

Business Plan Report

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Executive Summary

It has been seen that the business idea is related to the drone-based medicine delivery service in the UK market. It has been seen that the business will implement effective drone technologies along with the incorporation of AI based automation systems to address the emergency medical needs of the people all over the UK. The company will follow an effective price leadership strategy and digital marketing strategies to enhance its consumer demand. Along with this, the proposed business will also collaborate with large medicine suppliers of the UK to enhance its quality of the services.

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Introduction

Emergency medical needs are one of the most effective factors that lead to the deaths of thousands of people all over the world. It can be seen that in majority of the cases, the inability of the medical access to the people leads to severe health conditions. Such emergency needs may include accidents, cardiac arrests, strokes as well as vaccination services. Apart from classic medical services including hospitals and medical units, digital services such as telemedicine and app based medical advice play a vital role in providing immediate medical aid to the people. However, in the above-mentioned cases, although medical advice is possible, providing physical care is not. Therefore, the implementation of innovative drone-based medicine services can address the needs of the people in emergency as well as in the rural areas of the country. Therefore, the report aims to analyse the mentioned business details along with figuring out the macro environmental factors, competitors, and pricing strategies of the business idea.

Business Detail

It can be seen that drone base medicine service is one of the most effective modern technologies. The implementation of the modern technology can help the concerned business idea to foster within the healthcare industry of the UK. It has been seen that drone-based delivery has been a modern trend in the UK e-commerce industry. Large e-commerce organisations like Amazon have implemented this technology to enhance the quality of the delivery services in any location. However, the implementation of similar technologies in medical services is limited within the UK. The business idea will implement drone services controlled by technology experts to deliver medicines in immediate effect. The pricing strategy of the company will eventually include the cost of the medicine under the regulation of the UK government as well as the delivery fees based on the distance. However, the primary aim is not to have a private inventory of medicines. Instead of that the idea is to make effective partnerships with the large medicine dealers and shops of the UK. While ordering medicines the users will be able to choose from a range of shops from where our drones will deliver the medicine directly to the customers. Therefore, it has been observed that an incorporation of B2B and B2C business strategies will be implemented within the new business idea.

Macro-Environmental Overview

PESTLE Analysis

Political	Economic	Social	Technological	Environmental	Legal
Government regulations on drones	Climate affects drone operation	Increasing elderly population	Use of technology for efficiency	Environmentally friendly delivery	Legal permissions for drone delivery
Privacy concerns	High level of inflation	Rising healthcare costs	Labour to operate drones	Less road congestion	Drone safety laws
Funding needs	Higher Competition	Customer convenience	Artificial intelligence	Carbon footprint	Insurance requirements
Political support	Economic growth	Healthcare access	Automation	Noise reduction	Regulatory compliance

Current Trends

During the last few years, it has been seen that there is a significant growth in the implementation of technology in the healthcare industry of the UK. For example, the concept of telehealth received a significant focus during the COVID 19 pandemic which reduces the need of face-to-face appointments with healthcare professionals. On the other hand, other technologies such as virtual healthcare models, remote appointments and home monitoring are also getting increased demand in the UK. Therefore, following the above trend it can be said that drone-based medicine services have the potential to achieve an effective number of consumers from various parts of the country.

Economic Outlook

The economic situation of a location plays a vital role in the development of new business organisations. According to Stam and Van de Ven (2021), economic outlook is one of the most effective parts of the entrepreneurial ecosystem within a country. In the case of the UK, the country provides effective financial support to the modern business organisations during the startup stage. Along with this, as the business concept is related to healthcare service development, the idea can eventually achieve a high level of government as well as private investments which can foster the quality of the services that the company aims to provide. In addition, the continuous GDP growth

of the UK which was 4% in 2022 allows the consumers of the country to afford modern technological services without facing financial issues (Statista, 2022).

Market & Industry Analysis

Drone based medical services are at the very beginning stage in the UK. Therefore, there are no barriers to entry in the market. Along with this as the technology is at the introductory stage, the bargaining power of the consumers are not effectively high within this industry. However, looking at the other technological advancements like telehealth as well as its market share, from 2018 to 2023 the telehealth market in the UK has grown by 19.6% (IBISWorld, 2023). This data eventually signifies that the customers of the healthcare industry of the UK have the potential to adapt highly modern technologies within the industry.

