**FLYTER DRONE SERVICES**

**(UNBOX YOUR HAPPINESS)**

**ASSIGNMENT TAKEN:**

Assigned to prepare and present a complete business plan for Company's Board approval.

**TITLE**: Business Plan

**CASE UNDERSTANDING:**

Flyter Drone Services is primarily a courier company with its operations spread across India. It has multiple branches spread across the country and it provides delivery services to the most pin-codes. The company’s board has recently decided to enter into ‘Hyper-Local Delivery Space’ whereby the delivery would be made through the use of drones. The company has already secured all the necessary permissions for starting its venture of drone-based delivery. This is to present the business plan keeping in mind the Break-even of the Business, Brand Establishment and Innovation in processes and product to become Market leader.

**BCS SOLUTION SUMMARY:**

Our company is a courier company we have branches across India and reach to almost all pin codes across India. Company’s board decided to venture into ‘Hyper Local Delivery Space’ and they want to conduct deliveries through Drones. Our delivery will be done using a drone which will have Beyond Visual Line of Sight function.

Commercial drone delivery business is one of the many businesses that emerged with the advent of new technology. A commercial drone delivery business involves helping your clients deliver their packages or goods via drones to any destination of their choice. With this type of business, you can choose to own a store if you have the financial capacity to or you can choose to operate without a store. The bottom line is that you should know how to get goods delivered to your customers via drones. So, if you have decided to start a commercial drone delivery business, then you should ensure that you carry out feasibility studies and also market survey. Business plan is yet another very important business document that you should not take for granted when launching your own business.

**SOLUTION:**

**Business plan:** Scaling up the Drone-Based Delivery Business and value to end users, extension of company’s portfolio.

**Synopsis**:

1)Findings/Identify the problem found in the case

2)Summarize the major problems

3)Recommendations

4)Implementation

5)Conclusion

**Findings/Identify the problem:**

1)we have branches across India so we have to add pin codes of each and every city and village.

2)Need permission of DGCA

3)Trials

4)High purchase of LONG RANGE DRONES that’s why we are working on SHORT RANGE DRONES.

5)End-to-end drone applications

6)Beta Testing’s

7)Cargo deliveries for expansion of Drone Business.

8)Drone will save the Initial users time.

9)Extension of company’s current services portfolio.

10)Skilled employees, operators and engineers.

**SUMMARY**:

Our company is a courier company we have branches across India and reach to almost all pin codes across India. Company’s board decided to venture into ‘Hyper Local Delivery Space’ and they want to conduct deliveries through Drones. Our delivery will be done using a drone which will have Beyond Visual Line of Sight function.

Our product is a Air gadget so we need permission of DGCA (Director General of Civil Aviation), we get the all permissions and licenses which required for drone operations. All the trials regarding drone operations are conducted Beyond the Visual Line of Sight and deliveries conducted successfully. Beta testing has also been conducted successfully, our initial participants are few pharma chains, food delivery companies and Internal local deliveries. Our company intend End-to-end drone operations for scaling up the drone business. We are exploring more business areas for Cost-effective Cargo deliveries. Our initial users saving their time and having a safe and successful deliveries. This proven that, this case of Drone Business is best case for all the aspects regarding business.

This case is presenting the following points:

1)Break-Even operations within one year.

2)Brand Establishment.

3)Innovation in processes and product to become market leader.

**RECOMMENDATIONS**:

1. Our budget of Rs. 10 crore is not sufficient because the technology we are using is highly cost and the equipment’s we are using they are coming from the USA.
2. If we increase our budget we can use SHORT RANGE DRONES as well as LONG RANGE DRONES.
3. Our company is a courier company and short range drones capacity is of 10KG as compared to long range drones capacity is of 25KG so, if we work on long range drones we will get more profit.
4. We are employing 4 Qualified Drone Operators but we want more drone operators for making more drones because 3 and 4 drones are not sufficient for fulfilling customer’s needs.
5. Increase no. of drones.
6. We can work more for LONG RANGE DRONES.
7. We want more supporting staff, 4 people are not sufficient.

