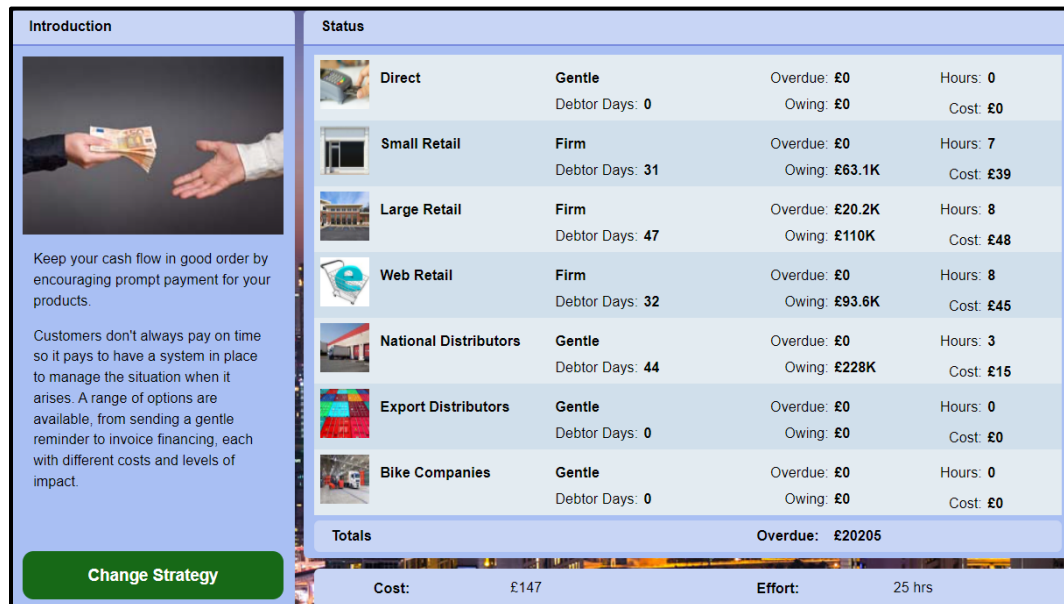


Figure 5: Credit Control (SimVenture Evolution)

1.7 EQUITY

Currently the company does not have any external shareholders, and all the shares are evenly distributed amongst the upper management in the company. We look to become a public limited company in the coming years and have external shareholding. The company will look for investors in Y6Q1 and also pay dividends to their shareholders. This would increase our reputation and market cap.



Figure 6: Equity status (SimVenture Evolution)

2. PRODUCT PORTFOLIO

2.1 DETAILS OF PRODUCT RANGE WITH BRANDING/NAME OF EACH PRODUCT

Since Skyvion is a combination of the words Sky and Avion, we named our bikes based on natural occurrences in the sky i.e., Lightning and Aurora (Northern lights).

Both, Lightning and Aurora offer a smooth and comfortable biking experience due to their self-balancing and autonomous mode. Lightning has automatic transmission, 32-spoke wheels and 26*4.0" tyres whereas Aurora has automatic transmission, 36-spoke wheels and 27.5*3.8" tyres. Our bikes have thicker tyres and a high number of spokes to increase their stability and strength to increase balance and prevent cyclists from falling while enduring unnatural movements. They both have an integrated controller that responds to the pedal inputs which results in reduced efforts while riding the bike.

Based on competition analysis and market research, we chose five categories to rate our product (out of 100) to see how our product competes against others'.

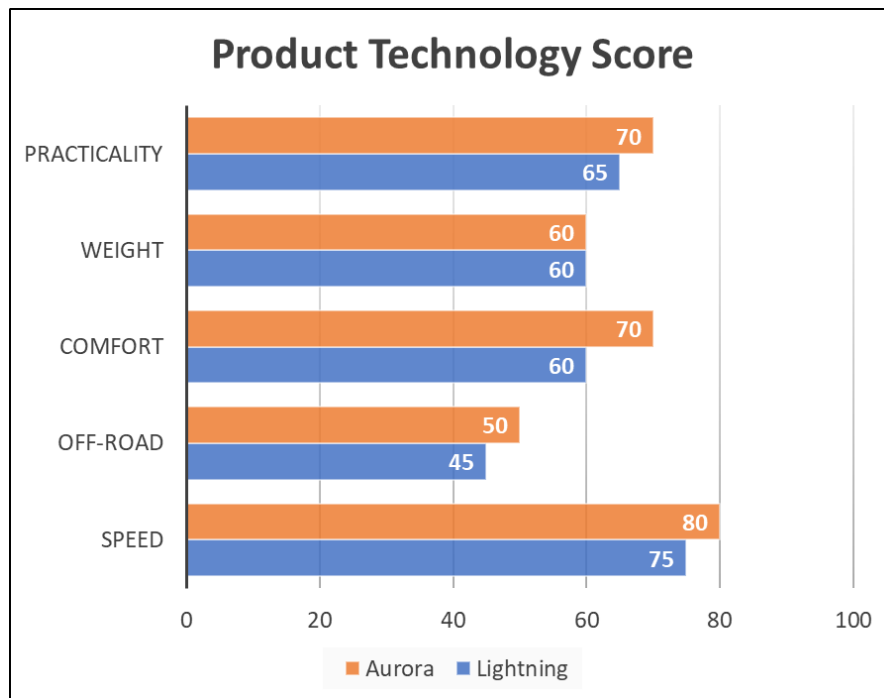


Figure 7: Product Technology Score for Lightning and Aurora

It is visible from figure 7 that we emphasize on comfort, speed and practicality as our products are self-balancing bikes. Our bikes are designed for optimum performance and a comfortable riding experience.

2.2 COMPLETE PRODUCT PROFILE WITH PROTOTYPE AND TECHNOLOGY SPECIFICATIONS

PRODUCT PROFILE:

- Lightning

Frame	Aluminium Alloy
Inseam	32"
Frame Size	22.9"
Front Fork	eXotic Rigid Carbon
Chain	SRAM EX1
Handlebars	Regular
Battery	2s 8.4V 10A Li-ion
Servomotor	60 kg
Camera	5 MP
Seat	Proxim W350 T2.0
Tyres	26*4.0"
Brakes	Disc
Computing chip	Huawei Kirin 990
Li-DAR	Short range (25-50 meters)
Motor	36V
Mud-guard	Optional

Table 2: Lightning specifications



Figure 8: Skyvion Lightning (Electronic components are zoomed in in the above figure)

- Aurora

Frame	Titanium Alloy
Inseam	32"
Frame Size	23"
Front Fork	eXotic Rigid Carbon
Chain	SRAM EX1
Handlebars	Regular (adjustable optional)
Battery	2s 8.4V 10A Li-ion
Servomotor	80 kg
Camera	8 MP
Seat	Proxim W350 T2.0
Tyres	27*3.8"
Brakes	Disc
Computing chip	Huawei Kirin 990
Li-DAR	Medium range (75-100 meters)
Motor	36V
Mud-guard	Optional

Table 3: Aurora Specifications



Figure 9: Skyvion Aurora (Electronic components are zoomed in in the above figure)

PRODUCT TECHNOLOGY

- The computing brain of our self-balancing and autonomous driving technology is the Huawei Kirin 990 chip. It consists of a source code which basically is an AI model tuned for self-balancing. We establish a lane selection decision model by interlinking the software with the electronic hardware like Li-DAR, camera, motor and gyroscope. This model will ensure security of riding and accuracy of route. This function is established based on the average speed of traffic flow, object distance and estimated ideal arrival time within the observation range of bicycle.
- The HD camera and LiDAR will detect the outside environment, gather the information and transmit to the AI chip to calculate the best driving scheme. Afterwards the CPU would give orders to the driving motor and balance system to drive the bicycle, and more forward smoothly according to the designed track route while ensuring stability. Ultimately the central computer system will control the direction and speed and balance according to the road conditions detected by the road LiDAR to ensure security and smoothness of the driving process.
- The bikes have an accelerometer and gyroscope sensors which allows the front wheel to change the directions instantly in case of loss of balance or falling. The entire system is tuned in such a way to provide the exact amount of angular momentum in the desired directions, and this prevents customers from falling.

FUTURE PROTOTYPES

We at Skyvion stress on customer safety and comfort, which is why our future models will be able to bear weight up to 120kg and have better balancing and advanced autonomous features like being able to activate the bike using a smart device and bringing it to the user within the radius of a few miles. Another feature that we intend to introduce is a two-factor authentication anti-theft device. Our bikes would consist of:

- QR code linked to the customer's personal smart device
- Fingerprint authentication

Before unlocking the bike, the customer will have to scan the QR code using their own smart device. This will generate a message and send it to them saying that the user is in the vicinity of the bike. This will allow the user to unlock their bikes by using their fingerprint. If there is an attempt to unlock the bike without scanning the QR code, an alert is sent to the bike owner stating that there is suspicious activity around the bike. So, if a burglar tries to steal the bike, they won't be aware of the two-factor authentication system and thus, the bike could be easily tracked down.

2.3 CUSTOMER SEGMENT

According to UK cycling statistics 2020, the younger population contribute to majority of the age group that cycles the most (Cycling UK, n.d.). The sub segments for our products are Road Commuting and Road Fitness because our products are intended for smooth and comfortable riding. Based on this we divided our customer base into young single workers, young families and students as they comprise the highest market share. In England:

- 2.5% of the children from ages 5-16 years go to school by cycle
- 5% of the people take their cycles to work

Due to self-balancing and self-driving, our road bikes are going to be technologically advanced. This will attract customers from our 3 chosen segments, because the young population is always more interested in new technology. Despite our major customer segmentation being the younger population, our products are also equally beneficial for older people due to the comfort of riding that our bikes provide.