Market Size & Characteristics

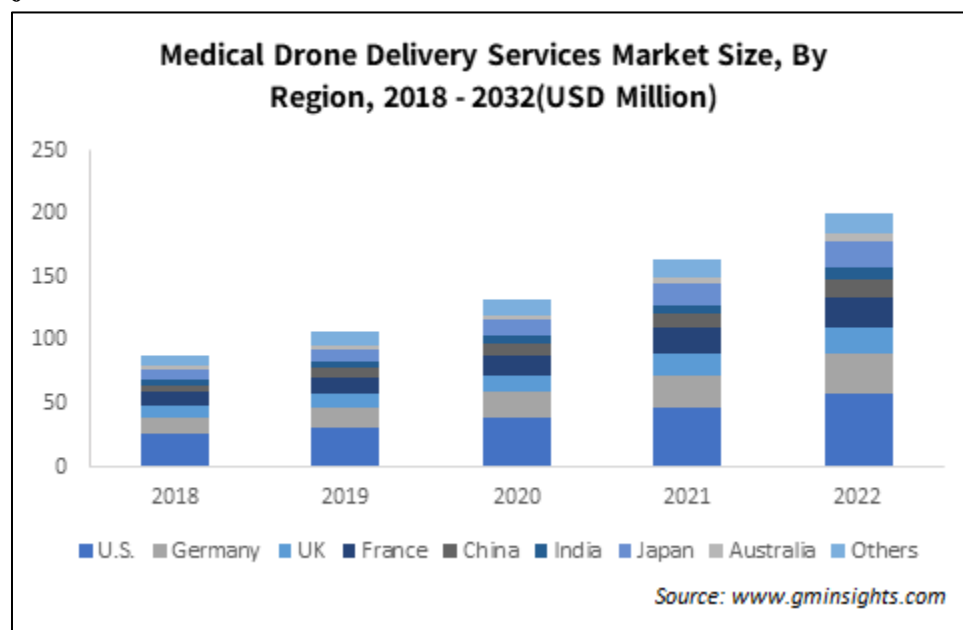


Figure: Medical Drone Delivery Services Market Size

Source: Faizullahbhoj (2023)

It has been reported that the UK medical drone service has started to develop from 2015. However, the concerned modern technology for effective attention during the COVID 19 pandemic. As of 2021, the market size of the drone-based medicine delivery service of the UK is 8.21 million (BrandEssence, 2022). Along with this, it can also be seen that the major organisations of the concerned industry within the UK eventually include Skyports Ltd, Skyfarer Ltd, Embention as well as Zipline Inc. Along with this the characteristics of the concerned industry eventually include

the safety and privacy of the consumers, use of modern technologies as well ensuring on time delivery.

Industry State

As it has been mentioned above, the medical drone service industry of the UK is at the beginning stage. Therefore, the competition within the industry is sustainable. However, the advancements in the AI and VR technologies in recent years can provide a potential trigger to the concerned industry.

Target market

According to Darmawan and Grenier (2021), effective target market identification can provide the organisation with the opportunity to identify the potential customers of the company. In the case of the concerned business idea, the target market eventually includes people of all ages especially those who need emergency medical care.

Competitor Analysis

Competitive Environment

Effective competitive environment has the potential to increase threats for the organisation. According to Hermundsdottir and Aspelund (2021), competition can reduce the sustainability of an organisation within an industry. In contrast, Tavera Romero *et al.* (2021) have also stated that high levels of competition within an industry can foster the financial and sales development of an industry. In the case of the drone medicine service, it has been observed that before the COVID 19 pandemic the industry was not effectively developed in the UK but during the COVID 19 lockdown the need of no touch delivery and immediate medical emergencies has enhanced the need of such medical services. Along with this in recent years the rapid development of artificial intelligence and other technologies like IoT have increased competition within the industry.

Main Competitors



Figure: Skyfarer and Medical Logistics UK collaborate to deliver medical supplies

Source: Times (2022)

Although drone based medical services are at the preliminary stage in the UK. The business can face significant challenges from some newly developed organisations. As it has been mentioned above, the companies like Skyports Ltd, Skyfarer Ltd, Embention as well as Zipline Inc. have incorporated drone based medical services within their process increasing the level of competition for the business. Additionally, this fact cannot be avoided that companies like Amazon can include medical services as well with the use of drones in the rural areas of the country. Such developments can increase the number of competitors for the business.

