

# SkyPulse Technologies

## Creating a startup business plan

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# ABSTRACT

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# Contents

<b>I</b>	<b>Introduction</b>	<b>1</b>
<b>1</b>	<b>Company description</b>	<b>2</b>
<b>2</b>	<b>Ownership</b>	<b>4</b>
<b>II</b>	<b>Business plan</b>	<b>6</b>
<b>3</b>	<b>Company description</b>	<b>7</b>
3.1	Organizational chart . . . . .	7
3.1.1	Management . . . . .	8
3.1.2	Research & Development . . . . .	8
3.1.3	Planning & Operational . . . . .	8
3.1.4	Accounting . . . . .	8
3.1.5	Administration . . . . .	8
3.1.6	Logistics . . . . .	8
3.2	Vision . . . . .	8
3.3	Mission . . . . .	8
3.4	Contributions to sustainability . . . . .	8
3.5	Objectives of services . . . . .	8
<b>4</b>	<b>Market situation</b>	<b>9</b>
4.1	PESTEL . . . . .	9
4.2	Market description . . . . .	9
4.3	Persona description . . . . .	9
4.4	Competitor analysis . . . . .	9
4.5	Market outlook . . . . .	10
4.6	Market regulations . . . . .	10
<b>5</b>	<b>Strategy</b>	<b>11</b>
5.1	Stakeholders . . . . .	11
5.1.1	Internal . . . . .	11
5.1.2	External . . . . .	11

5.2	SWOT-analysis . . . . .	11
5.3	STP Process . . . . .	11
5.4	How we reach our goals . . . . .	11
5.5	Possible barriers of entry . . . . .	11
<b>6</b>	<b>Financial plan</b>	<b>12</b>
<b>III</b>	<b>Future</b>	<b>13</b>
<b>7</b>	<b>Outlook</b>	<b>14</b>
<b>IV</b>	<b>Appendix</b>	<b>15</b>
<b>A</b>	<b>List of acronyms</b>	<b>16</b>
<b>B</b>	<b>Glossary</b>	<b>17</b>
<b>C</b>	<b>List of figures</b>	<b>18</b>
<b>D</b>	<b>List of sources</b>	<b>19</b>

# Part I.

## Introduction

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## CHAPTER 1

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# COMPANY DESCRIPTION

We are 4 young and motivated people who have founded a start-up called SkyPulse Technologies. SkyPulse Technologies is a Public limited company. With this newly founded company, we have set ourselves the goal of speeding up and optimizing the transport of medicinal samples. This new time-optimized transport makes it possible to help patients better and improve collaboration between laboratories and hospitals. This transportation is achieved with our drones, which are controlled with artificial intelligence. These drones fly their routes between hospitals and laboratories and transport the respective samples.

Our target market is therefore the pharmaceutical industry, and more specifically hospitals and laboratories.

Our start-up is divided into two different sectors. There is a technical department and a commercial department. The technical department is further divided into three different subdivisions:

- Research and development
- Planning and operational organization
- Production

The commercial department is also divided into three different subdivisions:

- Finance and accounting
- Administration
- Distribution

We have divided up the various departments according to our interests. Céline and Fabian are responsible for the Research and development department. Xenia is responsible for the Planning and operational

organization and also for the production. Jonas is responsible for the commercial department and all corresponding subdivisions.



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## CHAPTER 2

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# OWNERSHIP

Our main objective is to help patients. For this goal we created our drones which are controlled by Artificial Intelligence. They are programmed to fly their corresponding route. These drones can transport medicine or medicinal samples. With these drones we can make the collaboration more time-efficient. Therefore problems as long delivery times with organ donating and urgent samples can be eliminated. Because for the patients, every minute counts. The drones can transport up to 5kg each. It is also possible to transport critical samples such as organs, which have to be stored under special conditions. We offer the appropriate transportation for each sample required and thus guarantee that the samples reach their destination in the highest quality. However, in order to guarantee the highest possible quality of the samples, it should be noted that the transportation of the drones is dependent on the weather. If the weather is too bad (strong winds, thunderstorms), the drones cannot fly, as the samples and therefore their corresponding quality would be at risk. For the transportation times, the samples are divided into three different categories:

- Very urgent
- urgent
- not urgent

Customers can specify how urgent their sample is and in what time frame the sample should be delivered. The customer must therefore provide all important information about the sample so that it can be dealt with individually.

For our locations, we focus on a small set of either large, economically strong cities, cities with a strong pharma presence or cities in dire need of this technology. The set of cities includes the following:

- Basel

- Vienna
- London
- Paris
- Madrid
- Barcelona
- Berlin
- Kiev

We chose these locations because we need to validate our product/service idea on focused markets that resemble ones where the finished product is deployed in. Rural areas or small cities are also important, but not the key market of this company. A nationwide or even continent/worldwide expansion is not in the scope of a startup and can be achieved once our idea has been validated in different cities. Therefore large cities that are economically stable and have a strong pharma presence are the easiest to target in the beginning. There we will be able to test our drones and optimize them accordingly.

In order to know all possible contact points with our customers, we have integrated a representative from a laboratory and a representative from a hospital into our start-up.

For the representative of the laboratory we chose Jona Müller, he is a 32 year old chemical laboratory technician who works at Viollier. He aims to lead a major research project in pharmaceutical analysis. Jona Müller represents a dedicated and skilled professional, deeply involved in the pharmaceutical industry's innovative and dynamic nature, and an ideal customer for a drone delivery service catering to laboratory needs.