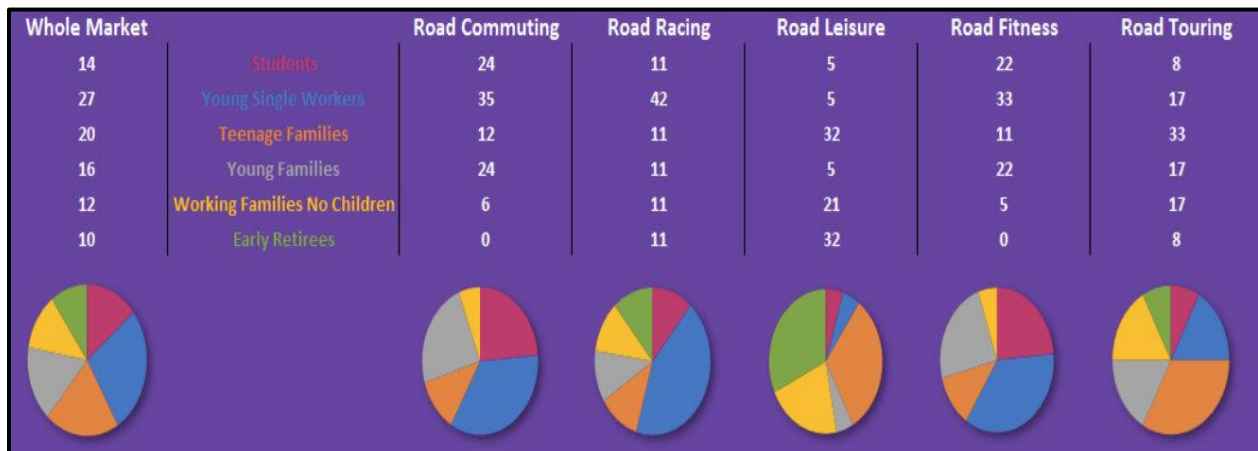


Figure 10: Road bike market with sub segment shares

2.4 PRODUCT PRICING

- Lightning - £760
- Aurora - £825

There is a different pricing strategy for our two products:

- Difference in material – Aluminium alloy in Lightning as compared to Titanium alloy in Aurora
- Different camera – 5 MP camera in Lightning as compared to 8 MP camera in Aurora
- Different servomotor – 60 kg in Lightning as compared to 80 kg in Aurora
- Different tyres – 26*4.0” in Lightning as compared to 27*3.8” in Aurora
- Change in sub-segment (SimVenture): Road commuting for Lightning as compared to Road Fitness for Aurora
- Change in market competitor – Change in sub-segments led to change in competition

2.5 PRODUCT USP

Skyvion bikes have two unique selling points:

- **Self-balancing**
 - Drastically reduces the risk to injuries
 - Riding the bike becomes easier during tough weather conditions because even if the bike skids on slippery roads, it will be able to find the right angle to balance the rider
 - Increased motivation for beginners because a lot of people give up after falling down a few times
- **Self-driving**
 - Significant reduction in the effort to ride bikes
 - Commuting becomes easier due to the object detection
 - Increased leisure for casual riders

3. SALES AND MARKETING

3.1 SALES STRATEGIES AND CHANNELS

STRATEGY (SimVenture)

Y1 :

- Explore the market in the Q1. Created reports on market segments including fitness, leisure, commuting, off-road.
- Create competitor research reports to understand product types, feature points, pricing, and marketing methods that competitors are launching in the current market. A demographic report was also created to understand customer segments. At this time, it is confirmed that it will be oriented to the commuter market, and students, single workers, and families will be selected as target users. At the same time, it provides information for creating new products through market research reports and competitive analysis.
- Recruiting sales staff in the Q2 to prepare marketing for new products that are being designed. In Q3, our new product Lightning was successfully developed and entered the mass production stage. At this time, the primary goal was to market our company's first product and try to make the company profitable.
- Since a large amount of the company's capital at this stage is used to produce products and research and development, it is possible to consider low-cost and user-friendly marketing channels. So, we chose small retail stores and large retail stores and online sales.
- At the same time use fewer print ads, public relations, social media resources for promotion. In Q4, we found that our products had more than 500 inventory, which means that we need to increase promotion efforts and investment in sales channels, as well as appropriate price reductions, to sell the inventory. So, we adjusted the price of lightning products from 760 pounds to 705 pounds. At the same time, 4 small retail outlets, 3 large retail outlets and four new online sales channels were added.

Y2 :

- After clearing inventory and price reduction in the fourth quarter of the first year, the order book in the first quarter of the second year tripled to 569 orders, but we produced only 170 orders. This means that promotion can be appropriately reduced, and more funds can be invested in mass production. But we lost money this quarter, so we need to invest in expanding sales channels and increasing sales efforts to ensure profitability.
- Therefore, 5 small retail channels, 3 large retail channels and 4 online sales channels were added again. In Q2 of Y2, we ushered in a profit. At the same time, the number of scheduled orders has reached 800, but only 400 orders have been produced, so more funds have been invested in automated production this quarter, and the investment in the sales and marketing department has been appropriately reduced, reducing 7 small retail sales points, 4 large retail outlets and scaled back promotion efforts.
- In Y2 Q3, profits turned negative again due to reduced sales efforts in the previous quarter. There is no doubt that in the new quarter, we need to expand our sales channels and promotion efforts.
- In Y2 Q4, the sales department made a profit in the quarter after a month of hard work. This quarter, the comfort and use of lightning products have been improved, and the sales and

marketing department needs to continue to recruit employees and expand sales channels to sell new and improved products.

Y3 :

- In Q1 of Y3, the sales strategy of the previous quarter was followed, and at the same time, it prepared for the development of new products, and invested funds to conduct market research in the health field.
- In Q2 and Q3, the company decided to develop new products. In these two quarters, the old products were mainly promoted, so 4 small retail points and 3 large retail points were added, and a new one was added.
- In Y3 Q3, the new inventory research and development was completed, the small sales channel was increased from 10 to 13, and 2 outlet sales channels were added for promotion.

Y4 :

- In Y4 Q1, the price of new products was set, and 4 new small sales channels were expanded at the same time, and promotion efforts were increased to make new products sell better.
- In Y4 Q2 and Y4 Q3, the marketing strategy of the first quarter was followed, and sales were continuously expanded. We reduced the promotion of lightning products until the delisting process in the third quarter.
- In Q4, it was found that Aurora had generated a large amount of inventory, so we gave a 15% discount to new products and expanded a channel for outlets to clear inventory.

Y5 :

- In Y5 Q1 and Q2, promotion efforts and marketing strategies were slightly increased in order to keep profits rising.
- By Y5 Q3, our new product had been on the market for 1 year, so we created a new competitive research report, customer research report and new product user experience report in this quarter to explore the new market and current Product improvements.
- In Y5 Q4, we saw the survey results and found that the size of the fitness market dropped from 17% in the fourth year to 15%. Although we are still profitable, the data tells us that it is time to turn around and invest in other market areas.

SALES CHANNELS

We choose company direct sales, small retail agents, large retail agents, national distributors for sales, and at the same time open online sales online stores. There are a total of four channels, all of which are in the UK market, covering both online and offline channels. It is inevitable to choose the company's direct management, but since the company is located in the suburbs and the passenger flow is low, it is necessary to choose more sales channels.

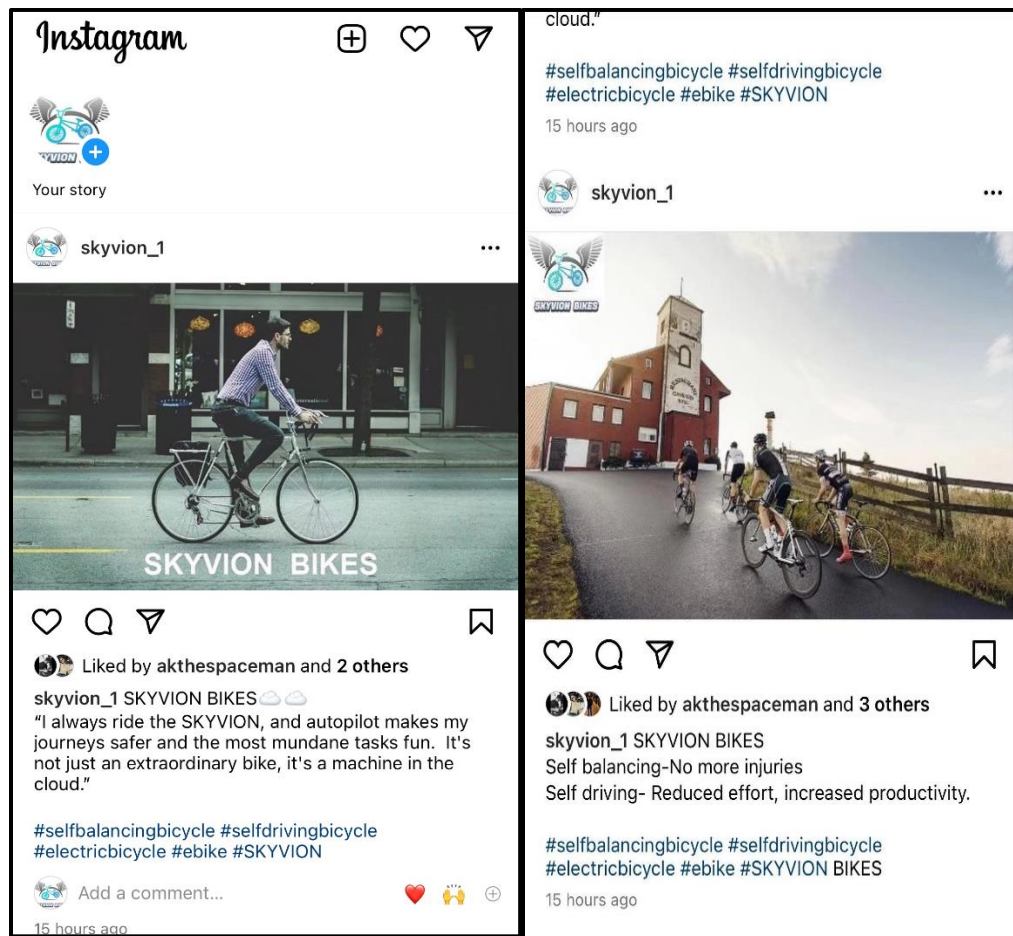
Large and small bicycle dealers and dealers to help increase the sales of our products is an inevitable choice, because they can provide a better service and experience, which makes it easier to increase the loyalty of users to our bicycles. In the UK, there are a total of 754 bicycle dealers, located in many prosperous cities such as London, Manchester, Birmingham, etc. (AutoTrader, n.d.). Our bikes can be placed in brick-and-mortar stores so customers can come in and try them out. At the same time, the agent

will also provide insurance and warranty services for the bicycle, which will undoubtedly bring a better experience to customers, and we do not need to provide additional manpower to repair our bicycles. In addition, taking the Norton Way Honda Bikes bicycle dealer as an example, putting our bicycles on this platform can also bring free delivery services to customers. The dealership is recognized by Honda, and the reliability of the dealership itself brings a high degree of trust to our products. At the same time increase customer loyalty to our products.

3.2 PROMOTION AND BRANDING STRATEGIES

ONLINE (INSTAGRAM): Since our target users are students, office workers and young families, they are concentrated in the age group of 15-40 years old, and users in this age group commonly use social media and the Internet. Data shows that more than 3.6 billion people use social media worldwide, which means that social media has a huge market value and can greatly enhance our brand power and promote promotion (Statista Reserach Department, 2022). Therefore, in the way of online promotion, we invest a lot of money in social media and online promotion.