**OPERATION**:

1. There are 10 parts we are using for drones and they are, Quadcopter Frame, Motors, Electric Speed Controller (ESC), Flight Control/Board, Propellers, Radio Transmitter, Battery, Electronics, and Power Distribution Cables, Camera, Landing gear, First person Video, etc.
2. We can hire Drone Operation Management team with the help of we can Gather Insights to Grow our Program, our drones will fly safely and we can gain control of our fleet, pilots, data and equipment, we can get Real-Time Views of our location, Improving Response Times, and Situational Awareness.
3. We use Powerful Apps and Integrations with the help of we can amplify drone data with public apps, custom applications, and enterprise APIs that connect with our existing tools. There are several apps like PROCORE, AUTODESK, and AIRMAP, etc.
4. We can use Biometric system and password for our sellers.
5. We can use sensor camera to our drones with the help of it the delivery will get to the right person.
6. We want land or ground our landing our drones.
7. In rural areas we can not deliver our products through drones because of the illiterate people who don’t know about the drone system, so we can keep sellers who know about it, we will train them and we can give them job as a seller and with the help of them we can distribute our couriers in urban areas.

**Our delivery operations will be held by following steps:**

1. Our customer can order their product from our organized app.
2. The details of the order will be sent to our sellers.
3. Drones will reach to our sellers and there is a password for our sellers across India.
4. When our drone will reach to our seller a seller will give his biometric to our drone, if the biometrics are right then the drone will load all products to our seller.
5. Then the distributions of products will conduct by our seller.

**IMPLEMENTATION**:

Our Products and Services: Our company is a courier company. We are giving services to our customers by Drones. So, it is a Drone Delivery Services. We are in the commercial line of business to maximize profits and we are doing this business by permitted all government laws and rules and regulations. Our Initial participants are Food delivery companies, Few pharma chains and Internal local deliveries and looking forward to exploring more business areas for cost-effective cargo deliveries. This services is time saving services and this a feedback from our initial users. Our company wants to add more value to end users.

**Our Mission and Vision statement:**

* **Mission**: Our Mission is becoming a Market leader and to spread all over world.
* **Vision**: Our mission is to provide faster and reliable means of delivering parcels via drones. We want to build a commercial drone delivery services company that can favorably compete with leading brands in the commercial drone delivery services industry both in India and in other parts of the world.

**BUSINESS STRUCTURE:**

Our courier business is in across India. So, we are Choosing five metro cities for our Business headquarters and they are Bangalore, Chennai, Kolkata, Mumbai, Lucknow. There are many business structures for our drone business to operate under like sole proprietorship, partnership, limited liability company (LLC), but our structure will be LLC.

**JOB ROLES AND RESPONSIBILITIES :**

1. **LEADER:**

A. Influencing the behavior of people, Inter-personal process, Attainment of common organizational goals, Group process, Dependent on the situation. Importance like Initiating action, Providing Motivation, Providing Guidance, Creating Confidence, Building Work Environment, Co-ordination, Creating successors, Induces Change .

 B. The functions like recruitment, assessment, performance management, succession planning and career planning. Managing day-to day operations, planning, organizing, directing, controlling, implementing.

1. **HR MANAGER:**
2. Human Resource planning, Job analysis and design, Hiring candidates, Training and

development, Design Workplace Policies, Monitor Performance, Maintain Work Culture, Resolve Conflict.