For the representative of the hospital we chose Dr. Sarah Becker. She is a 38 year old oncologist who works at a cantonal hospital. She aims to contribute to groundbreaking research in targeted cancer therapies. Interested in developing supportive care programs for cancer survivors Dr. Sarah Becker represents a compassionate and innovative medical professional, dedicated to advancing cancer treatment and care. Her reliance on the drone delivery service highlights its importance in providing timely and critical medical supplies in the field of oncology.

## **Part II.**

# **Business plan**

## CHAPTER 3

# COMPANY DESCRIPTION

### 3.1. Organizational chart

Through previous endeavors, research and talks with various people which work in different management positions, we've come to this organizational chart. The diagram 3.1 depicts all required departments and their teams as well as management positions. Division are marked with the same color. The color's saturation denotes the hierarchical position within said department.

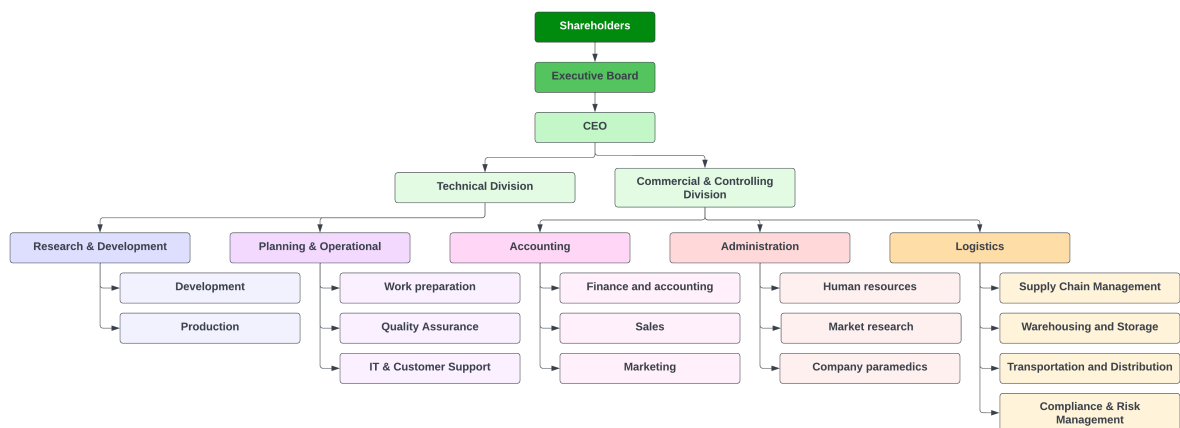


Figure 3.1.: Diagram of the organization

This diagram might be more detailed or complex when compared to ones from different startups, but this is by design. It is important that our service works reliably and follows industry standards. To achieve that, we structurally trade a bit of agility for reliability and structure.

Not displayed are ways or means of communication between teams and/or departments. Also, in the future there might be an additional team, which's job is to ignore department barriers and work on different tasks or enable better communication or a better work flow, depending on the workload of a department.

The following chapters 3.1.1 through 3.1.6 will now go into further detail on what each department entails and of what teams it is made of.

### **3.1.1. Management**

The management division is marked with the color green.

### **3.1.2. Research & Development**

### **3.1.3. Planning & Operational**

### **3.1.4. Accounting**

### **3.1.5. Administration**

### **3.1.6. Logistics**

## **3.2. Vision**

## **3.3. Mission**

## **3.4. Contributions to sustainability**

## **3.5. Objectives of services**

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## CHAPTER 4

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# MARKET SITUATION

### 4.1. PESTEL

### 4.2. Market description

### 4.3. Persona description

### 4.4. Competitor analysis

Drone transportation is not yet very widespread, so there are not yet many competitors on the market. However, there are already one or two companies that offer drone transportation. One company called Zipline [2] also offers drone transportation for medical samples, among other things. However, this is only a sub-category for them. They also transport food, for example. The same applies to another company called DroneUp [1], which offers almost the same services as Zipline [2]. We at SkyPulse Technologies only offer transportation for medical samples and can therefore also transport very critical samples such as organs. By focusing only on the pharmaceutical industry, we are able to provide customized transport for samples and cater to the specific needs of our customers. With this service we distinguish ourselves from other companies that are already on the market. Our goal to help the patients, is achieved through Drone delivery with the highest quality, so that this transportation becomes an everyday business in the pharma industry.

## 4.5. Market outlook

## 4.6. Market regulations

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## CHAPTER 5

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# STRATEGY

### 5.1. Stakeholders

#### 5.1.1. Internal

#### 5.1.2. External

### 5.2. SWOT-analysis

### 5.3. STP Process

### 5.4. How we reach our goals

### 5.5. Possible barriers of entry



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## CHAPTER 6

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# FINANCIAL PLAN

## Part III.

# Future

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## CHAPTER 7

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# OUTLOOK

# Part IV.

# Appendix

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## APPENDIX **A**

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# LIST OF ACRONYMS

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## APPENDIX **B**

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## GLOSSARY

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Expression	Explanation

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## APPENDIX C

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### LIST OF FIGURES

3.1 Organizational chart made with lucidchart.com . . . . .	7
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## APPENDIX D

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# LIST OF SOURCES

- [1] DroneUp LLC. *Medical Delivery Services | DroneUp*. Droneup.com. 2024. URL: <https://www.droneup.com/delivery-services/medical> (visited on 03/13/2024).
- [2] Zipline. *Zipline Drone Delivery & Logistics*. Zipline. 2022. URL: <https://www.flyzipline.com/> (visited on 03/13/2024).