We will publish 1 post on Instagram every week, the content of the message includes the appearance promotion picture of our new product, the text related to our company's philosophy, and attaches exquisite pictures to convey the pursuit of speed and comfort that Skyvion upholds Brand concept with freedom. Figure 11 shows the screenshots of our social presence on Instagram:



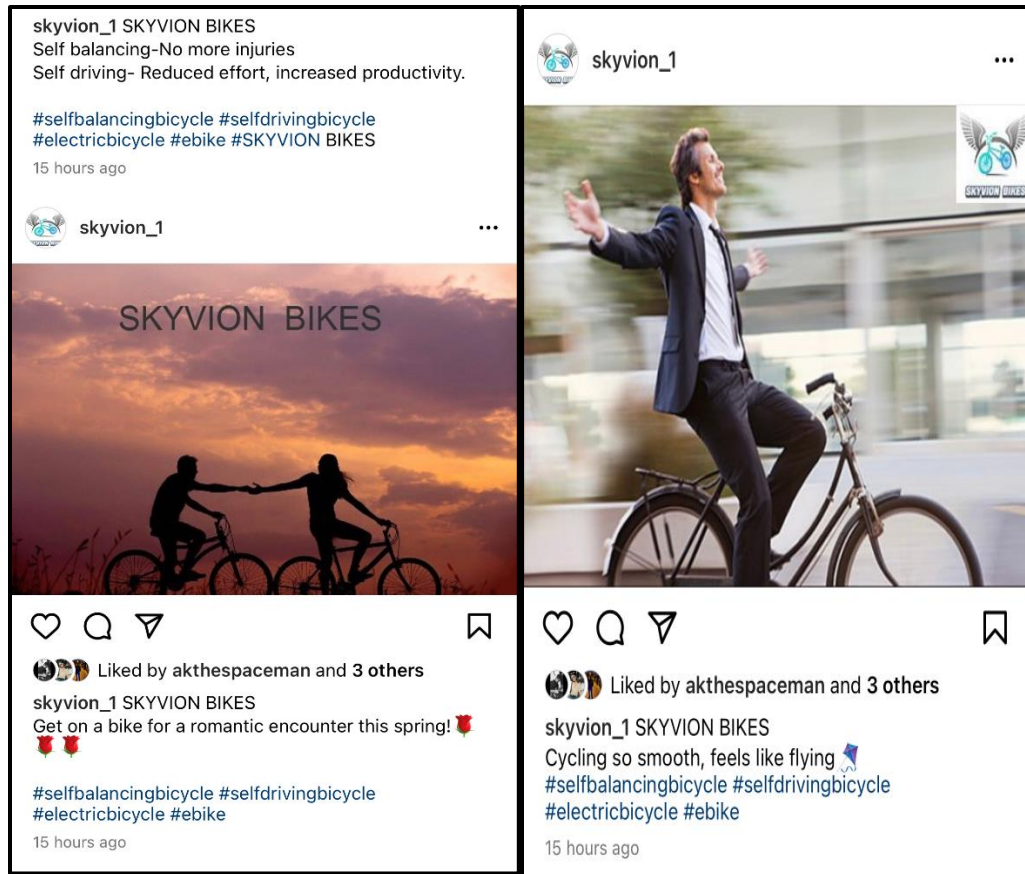


Figure 11: Skyvion Instagram page

OFFLINE: In offline promotion activities, we choose to establish public relations. For the Aurora product, since it is aimed at the fitness field, we can connect it to cycling competitions, providing cyclists with professional fitness-friendly styles. At the same time, we invite popular cyclists to endorse our products. As for Lightning products, we can cooperate with small and medium-sized enterprises, let them buy our commuter bicycles, and then distribute them to employees as employee benefits. So that more office workers have access to our products.

3.3 MARKET RESEARCH

Bicycles, an extremely green way of travel, avoids close contact between people, which can largely slow down the spread of the epidemic, while ensuring people's daily travel. On the other hand, due to the impact of the epidemic, people's attention to health has also increased, so the demand for the bicycle industry will also increase. Figure 12 shows that all motor vehicle traffic in the UK decreased in 2020, but only bicycle traffic increased by 45.7% (Havaei-Ahary, 2021). More and more people like to travel by bicycle, not only to exercise, but also to effectively prevent the spread of the epidemic.

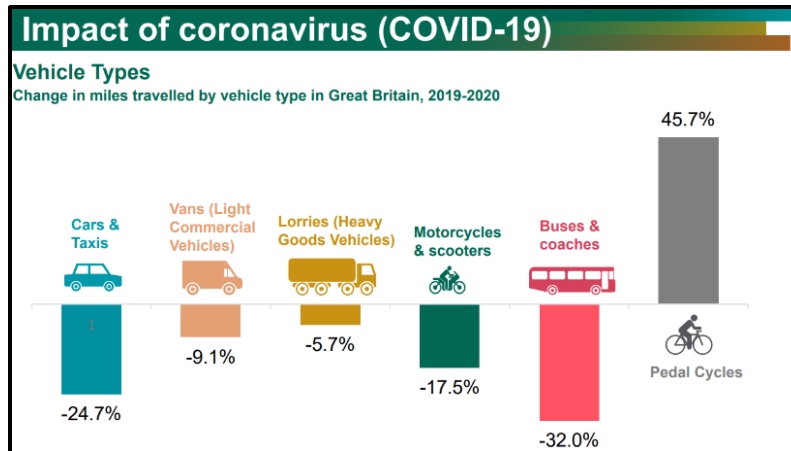


Figure 12: Increase in bicycle traffic

CUSTOMER MARKET

Growing concerns about commuting and health will spur consumer engagement. As you can see from the chart below, an average of 35% of customers in the UK use bicycles for their daily commute, which is the largest share of the entire bicycle consumer market. Due to the increasing emphasis on health and green travel under the epidemic, the health field is also a good potential customer market, of which the market size of the health field has also reached 17.65% (Simventure, 2022). Therefore, our target market can choose in the field of commuting and wellness.

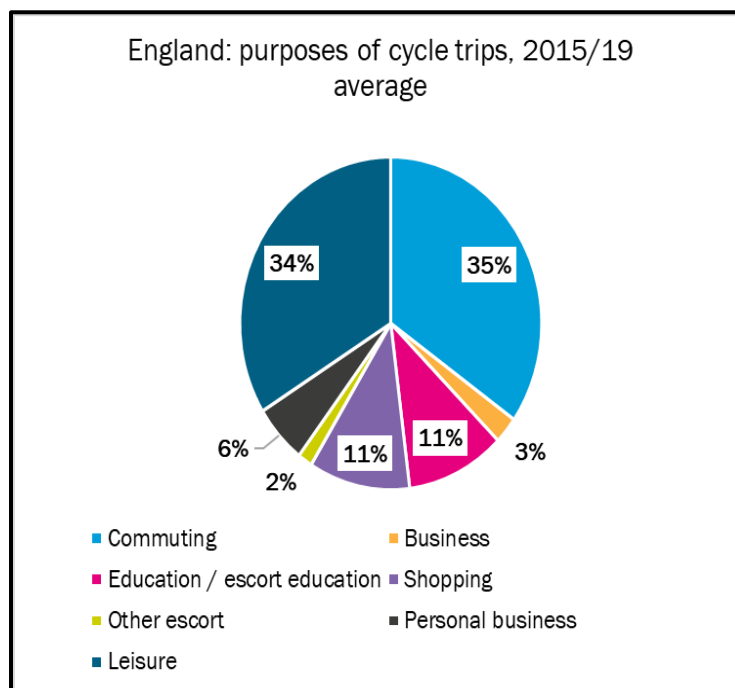


Figure 13: Different purposes of cycling

COMPETITOR ANALYSIS

For the commuter market, I compared the Lightning to Cameron Cycles' Road bike and BOARDMAN's URP 8.9.

Name	Material	Price	USP
Cameron Cycles-Road Bikes	/	£650	The best Practicality, Good Comfort, Good Speed. Score: Speed: 60; Off-Road: 30; Comfort: 50; Weight:50; Practicality: 60;
BOARDMAN-URP 8.9	6061 aluminum frame and full carbon tapered fork.	£850	1. The geometry of the frame is used to ensure that the rider's position is balanced. 2. Belt drive, no lubrication, no rust. 3. 8-speeds can be adjusted.
SKYVION BIKE-Lightning	Aluminium alloy	£760	1. Automatic driving and self-balancing bicycle 2. HD camera and LiDAR can detect road conditions and automatically set driving speed. 3. The use of Gyroscope and Steering engine makes cornering smoother. Score: Speed:75; Practicality: 65; Weight: 60; Comfort: 60; Off-road: 45

Table 4: Skyvion Lightning's competitors

Advantages of BOARDMAN-URP 8.9:

- BOARDMAN was acquired by Halfords, the UK's largest car and bicycle service provider, in 2014 (Rankin, 2014). This means that the Boardman Company has enough money to try out many different model development and product promotion.
- BOARDMAN-URP 8.9, a bike specially designed for commuters, uses an aluminum frame and a full carbon tapered front fork to make the bike itself lighter and easier to handle, while the appearance is simple and low-key, suitable for commuters who only need to commute. It's very suitable.
- With belt drive, no lubrication, no rust in rainy weather and easy to clean, so it is more convenient to ride.
- BOARDMAN Company itself has been established for a long time, and its brand influence is greater than that of SKYVION COMPANY.

Disadvantages of BOARDMAN-URP 8.9:

- The design is simple and monotonous, the function is single, and it is only suitable for commuting workers, which leads to a narrow audience of the product.
- Although this bike focuses on commuting and leisure, the price is more expensive than bikes in the same segment, which may make the sales figures less optimistic.

- There are 8 shifting functions, but the fastest speed is only 15.5 mph, which is still too slow compared to mountain bikes and electric bikes on the market.

The Cameron Cycles-Road Bikes Advantage:

- Inexpensive and practical, it is a cost-effective bike.
- Compared with SKYVION, the weight is slightly lighter, which means it is more convenient for teenage and female users to ride.

Disadvantages of Cameron Cycles-Road Bikes:

- Without outstanding highlight features, it can't survive for a long time only through low prices.
- The off-road ability is only 30 points, which may not meet the needs of young people who like street riding. Because ordinary tires can't allow them to complete complex and fancy riding actions.

For the fitness market, we compared the Aurora to Fitbike's road bikes and Trek Bikes' Trek FX3DISC.