1. Developing and implementing HR strategies and initiatives aligned with the overall business strategy
2. Bridging management and employee relations by addressing demands, grievances or other issues.
3. **WAREHOUSE MANAGER:**
4. Processing orders.
5. Operating mechanical and IT systems.
6. Liaising with transport companies ,suppliers and clients
7. Training, supervising and appraising staff
8. Maintaining statistical and financial records.
9. Devising rotes for staff.
10. **MARKETING MANAGER:**
11. Promotes business, services, products and brands.
12. Develop marketing and pricing strategies.
13. Oversee marketing department staff.
14. Manage marketing budget and analyze trends.
15. **INFORMATION TECHNOLOGY MANAGER:**
16. Maintain information technology strategies.
17. Manages staff
18. Researches and implements technological strategic solutions.
19. Accomplishes information technology staff results.
20. Running regular checks on network and data security
21. Identifying and acting on opportunities to improve and update software and systems.
22. Developing and implementing IT policy and best practice guides for the business.
23. **FINANCE MANAGER:**
24. Producing accurate financial reports and information.
25. Developing cash flow statements.
26. Projecting profit.
27. Managing credit.
28. Providing advice in making financial decisions.
29. Directing investments.
30. Making financial forecast.
31. Budgeting
32. Managing risk of financial loss.
33. **DRONE OPERATION MANAGER:**
34. Check drones before a flight to ensure safe and proper operation.
35. Analyze weather forecasts to ensure safe flights.
36. Document pre- and post- flight logs.
37. Monitor drones during flight.
38. Plan drone flight routes.
39. Navigate drones along designated paths.
40. Gather information or produce aerial photographs, as needed.
41. Perform equipment testing, troubleshooting, and maintenance.
42. **LOGISTICS MANAGER**:

A.Planning and managing logistics, warehouse, transportation and customer services.

B. Directing , optimizing and coordinating full order cycle.

C. Liaising and negotiating with suppliers, manufactures, consumers.

**SWOT ANALYSIS:**

1. **STRENGTH:**

The important advantage of using drones is its potential to decrease the travel time for diagnosis and treatment. Patients within a 4.6 square mile radius can be reached by a drone in a minute which is 10 times faster than conventional emergency services. Our drones are a cost-effective alternative to road transport in difficult terrains. A stimulation model has shown that the drones could increase vaccine availability and decrease the costs. Our drones can be operated in difficult areas, such as mountains, canyons, and snow covered ground.

1. **WEAKNESS**:

Operating drones requires trained staff and continuous monitoring from the ground. Lack of infrastructure like runway is a potential problem; however, it can be overcome by using drones having vertical take off and landings. Unlike commercial planes our drone cannot carry heavier delivery goods and long distances. The payload of a short range and long range drone varies between 10 to 25 KG. The smarter a drone, the weight, and its cost would increase. The battery life of drones is a concern, which can be addressed by using solar-powered drones. Drones can be programmed to a return-to-safe location if the battery is low or communication is lost. The tolerance of drones to adverse environmental conditions like wind and turbulence is not clear.

1. **OPPORTUNITIES**:
In India, there is a shortage of safe blood in hard-to-reach areas. Drones can be used to transport the blood, required for transfusion during surgery or delivery. This will avoid the need to set up blood storage facilities in rural health centers and save costs. Drones can deliver essential medicines like anti-venom for snake bite and dog bite, which will prevent deaths from these causes in rural areas. In disaster relief operations, drones can be employed in rescuing victims from collapsed buildings or in searching fishermen lost in the sea. One of the biggest challenges in organ transplantation is in moving the donated organ from the facility where it is harvested to a recipient admitted at another distant hospital in the shortest possible time. With the help of drones, we can transported organs in a short time bypassing the busy traffic.
2. **THREATS**:

In case of an accident, the drone may fall in the residential area or in the public places and injure the public. Hackers can hijack a drone using GPS jammers and loot the drone or its payload. Software’s resistant to hacking have to be developed. Drones may interfere with air traffic and cause confusion to commercial planes.

**MARKET ANALYSIS:**

The Drone package delivery market is projected to grow from USD 528 million in 2020 to USD 39,013 million by 2030, at a CAGR of 53.8% from 2020 to 2030. Growing demand for fast delivery, rising amendments in regulatory frameworks to encourage drone package delivery, and increasing demand for lowering carbon emission are some of the factors fueling the growth of the market. Companies operating in the logistics and transportation, retail, healthcare, agriculture sectors are making efforts to integrate drone delivery into their business models for the smooth and successful execution of same-day delivery of packages. Technologies help in carrying out drone package delivery operations autonomously and safely, thereby contributing to their increased adoption in the drone delivery ecosystem.