Marketing & Pricing Strategies

Marketing Strategy

Effective marketing strategy plays a vital role in the development of an organisation. In the case of the concerned company, it will focus on effective digital marketing strategies to enhance its reach to the customers. The use of effective digital marketing through email marketing can provide the company with the opportunity to enhance personalised services to the customers. The business will aim to get the email of the consumers through their login in the official website of the organisation. Then, the company will use effective data analytics methods to analyse the personalised needs of the customers mainly based on the previous orders and medical details of the customers. Along with this, the company will also use effective SEO strategies within its

website to increase the consumer traffic within the official website of the company. In addition, the company will also implement effective social media marketing strategies to reach an effective number of consumers. The company will use still pictures and short videos to post on social media platforms like Instagram, Facebook, and X to enhance the reach of the company to the potential customers.

Pricing Strategy

According to Abdulwase *et al.* (2020), the implementation of effective price leadership strategy can help the organisation in being competitive in nature. In the case of the concerned business, an effective discount-based pricing strategy will be implemented to enhance the consumer demand of the company. For the implementation of the same, the company will develop effective collaboration with the suppliers and large medicine shops so that the operational cost of the organisation can be reduced. The reduction of the operational cost of the company can eventually provide the organisation with the opportunity to implement the effective price leadership strategy.

Operations Plan

Production

The production unit of the business will deal with the number of orders by the consumers as well as providing the best quality services to them. Along with this, the incorporation of effective automation technologies can also help the organisation to develop the production approach of the company.

Facilities & Equipment

Based on the approach of Dey *et al.* (2022), this fact can be identified that the use of high-quality facilities and equipment can provide the organisations to enhance sustainability in the modern business context. In the case of the concerned business, the company will use effective AI automated strategies to enhance the ability of the company to be sustainable.

Legal Considerations

Effective legal considerations can provide the organisation with the opportunity to maintain effective stakeholder relationships with the UK government. As the company is related to medical services, the regulations such as the THR and Licensing authority. Along with this, the company will also comply with the Health and Care Act 2022 of the country.

SWOT Analysis

Strengths	Weaknesses
Innovative service	High startup costs
Addresses unmet needs	Untested business model
Leverages AI and drones	Dependent on regulations
Environmentally friendly	Privacy concerns
Convenient delivery	Weather constraints

Opportunities	Threats
Growing telehealth adoption	Competition from large retailers
Healthcare cost pressures	Changing laws on drones
Ageing population	Public scepticism
Rural access gaps	Economic downturn
Pandemic highlighting needs	Security and hacking

Financial Requirements

Start-Up Costs

Expenditure	Cost (GBP)
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Drone Equipment	50,000
Software & Control Systems	20,000
Licences & Permits	5,000
Office Space Rental & Utilities	12,000
Salaries - Pilots & Staff	85,000
Inventory System	10,000
Insurance	15,000
Packaging Materials	5,000
Marketing Costs	8,000
Legal Fees	10,000
Other Overheads	5,000
Total	£225,000

Cost of Sales & Selling Price

Item	Cost
Medicine Purchase Price (average per order)	£25

Drone Delivery Charge	£10
Packaging Materials	£2
Pilot & Staff Labour	£5
System Maintenance	£1
Total Cost per Delivery	£43
Profit Margin at 25%	£11
Selling Price per Delivery	£54

Fixed & Running Costs

Fixed Costs	Costs	Running Costs	Costs
Rent & Utilities	£15,000	Drone Maintenance	£8,000
Salaries - Management & Support Staff	£50,000	Pilot Salaries	£45,000
Licences & Permits	£3,000	Packaging Materials	£6,000
Insurance	£10,000	Inventory System Fees	£3,000
Total Fixed Costs	£78,000	Total Running Costs	£62,000

Profitability & Break-Even-Point

Profitability

Monthly Delivery Volumes	500	1000	1500
Monthly Revenue	£27,000	£54,000	£81,000
Monthly Variable Costs	£21,500	£43,000	£64,500
Monthly Fixed Costs	£6,500	£6,500	£6,500
Monthly Profit	-£1,000	£4,500	£10,000
Annual Revenue	£324,000	£648,000	£972,000
Annual Profit	£42,000	£234,000	£426,000

Break-Even-Point

Metrics	Monthly	Annually
Revenue Break-even Point	£52,000	£624,000
Delivery Break-even Point	667 deliveries	8,000 deliveries
Assumptions		
Average Selling Price per Delivery	£54	
Average Variable Cost per Delivery	£43	
Monthly Fixed Costs	£6,500	

Conclusion

Based on the above report, it has been seen that the Drone based Medicine service business idea has effective potential in the market of the UK. It has been seen that the company will use effective technologies to meet the emergency medical needs of the consumers within the UK. Along with this, it has also been seen that businesses will use effective digital and social marketing strategies to enhance sales growth. In addition, the report has also included effective financial strategies that show efficient growth in the coming financial years.

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