Name	Material	Price	USP
Fitbike-Road Bikes	/	£700	Excellent Speed Excellent Comfort Excellent price Score: Speed: 72; Off-Road: 30; Comfort: 45; Weight: 70; Practicality: 45
Trek Bikes-Trek FX3DISC	Lightweight aluminum frame, carbon fiber fork	£925	1. All-weather hydraulic disc brakes for long rides. 2. DuoTrap S records and tracks fitness progress on your computer or smartphone. 3. Unique vibration damping material provides high comfort experience.
SKYVION-Aurora	Titanium alloy	£825	1. Lightweight material. 2. Automatic driving, higher balance. 3. It can detect road conditions and automatically set the driving speed. 4. Cool black and white spray paint. Score: Speed: 80; Off-Road: 50; Comfort: 70; Weight: 60; Practicality: 70

Table 5: Skyvion Aurora's competitors

Trek Bikes - Advantages of the Trek FX3DISC:

- More brick-and-mortar stores have been laid in the UK, and the distance to users is closer.
- Trek's wide range of bikes, including mountain, road and hybrid bikes, means a wider range of users.
- Doutrap S device and shock-absorbing material provide more convenience and high comfort for fitness young people.

Trek Bikes - Disadvantages of the Trek FX3DISC:

- The price is high. For ordinary families and students, it is too wasteful to buy such a bicycle for fitness.
- The product style is monotonous, and for students, the desire to buy is not enough.

Advantages of Fitbike-Road Bikes:

- Higher speed and lighter weight bring more comfortable experience to young people and families.
- The price is relatively low and can be afforded by more people.

Disadvantages of Fitbike-Road Bikes:

- For students or families who want to ride mountain bikes, the off-road ability is too low and it is not suitable for fitness on complex roads.
- A low comfort score means a poor overall fitness experience.

4. LEGAL ASPECTS

PATENTS

The main thing that sets Skyvion apart from other electric bike companies is our self-balancing technology. It's our blue ocean strategy and our entire business relies on this technology. This technology, along with the design of our bike will require a patent. Our technology consists of:

- AI model – It will require continuous tuning and training as per extreme testing conditions. This model will have a source code which is the company's intellectual property.
- Sensors – The design of our bikes is unique as well because we will install the sensors and motors on our bike in such a way that it takes sufficient amount of weight and undergoes extreme and unnatural movements.

Since Skyvion is a company based in the UK, we will have to follow protocol as per the UK guidelines and apply for patent protection through the Intellectual Property Office (IPO).

TRADEMARKS

To maintain the uniqueness of our business, we will have to register trademarks for the following:

- Skyvion logo
- Slogan – "Cycling so smooth, feels like flying"
- Branding – "Revolutionizing the cycling experience by providing the very first self-balancing bikes"

COPYRIGHTS

- We will release advertisements with our original music and thus, will require copyrighting.
- Our business cards, pamphlets, brochures, offer coupons and gift cards will also be copyrighted as they will all be unique to our business and brand identity.

INSURANCE

Skyvion makes highly advanced technology bikes, but with the advancements also come certain risks due to the promises we make. Thus, it is extremely crucial for our business to have the perfect insurance policies.

- Product liability insurance: Protects the company from legal issues and covers the damages caused to customers in case they get injured due to problems with the technology.
- Employer's liability insurance: It is a legal requirement for businesses in the UK that have working staff.
- Business contents insurance: If the business tools and equipment are stolen, damaged or destroyed, the costs of replacement or repair get covered.
- Stock insurance: If any stock stored in the company premises gets stolen or damaged, this policy covers those costs.

PRODUCT SAFETY

- Our products must comply with the UK Pedal Bicycle Safety Regulations (PSBR) act of 1983 (Juden, 2012).
- The bikes we manufacture must comply with the Consumer Product Safety Commission (CPSC) bicycle requirements guidance if we export the products to the United States of America.
- Our bikes should come with CE or UKCA safety compliance markings so that they can be sold in Europe or United Kingdom respectively.

LIABILITY

There are three types of liabilities we need to be aware of:

- Current liabilities (due in less than a year)
- Non-current liabilities (due in more than one year)
- Contingent liabilities (may or may not arise i.e., based on situational outcomes)

Finally, we must also be aware of employee liabilities that we could face if there is a breach of contract or a lawsuit against.

5. FINANCIAL REPORTING

5.1 DETAILED ANALYSIS OF FINANCES FOR YEARS 2, 4 AND 5

OVERALL REVIEW

The sales revenue generated by Skyvion followed a continuous upward trend (except for Y5Q1 where our sales and order count went down).

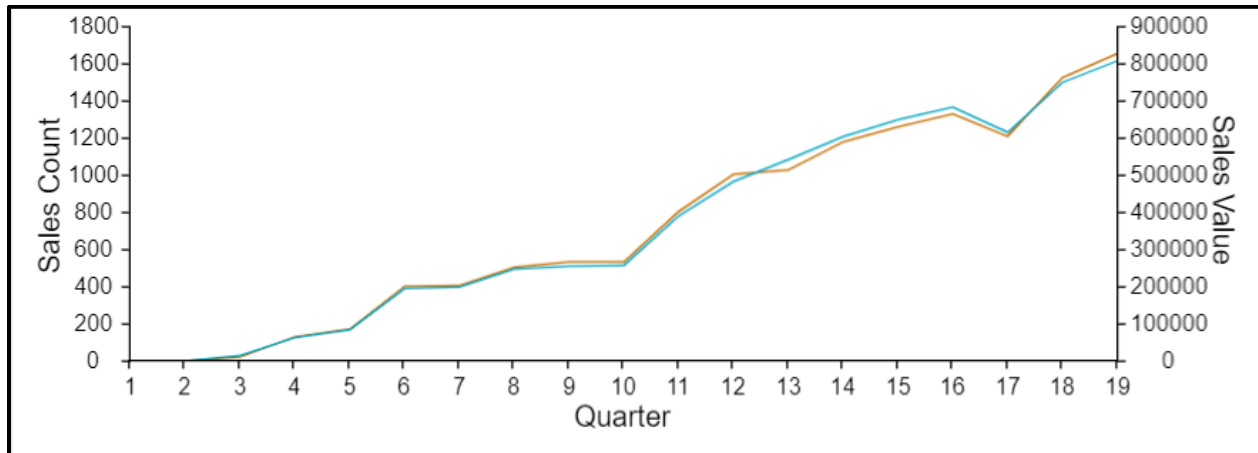


Figure 14: Sales count and value from Y1Q1 to Y5Q4

Target Date: End of Y2Q4	Level1	Level 2	Level 3	Result	Level reached
Y2 Average Net Profits	£ 10,000	£ 14,000	£ 18,000	£ 13,672	Level 1
Y2 Average Sales Count	160	240	350	368	Level 3
Y2Q4 Net Assets	£ 100,000	£ 150,000	£ 250,000	£ 142,000	Level 1

Table 6: Year 2 Targets vs Achieved Results

It is visible from table 6 that we were able to achieve the year 2 minimum targets for net profits and net assets, and we also exceeded the target for average sales count.

Target Date: End of Y4Q4	Level1	Level 2	Level 3	Result	Level reached
Y4 Average Net Profits	£ 35,000	£ 45,000	£ 65,000	£ 127,586.5	Level 3
Y4 Average Sales Count	400	650	800	1194	Level 3
Y4Q4 Net Assets	£ 350,000	£ 450,000	£ 625,000	£ 837,000	Level 3

Table 7: Year 4 Targets vs Achieved Results

Year 4 was a very successful year for the company as we surpassed all the targets by a huge margin and it is visible in table 7.

Target Date: End of Y5Q4	Level1	Level 2	Level 3	Result	Level reached
Y5 Average Net Profits	£ 120,000	£ 150,000	£ 175,000	£ 145,831.25	Level 1
Y5 Average Sales Count	1000	1250	1400	1541	Level 3
Y5Q4 Net Assets	£ 800,000	£ 1,000,000	£ 1,200,000	£ 1,410,000	Level 3

Table 8: Year 5 Targets vs Achieved Results

Year 5 was also a good year for us as we crossed the minimum target for net profits and surpassed the level 3 targets for average sales count as well net assets. Our profit went down in Y5Q1 by £87.3K which is why our average net profits did not exceed level 3.

BALANCE SHEET

	Year 1	Year 2	Year 3	Year 4	Year 5
Equipment	£ 43,255.00	£ 216,541.00	£ 324,393.00	£ 441,358.00	£ 1,468,742.00
FIXED ASSETS	£ 43,255.00	£ 216,541.00	£ 324,393.00	£ 441,358.00	£ 1,468,742.00
	£ -	£ -	£ -	£ -	£ -
Debtors	£ 13,127.00	£ 266,910.00	£ 628,023.00	£ 1,005,142.00	£ 1,374,892.00
Cash	£ 770,595.00	£ 332,134.00	£ 471,341.00	£ 1,518,772.00	£ 2,194,578.00
Stock	£ 23,311.00	£ 28,991.00	£ 10,800.00	£ 166,347.00	£ 175,797.00
CURRENT ASSETS	£ 807,032.00	£ 628,034.00	£ 1,110,163.00	£ 2,690,260.00	£ 3,745,267.00
	£ -	£ -	£ -	£ -	£ -
TOTAL ASSETS	£ 850,288.00	£ 844,574.00	£ 1,434,558.00	£ 3,131,619.00	£ 5,214,009.00
	£ -	£ -	£ -	£ -	£ -
Creditors	£ 22,149.00	£ 141,934.00	£ 264,124.00	£ 482,777.00	£ 574,631.00
CURRENT LIABILITIES	£ 22,149.00	£ 141,934.00	£ 264,124.00	£ 482,777.00	£ 574,631.00
	£ -	£ -	£ -	£ -	£ -
Loans	£ 357,103.00	£ 284,764.00	£ 207,193.00	£ 124,016.00	£ 34,826.00
Shareholder Equity	£ 472,004.00	£ 423,557.00	£ 979,249.00	£ 2,559,122.00	£ 4,657,976.00
LONG TERM LIABILITIES	£ 357,103.00	£ 284,764.00	£ 207,193.00	£ 124,016.00	£ 34,826.00
	£ -	£ -	£ -	£ -	£ -
TOTAL LIABILITIES	£ 379,251.00	£ 426,697.00	£ 471,319.00	£ 606,793.00	£ 609,457.00