The most need demand increase of drone delivery is in COVID 19. Aerial delivery drones were widely used by law enforcement agencies, healthcare service providers, quick service restaurants, logistics companies, and various e-commerce companies.

**Market Dynamics:**

1. Increasing demand for quick, instant, same day delivery, and emergency supplies
2. High cost of infrastructure
3. Increasing private investments I drone industry
4. Data security breaches and trafficking using aerial delivery drones.
5. The service segment is projected to lead the drone package delivery market during forecast period.

**COMPETITION**:

The direct competition with other courier companies, food companies, pharmaceuticals companies.

**Target Market**

Potential customers in the target market can be divided into businesses and individual customers. The reason is that the drone industry was primarily oriented to the business-to-business market. Today, this market is more customer-oriented than previously .Potential individual customers are young males aged 22-35 years. We are aware that commercial drone delivery business is pretty much green and would require innovative marketing approaches. Our target market cuts across hospitals that need delicate blood samples or medicines, and food companies.

**MARKETING STRATEGIES and PRODUCT STRATEGIES:**

In essence, our source of income will be the delivery of medicines and vaccines, and retrieving medical samples, into and out of remote or otherwise inaccessible regions and transporting packages, machine components, food or other goods.

**PROMOTION STRATEGY**

The promotion campaign will include advertisements on the Internet, using cookies to follow the potential customer’s interests, and locating ads on the websites about film production, home film production, e-commerce, and online stores. The social media are also planned to be used in promoting drones while locating ads in web communities. The advertisements are also provided in specialized magazines and journals.

Place adverts on community based newspapers, radio and TV stations Encourage the use of word of mouth publicity from our loyal customers Leverage on the internet and social media platforms like YouTube, Instagram, Facebook, Twitter, LinkedIn, Snapchat, Google+ and other platforms to promote our business.

**PRICE STRATEGY:**

we will keep the prices of our services below the average market rate for all of our customers by keeping our overhead low and by collecting payment in advance from corporate organizations who would steadily bring in loads of parcels to be delivered via drones to their large clientele base. In addition, we will also offer special discounted rates to all our customers at regular intervals.

**Payment Options**

The payment policy adopted by Flyter Drone Delivery Services, LLC is all inclusive because we are quite aware that different customers prefer different payment options them but at the same time, we will ensure that we abide by the financial rules and regulation of the United States of America.

Here are the payment options that Flyter Drone Delivery Services, LLC will make available to her clients;

* Payment via bank transfer
* Payment with cash
* Payment via credit cards/Point of Sale Machines
* Payment via POS machines
* Payment via online bank transfer
* Payment via Check
* Payment via bank draft

In view of the above, we have chosen banking platforms that will enable our client make payment for our services without any stress on their part. Our bank account numbers will be made available on our website and promotional materials to clients who may want to deposit cash or make online transfer for our services.

**CONCLUSION**:

From above business case it is concluded that our break even point is 0.5626920158 and brand establishment is given properly and by this we can concluded that our services will become market leader. This venture has a huge growth potential to generate revenue and increase profitability in the coming years. Delivery drones are arguably one of the most important and useful technological advances humanity has made. They aren't only online shopping delivery drones. drones do much more than just deliver amazon packages, they can deliver other goods, save people in danger, monitor damage and large gatherings, as well as support in the execution of rescue missions. Delivery is a big part of practical drone usage, but drones are capable of many more complicated tasks, all of which affect everyday life. So our company has tried their best to reach out to our customers and provide them the best , smooth and fastest delivery services.

 LEADER: VINAYA GOVIND JOSHI

 ( TEAM: MARS )