Figure 15: Balance Sheet Analysis

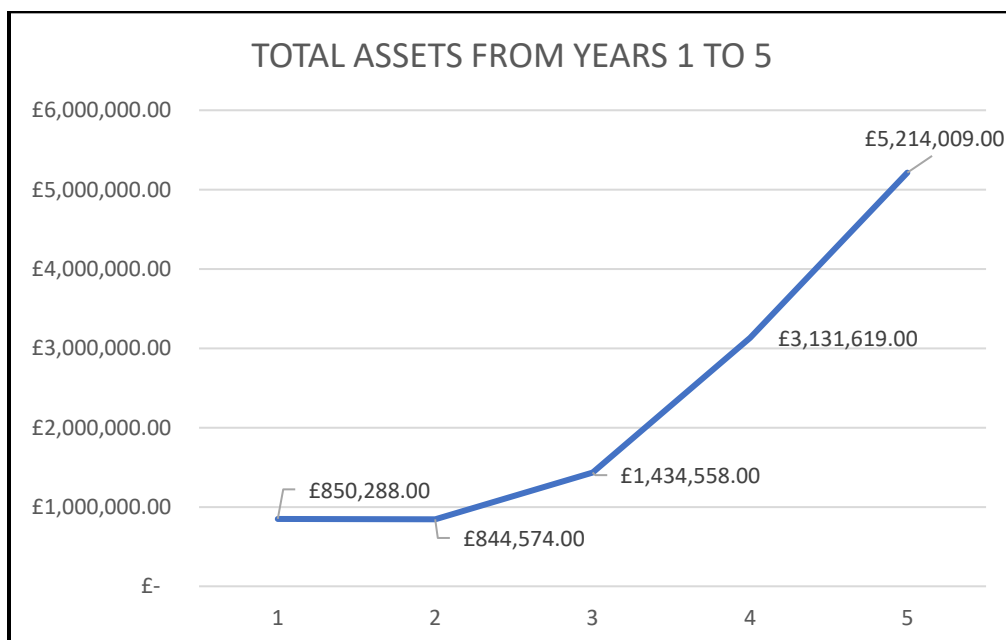


Figure 16: Total assets from Y1 to Y5

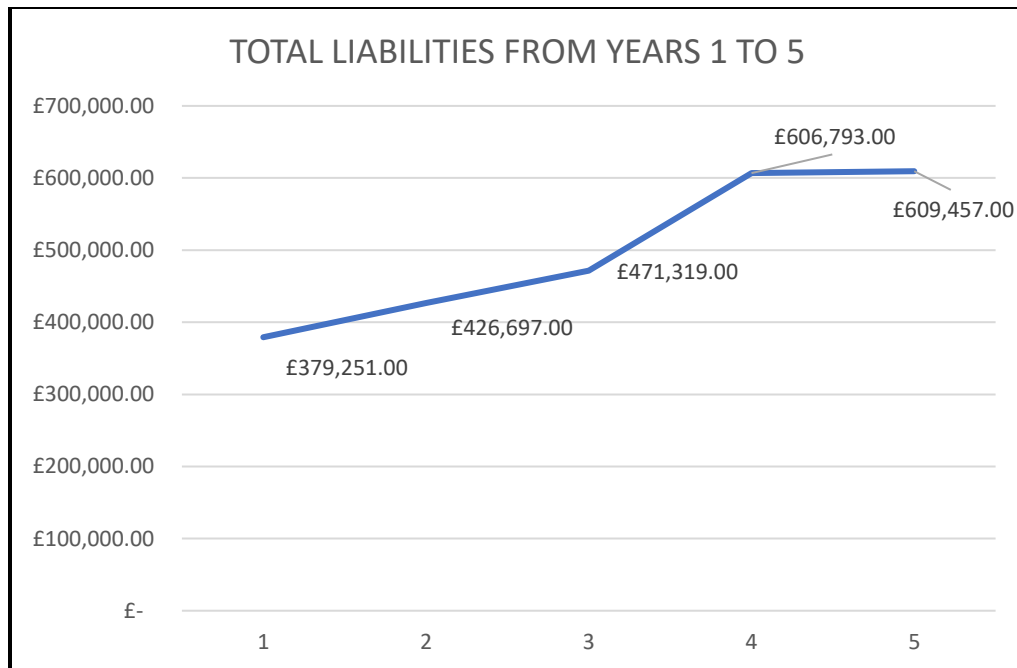


Figure 17: Total Liabilities from Y1 to Y5

PROFIT AND LOSS

	Year 1	Year 2	Year 3	Year 4	Year 5	Variance (Y5-Y4)
Sales	£ 76,651.00	£ 720,765.00	£ 1,378,621.00	£ 2,466,448.00	£ 3,038,583.00	£ 572,135.00
Cost of Sales	£ 26,554.00	£ 260,491.00	£ 505,052.00	£ 902,664.00	£ 1,165,563.00	£ 262,899.00
Gross Profit	£ 50,097.00	£ 460,276.00	£ 873,570.00	£ 1,563,784.00	£ 1,873,020.00	£ 309,236.00
	£ -	£ -	£ -	£ -	£ -	£ -
Interest Received	£ 6,041.00	£ 2,108.00	£ 2,395.00	£ 8,638.00	£ 13,756.00	£ 5,118.00
Other Income	-£ 44.00	-£ 15.00	£ -	-£ 16.00	-£ 35,610.00	-£ 35,594.00
	£ -	£ -	£ -	£ -	£ -	£ -
Total Income	£ 82,647.00	£ 722,857.00	£ 1,381,017.00	£ 2,475,069.00	£ 3,016,727.00	£ 541,658.00
	£ -	£ -	£ -	£ -	£ -	£ -
Organisation	£ 22,295.00	£ 53,880.00	£ 98,357.00	£ 134,435.00	£ 267,127.00	£ 132,692.00
Research and Development	£ 17,280.00	£ 27,076.00	£ 42,960.00	£ 59,940.00	£ 61,220.00	£ 1,280.00
Operations	£ 35,682.00	£ 235,400.00	£ 437,502.00	£ 743,752.00	£ 709,277.00	-£ 34,475.00
Sales and Marketing	£ 58,324.00	£ 80,725.00	£ 92,761.00	£ 110,690.00	£ 192,238.00	£ 81,548.00
Interest	£ 6,737.00	£ 5,200.00	£ 3,859.00	£ 2,419.00	£ 877.00	-£ 1,542.00
Depreciation	£ 1,097.00	£ 5,400.00	£ 8,017.00	£ 10,823.00	£ 37,101.00	£ 26,278.00
	£ -	£ -	£ -	£ -	£ -	£ -
Total Expenses	£ 141,414.00	£ 407,680.00	£ 683,456.00	£ 1,062,059.00	£ 1,267,840.00	£ 205,781.00
	£ -	£ -	£ -	£ -	£ -	£ -
Net Profit	-£ 85,320.00	£ 54,688.00	£ 192,507.00	£ 510,346.00	£ 583,325.00	£ 72,979.00

Figure 18: Profit and Loss statement from Y1 to Y5

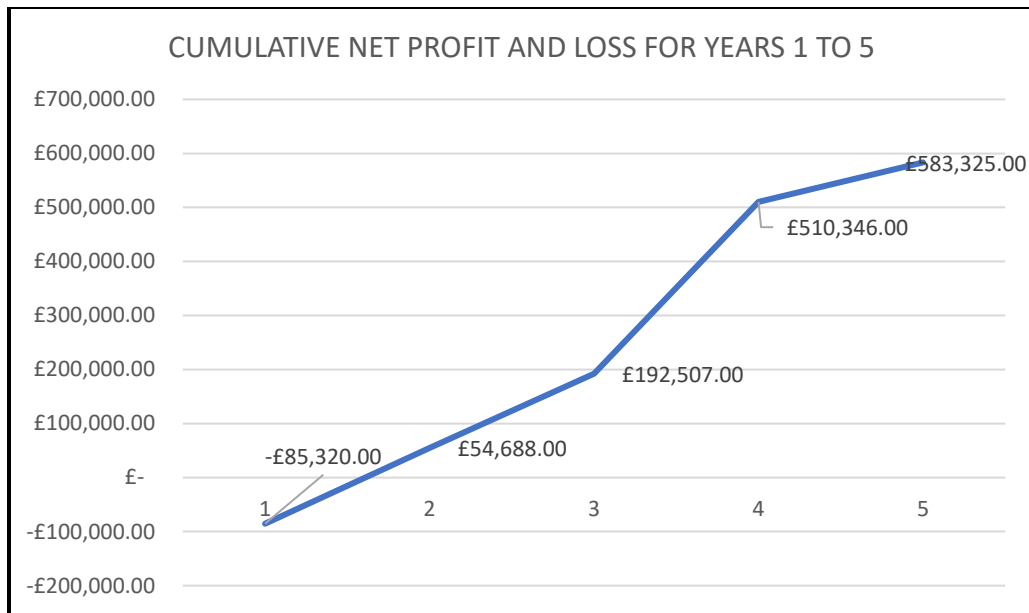


Figure 19: Cumulative net profit/loss for Y1 to Y5

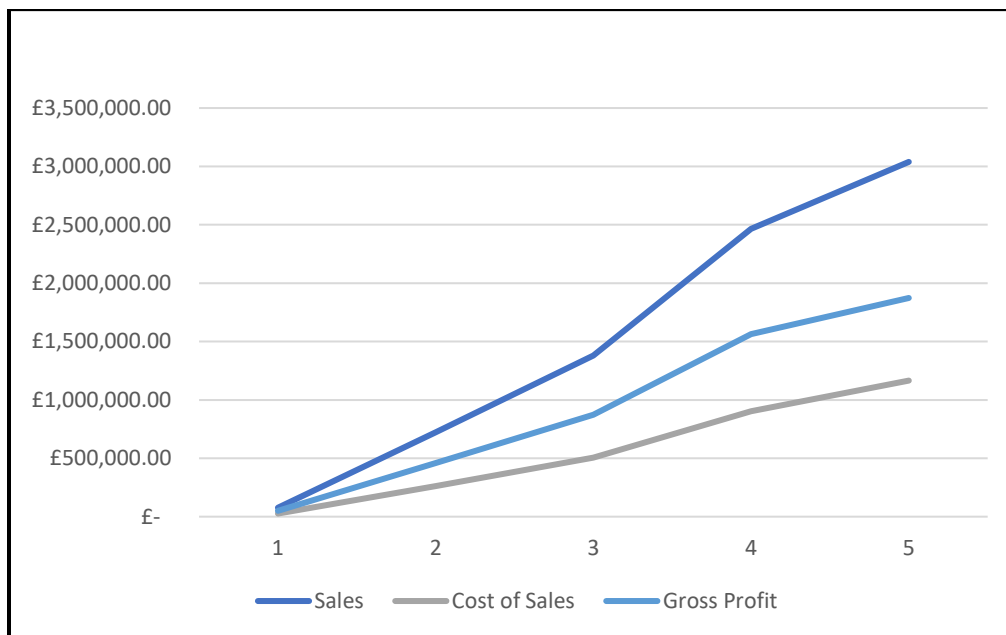
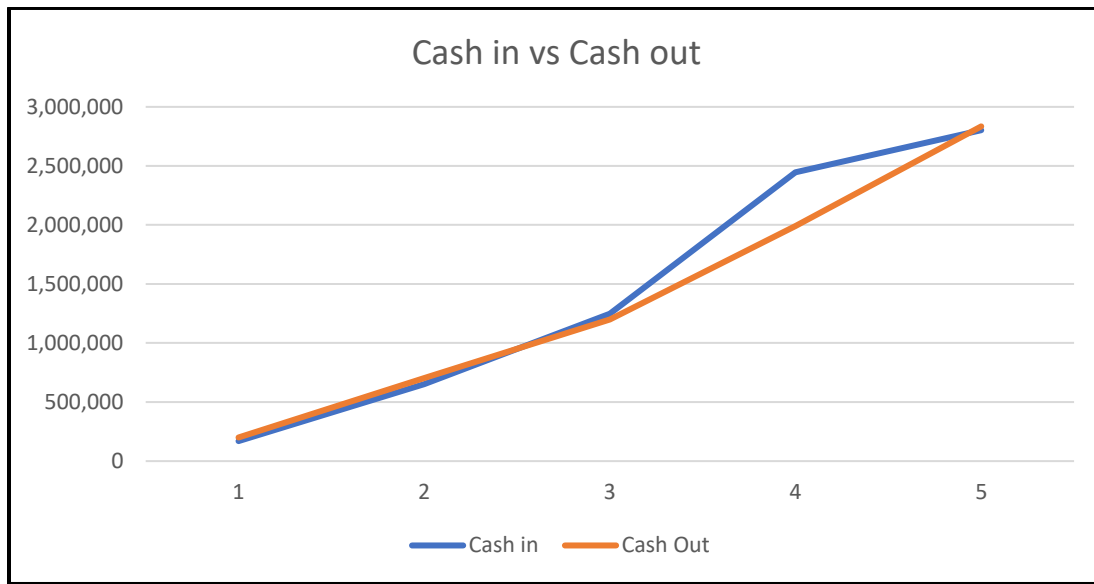
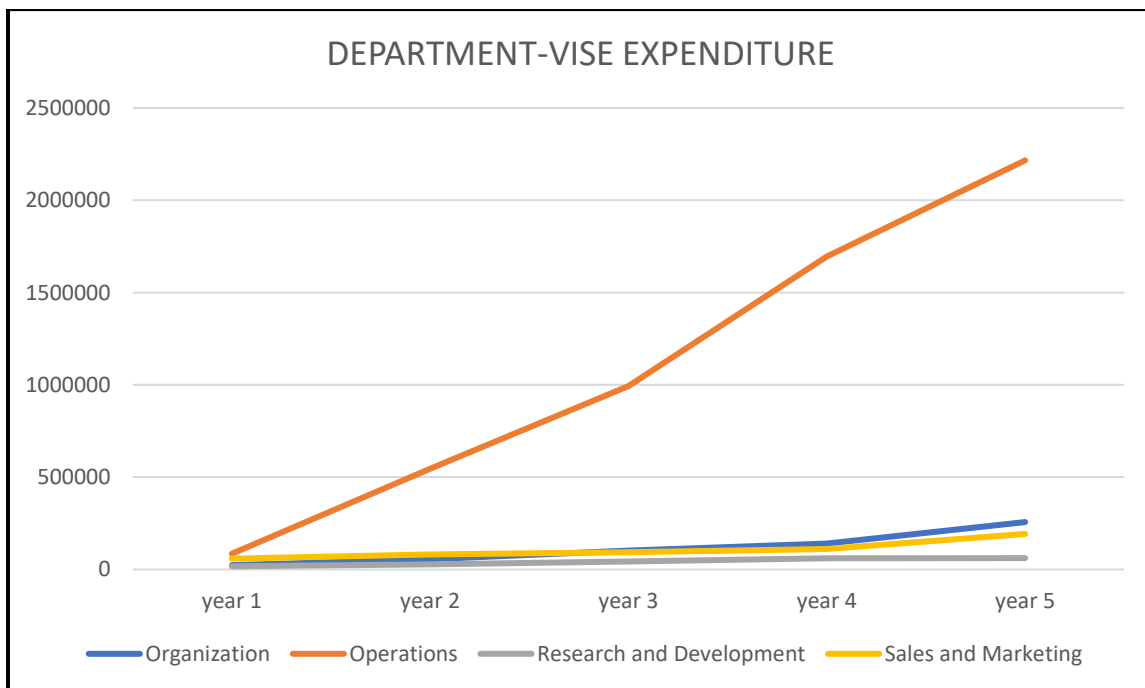


Figure 20: Sales and Gross profit vs Cost of Sales

Through the above figures, it is visible that cash generated by the company through sales and profit is greater than the cost required to sell the products.

CASHFLOW*Figure 21: Cash in vs Cash out**Figure 22: Department-wise expenses (Cash out)*

From figure 21, we can see that the overall cash in is greater than the cash out but that is only because Y4 had a surge in cashflow. Figure 22 shows the company's department-wise expenses i.e., the cash out. Operations requires the most cash as it is the department where production and purchasing occurs. This increases the fixed cost and variable cost respectively.

5.2 OUR TARGETS

Our aim was to go beyond the level 3 targets for year 4 and 5. We managed to do so in year 4 but couldn't do the same in year 5 as we were able to clear only level 1 for net profits. Our profit went down in Y5Q1 by £87.3K and this brought down our overall profit for year 5. Had that been the same as Y5Q2 to Y5Q4, we would've achieved our targets.

5.3 STRATEGY

We borrowed crowd fundings worth £100,000 along with an overdraft of £34,000. This, along with the initial £175,000 made our funding sufficient enough to carry out market research and relocation for the first two quarters. Based on the research reports generated in the first quarter, we designed our first bike with competitive technology specifications. After the design was completed in Y1Q3, we branded our product as per our customer base and technology, increased promotions, added sales channels and then started with production. We had to relocate on a yearly basis so that we could gradually increase production every year. Along with the increased number of products, we had to constantly promote our brand in such a way that neither did our order counts exceed sales nor did we have extra products left in stock. This was the ideal solution but there were times when both of the above situations happened. Year 2 was a bit shaky for us because there was continuous fluctuation in the net profit throughout the four quarters, but we still managed to meet the minimum targets. Year 3 was a slow and steady increase for us in terms of sales, net profits and net assets because we were trying to follow the same strategy. The profit drastically declined in one of the quarters because we accidentally changed one of the sales channels to 0 visits and that took away all the outlets of that channel from us. Year 4 was our strongest in terms of increase in percentage of profit, sales, assets. This is because we designed our second product in the last quarter of year 3 and started production right in Y4Q1. We surpassed all the targets in year 4 and our production, pricing and promotion strategies were working well. In Y5Q1, we increased production, sales channel, promotion and discount, but still made £87K lesser profit than the previous quarter. This led us to think of a mini bounce back strategy. We changed the base price of our second product from £825 to £800 and provided a discount of 12% thus bringing down the effective price to £704. This strategy worked well for us and brought us our order count as well as sales count back. Had it not been for the drop in profit in Y5Q1, we would have not been able to think of a turnaround strategy for the company. But on the other hand, if we would've reduced the base price to £800 in Y5Q1, then we would've surpassed all the level 3 targets. Skyvion was successful in running the company for five years in the first attempt because of the strategies that we used.

To summarize, our strategy was to constantly increase production, promotion and sales channel in such a way that our order count and sales count always matched to yield profitable outcomes.

6. PROJECT MANAGEMENT

6.1 GROWTH SCENARIO (WEEKS 2 TO 5)

- Week 2 – Each team members' role in the company was decided. We had an in-person meeting where everyone chose their roles based on their strengths. Based on everyone's roles, weekly targets were set for the team by the CEO. Each team mate was responsible for their own department and the first target was to understand SimVenture Evolution software and come up with at least two names for our company.
- Week 3 – The name Skyvion was formed by combining two suggestions; Skywing and Avion, and was unanimously decided by the team. Everyone in the team had started to get an understanding of the basics of SimVenture.
- Week 4 – The team contributed in making the company logo, continued working on SimVenture and understanding the impacts of each decision.
- Week 5 – Most productive week in the growth scenario. We ran the simulations from year 4 quarter 1 to year 5 quarter 4 by trying out a number of scenarios. Initially, we did not make a new product and just continued the production of the first bike. That wasn't very profitable. Thus, our R&D director designed a new product, but not based on the competition that was given in the software. This ended up massively increasing our fixed costs because the number of our components required for one bike was very high. Finally, we designed an ideal product as per the market competition and segment. We relocated to larger premises, increased production and promoted our company more because of the new product being launched. We increased production every quarter to match our order count and adjusted our promotion strategies to maintain order and sales count equally. We crossed the level 1 target for average net profit and level 3 targets for both, average sales and net assets.

6.2 COMPETITION (WEEK 6)

We took a few decisions which were unfavorable for the company and thus ended up getting our company closed. There were key learnings in this phase that prepared us for the SEED scenario. We did not timely relocate to larger premises and this led to a restraint in our production and space for employees. By the time we realized that our financial situation was not good, it got a bit too late. Before our company got shut down, we were slowly gaining profits but they weren't sufficient enough. Team members contributed during the meetings.

6.3 SEED SCENARIO (WEEKS 7 TO 10)

- Week 7 – The CEO was unable to conduct a meeting due to health and personal issues.
- Week 8 – Ran the simulations from year 1 quarter 1 to year 5 quarter 4 successfully in the first attempt. Based on the outcomes from the competition scenario, we relocated timely kept marketing strategies and production of bikes in such a way that the sales and order counts matched most of the time. Team mates contributed in borrowing funds, locating to larger premises, creating the product, branding it, marketing the company, increasing sales channels and increase production. The team decided on the part they wanted to present for the business pitch.

- Week 9 – Online practice session before the presentation helped us time ourselves and prepare. Distribution of work for the business plan was carried out in a team meeting where team mates chose the sections that they were responsible for and comfortable with. Created the Instagram account for promotion.
- Week 10 – The team worked on the report and sent drafts to the CEO for proofreading and editing.

7. RISK ASSESSMENT

The major competitive risks to our business can be analyzed using Porter's five forces.

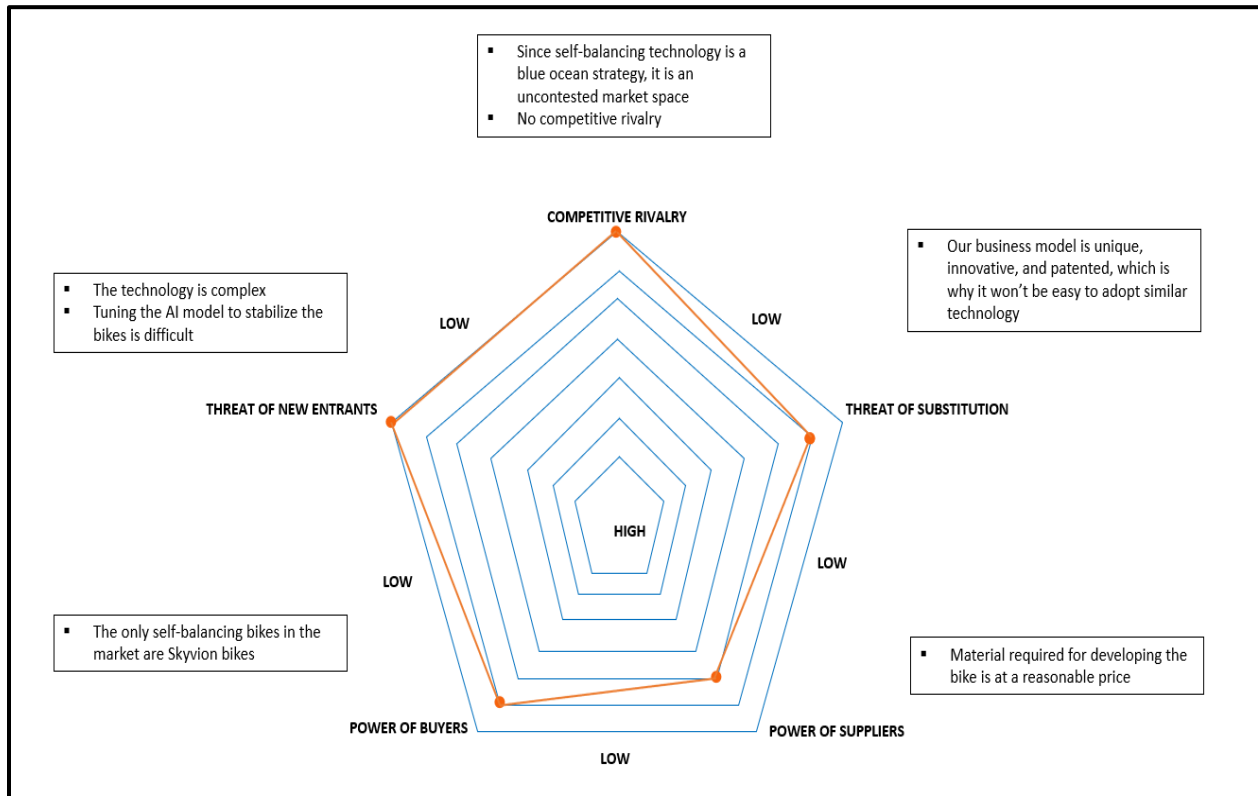


Figure 23: Porter's five forces for analyzing external competitive threats

- **Hardware failure** – Our main technology relies on our AI model which is interlinked with electronic circuitry inside the frame of the bike. If it fails, it means that the self-balancing technology fails.
- **Customer safety** – With the self-balancing technology in proper working conditions, the only safety risk is of an accident under unimaginable circumstances. But when the technology doesn't function properly due to a short circuit or a dead battery, it's basically a simple electric bike which makes customers more prone to losing their balance.
- **Preference of electric scooters over road bikes** – Electric scooters are much faster and convenient. As long as the motor drives the pedals of a road bike, the speed limit is 15.5 mph in the UK, otherwise there is no speed limit to regular bike riding.
- **Maintenance and repair costs** – Electric bikes have very high maintenance costs, which make it less appealing to customers. Maintaining a bike with such complex technology could be challenging for a lot of customers.
- **Preference towards classic road bikes** – Fitness enthusiasts would prefer manual bikes over autonomous, self-balancing bikes.
- **Legal risks** – If the product technology does not function properly and customers end up getting injured due to the failed technology, the company may face a lawsuit that could prove fatal to the future of the company.

8. ROADMAP

8.1 BUSINESS ROADMAP FOR THE NEXT 6 YEARS

TARGETS	2023	2024	2025	2026	2027	2028
PRODUCT LAUNCH	Skyvion Halos (Road Racing)		Skyvion Nacreous (Road Fitness)		Skyvion Cloud (Road Commute)	
SALES	Annual sales of at least 3200 bikes					
	Annual sales of at least 4750 bikes					
	Annual sales of at least 7500 bikes					
TECHNOLOGY	Improvement of self-balancing and autonomous riding technology – 90 kg weight load			Improvement of self-balancing and autonomous riding technology – 100 kg weight load		
	Two-factor anti-theft features					
	Smart device enabled autonomous cycling					
MARKET SHARE	30%		50% market share		65% market share	
	Expansion in foreign markets					
FINANCIAL TARGETS	Average Net Profits – £220,000	Average Net Profits – £340,000	Average Net Profits – £470,000	Average Net Profits – £650,000	Average Net Profits – £900,000	Average Net Profits – £1,400,000
	Net Assets – £2,020,000	Net Assets – £2,750,000	Net Assets – £3,500,000	Net Assets – £4,200,000	Net Assets – £5,300,000	Net Assets – £6,500,000

Figure 24: Skyvion Roadmap for 2028

8.2 GROWTH AND EXPANSION STRATEGIES

Our aim is to be the market leader not just in the electric bike market, but the hybrid market as well. For reaching such heights, we have a few growth strategies.

A. Offensive

- Bypass attack – Our self-balancing technology is the only one in the market. We look to expand our bikes into the foreign market as well from 2026. This way we bypass all the competitors in the electric bike market.
- Encirclement attack – By launching new bikes in different sub-segments, we would be capturing the entire market and its competitors with our self-balancing bikes.

B. Defensive

- Flank defense – Our technology needs to be developed perfectly to such an extent that there could never be a product liability issue with our company. Perfecting this complex technology is one of our weak spots but if done successfully, there would be no threat of new entrants or substitutions.
- Counter defense – If there is a competitor in this market that tries to provide bikes with similar functionalities, we will announce the launch of our high-security bikes with the new anti-theft features. This will increase pressure on the competitor and put us in the driving seat again.

9. CONCLUSIONS AND RECOMMENDATIONS

Loss of balance while riding bikes has been a major issue ever since bicycles were invented. We at Skyvion pvt ltd. saw the opportunity and became the first company to provide self-balancing technology to their customers. We launched two products; Lightning and Aurora, with the self-balancing and autonomous riding features. Since our bikes are technologically advanced, we chose our major customer base as the young population. By using competitive pricing and discount strategies and promotion strategies, we were able to profit highly from our first two products.

We, at Skyvion promote sustainability. We use aluminium and titanium as the main component of our bikes i.e., 100% recyclable material. Aluminium can be indefinitely recycled and the process for both, titanium and aluminium are completely environment-friendly.

We have always maintained a good to excellent sustainability ratings for our manufacturing process and it can be seen from figure 25. We still have room for improvement in increasing the sustainability for purchasing and location and it can be observed from figures 26 and 27 that starting Y6, we should introduce some changes.

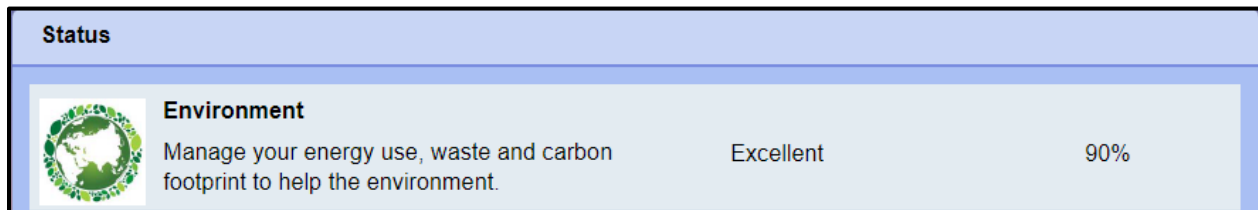


Figure 25: Skyvion Organization Sustainability

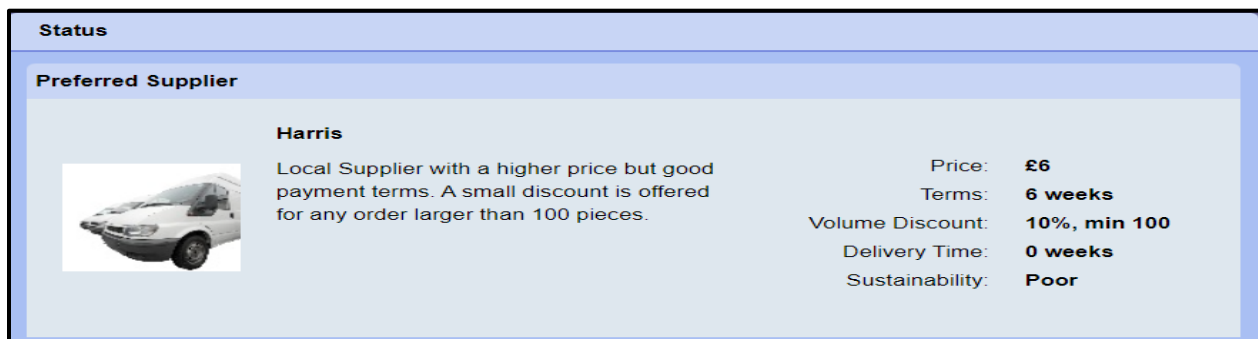


Figure 26: Purchasing sustainability



Figure 27: Location sustainability

Along with the continuous improvements in the original features, our future plans are to incorporate extensive security features that alert customers if there are suspicious activities happening in the vicinity of the bike.

Skyvion is a promising company in terms of financial growth and product features and in the coming decade, we are going to expand our business overseas. This will greatly benefit our shareholders.

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APPENDIX

PROJECT MANAGEMENT REPORTS

Project Management report for Week 2:

Date: 21/01/22	Time: 14:07	Venue: Student accommodation common room	Meeting N°: 1
Team identity: Group 5			
Present: <i>ap2192, jl4811, tk986, xm950, yl5840, ak2004</i>			
Apologies for absence: N.A.			
Meeting N° 1 minutes accurate: 65	Proposed: <i>xm950</i>		
Matters arising: <i>N.A.</i>			
Meeting N° YY notes: N.A.			
Any other business: <i>Team lunch before meeting</i>			
Date, Time and Venue of next meeting: 26/01/22, Wednesday; 10:15 am; University Library			
Meeting closed at: 15:12			
Progress report from each team member			
Name of Team member	Progress notes		
Xinyu Mao	Sales and Marketing Director		
Yuechen Liu	R & D Director		
Jingjin Li	Organizational Director		
Tushar Khandelwal	Financial Director		
Akash Pawar	Operations Director		
Antariksh Kudal	CEO		

Team leader's overall summary on group progress for the week:**Agenda -**

- 1. Role allocation based on strengths**
- 2. Targets for next week**

Project Management report for Week 3:

Date: 26/01/22	Time: 10:15	Venue: Electronics building	Meeting N ^o : 2
Team identity: Group 5			
Present: <i>ap2192 (online), jl4811, tk986 (online), xm950, yl5840, ak2004</i>			
Apologies for absence: N.A.			
Meeting N ^o 2 minutes accurate: 25	Proposed: <i>ak2004</i>		
Matters arising: <i>Discussion of company name</i>			
Meeting N ^o 2 notes: Roles assigned, tasks given for week 3			
Any other business: <i>N.A.</i>			
Date, Time and Venue of next meeting: 3/02/22, Thursday; 12:15; University Library (tentative)			
Meeting closed at: 10:40			
Progress report from each team member			
Name of Team member	Progress notes		
Xinyu Mao	Participate in the company name discussion, propose a total of 3 names, and give the name meaning. Familiar with simventure software. Read Bike material. Think about marketing strategies.		
Yuechen Liu	Participate in the discussion of establishing the name of company and propose 3 name:vent, Anemoi, hurricane. Do research about the bike market and the material of bike manufacturing, suggest that use polymers to replace steel to manufacture bike.		
Jingjin Li	Participated in the company name discussion, propose a total of 3 names: Skywing, pioneer, Green and give the name meaning. And familiar with simventure software.		
Tushar Khandelwal	Skywing Bikes, Avion Bikes, Skyvion Bikes, Wingion Bikes These four names were finalised after major discussion among team members. 12-14 names came out with different perspectives and everyone explained why they wanted to name the company by their chosen name.		
Akash Pawar	We had a discussion on the name for our company in which lots of names came up from the discussion: skywing bikes, Avion bikes, wingion bikes, skyvion bikes were the names finalised from which we have to decide and finalise a name for the company.		
Antariksh Kudal	Came up with a few names for the company as per agenda.		

Team leader's overall summary on group progress for the week 3:

Each member came up with potential names for the company and read about the road bike market as per the agenda. The team is on track as per targets set in previous weeks.

Project Management report for Week 4:

Date: 03/02/22	Time: 12:15	Venue: Alcuin College	Meeting N°: 3
Team identity: Group 5			
Present: <i>ap2192, jl4811, tk986 (online), xm950, yl5840, ak2004</i>			
Apologies for absence: N.A.			
Meeting N° 3 minutes accurate: 75	Proposed: <i>ak2004</i>		
Matters arising: <i>N.A.</i>			
Meeting N° 3 notes: Logo created, Market segmentation was decided, trial and error of different scenarios assigned for the rest of the week with a target of at least 3 profitable situations.			
Any other business: <i>N.A.</i>			
Date, Time and Venue of next meeting: 7/02/22, Thursday; 11:15; University Library (tentative)			
Meeting closed at: 13:30			
Progress report from each team member			
Name of Team member	Progress notes		
Xinyu Mao	Design the logo,including primary font and color selection. Share market research reports, including segmented users and fields, for team members to choose appropriate product segments. Adjust the market module in the system, increase the number of employees and infrastructure, and adjust the sales channels to promote profitability.		
Yuechen Liu	Participated in the work of logo design, establishing the meaning of logo and selecting the color and appearance of logo. Understand the customer segmentation and design the products which are aiming at particular customer group based on the segmentation and market situation. Intended to reach a balance between cost and product's quality by adjusting the R&D strategy.		
Jingjin Li	Participated in the design of the logo and was involved in discussing target customer positioning, learnt the working of the software.		
Tushar Khandelwal	Decided logo design worked on growth scenario and worked together on growth scenario. Also run the quarter and changed some of the financial aspect of the business		

Akash Pawar	In this week we finalised our logo and got familiar to the simventure evolution by looking the guidance given in the simventure evolution. Started doing changes in the operation side to make the company grow.
Antariksh Kudal	Understood the working of different departments in the software as per targets assigned for week 4. Made a spreadsheet for the team to note down their changes for each quarter.

Team leader's overall summary on group progress for the week 3:

Team members contributed in making the logo, deciding the customer segmentation based on the market research, learnt the working of the software, and are on track for next weeks target.

Project Management report for Week 5 (multiple meetings progress included):

Date: 07/02/22	Time: 11:15, 15:00	Venue: Library	Meeting N ^o : 4, 5 (online)
Team identity: Group 5			
Present: <i>tk986, xm950, yl5840, ak2004</i>			
Apologies for absence: Akash - working a morning shift, Jingjin - not well			
Meeting N ^o 4 , 5 minutes accurate: 75, 155	Proposed: <i>ak2004</i>		
Matters arising: <i>N.A.</i>			
Meeting N ^o 4, 5 notes: Ran quarters, made profit in multiple quarters, each team member understood their impact of individual decisions made. Designed a competitive product for the road commuting sub segment. Developed ideal pricing strategy, manufactured adequate products, relocated to bigger premises, invested hours in R&D constantly.			
Any other business: <i>N.A.</i>			
Date, Time and Venue of next meeting: 13/02/22, Thursday; 15:00; Online			
Meeting closed at: 12:30; 17:35			
Progress report from each team member			
Name of Team member	Progress notes		
Xinyu Mao	Combine market research data and user feedback as well as competitors' prices to formulate prices for newly developed products, set up marketing strategies and sales channels. Participate in group discussions, combine data from		

	other parts, and continuously adjust the parameters of the sales module until the company is profitable.
Yuechen Liu	Set up the data of resources part of R&D, deciding the quantity of equipments and employees and the budget. Establish the data of product technology in case to make the best design. Design the bicycle which target at students and young single workers.
Jingjin Li	Relocated from small rural premises to large rural premises to increase production to generate more profit.
Tushar Khandelwal	Kept the company's expenses in the budget which led to more profitable quarters.
Akash Pawar	Increased the production regularly as per demand and changed from basic automation to standard automation to save company hours.
Antariksh Kudal	Ran all quarters with the team from Y4Q1 to Y5Q4, crossed the Level 1 target for Average Net Profit and Net Assets, and crossed Level 3 target for Sales.

Team leader's overall summary on group progress for the week 5:

This week was the most productive for the team, we ran all quarters, understood the business, understood most of the impacts of each decision. We developed new products, generated regular profits, increased production, maintained company efficiency and budget, expanded to a larger premise, and met at least all the minimum company targets as mentioned in the briefing. Overall, a great week of efficiency for the team.

Project Management report for Week 6:

Date: 16/02/22	Time: 21:00, 21:00	Venue: Library	Meeting N°: 6(online), 7(online)
Team identity: Group 5			
Present: <i>tk986, xm950, yl5840, ak2004, ap2192, jl4811 (6), ak2004, ap2192 (7)</i>			
Apologies for absence: Not well			
Meeting N° 6, 7 minutes accurate: 65, 90	Proposed: <i>ak2004</i>		
Matters arising: <i>N.A.</i>			
Meeting N° 6, 7 notes: Competition week - Increased production gradually, increased promotion, work space was very less initially which caused problems for increasing production and resources until relocation to larger premises.			
Any other business: <i>N.A.</i>			
Date, Time and Venue of next meeting: 23/02/22 (tentative); 15:00; Library (tentative)			
Meeting closed at: 22:05; 22:30			

Progress report from each team member	
Name of Team member	Progress notes
Xinyu Mao	Complete the price strategy formulation of new products. Conduct competitive analysis, Consumer segments analysis, and formulate marketing strategies.
Yuechen Liu	Read the book ‘Revenue Growth Engine: How to Align Sales&Marketing to Accelerate Growth’ in order to better understand the generation of profit and intend to create a wiser business strategy.
Jingjin Li	This week I was involved in a meeting to discuss about competition, our attempt to turn the business around.
Tushar Khandelwal	Tried making profit out of a losing business got succeed in it but some criterias failed.
Akash Pawar	In this week we had a competition in which our company in Y4 Q4 was shut down by the bank because our company was underperforming in the market. From Y4 we had increase in the profit but our cash was decreasing.
Antariksh Kudal	Ran the quarters with present members, tried turning loss-making business into a profitable one.

Team leader’s overall summary on group progress for the week 6:

<p>In the competition week, our strategy failed because our company got shut down as it was underperforming in the market. We understood how important it is to relocate to a larger premises initially because there are less space constraints for resources. Due to not relocating in Y2Q1, our company’s production was restricted due to the number of employees and units that we could fit. Our team is now prepared for the SEED scenario.</p>
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Project Management report for Week 8:

Date: 01/03/22, 02/03/22	Time: 15:30, 15:00	Venue: Online	Meeting N°: 8(online), 9(online)
Team identity: Group 5			
Present: <i>tk986, xm950, yl5840, ak2004, ap2192, jl4811</i>			
Apologies for absence: N.A.			
Meeting N° 8, 9 minutes accurate: 240, 150	Proposed: <i>ak2004</i>		
Matters arising: <i>N.A.</i>			
Meeting N° 8, 9 notes: Ran the SEED scenario, discussed and distributed the PPT work.			
Any other business: <i>N.A.</i>			
Date, Time and Venue of next meeting: N.D.			
Meeting closed at: 19:30 (8), 17:30 (9)			
Progress report from each team member			
Name of Team member	Progress notes		
Xinyu Mao	Participate in the operation of simventure. Complete the market research section of the PPT.		
Yuechen Liu			
Jingjin Li	Ran the SEED scenario with the team online, explores the problems we have with cycling in general, and our solutions. Discussed the structure and division of labour for the PowerPoint.		
Tushar Khandelwal	Done with the seed scenario, Discussed the plot of ppt and divided the part for each member to complete.		
Akash Pawar			
Antariksh Kudal	Ran the SEED scenario with the team on call, distributed work for PPT		

Team leader's overall summary on group progress for the week 8:

Ran the SEED scenario successfully in the first attempt where we made a net profit of over 145,000 for Y5 (Level 1) and crossed level 3 for sales as well as net assets. The team provided inputs for R&D, and sales and marketing strategies. Distributed work for the PPT.