

**BUSINESS CASE
DRONE PRO**

**CENTURION DRONES
360 HUNTINGTON AVE
BOSTON, MA 02120**

06.19.17

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1. EXECUTIVE SUMMARY

This business case delineates how customization of drones has the edge over the current fashion of business that already has fixed defined models for different purposes.

This business case encloses the benefits coming from this project, possible alternatives and recommended alternatives with its justification. This case is not only about having a computer based information system but also covers the assembling of drones which is entirely a new platform for this business.

1.1. Issue

Many of the masses had very acute idea and underestimated the wonders that a drone can do. Drones then were still evolving. Now with the technology advancement that can be integrated into drones easily, it is now classified into powerful technological invention ever made. This has result in rise of its awareness and so is the size of customers and their demand.

The current system that Centurion Drones has employed offers variety of drones but they have fixed definition. Until now customer has to align the needs to the available drone and go for the purchase. In order to help customers to get the drone that fulfill their requirements, we should give them the choice to customize their drones. With this customer satisfaction can be achieved, which in turn results in greater turn over.

1.2. Anticipated Outcomes

Having implemented Drone Pro platform to Centurion Drone is a welcome to the customization world which will be another grand dimension of the business. This will give more control to the customer which will bring Centurion Drone more customer satisfaction. This will significantly improve the customer base. Deploying Drone Pro on web-platform has ability to reach across the world. Options to offer combo packs, suggestions/recommendations, online consultation will increase customer trust. This also opens new domain for business.

1.3. Recommendation

Various ways to implement this business case were considered. After careful analysis the approach considered will allow to meet our goals in most efficient way; easy, quick and cheap. System Analyst will help in understanding the working of organization. Product Manager will inform about the variety of the products that are being offered and that could be offered. The process of assembling drones in shortest time can be designed and implemented. Sales Manager's help in understanding the clients need will allow us to design interface customer friendly and as per current market trend. Working in combination with these 3 major stakeholders will lead to more accurate judgement. Let's have quick look at benefits that will be achieved: -

- Product Manager will give more options of equipment that a drone can be mounted on a drone. Thus, resulting in massive variety of drones that can be assembled.

- System Analyst can help to understand the working of organization which will allow to build “make on order” drones accurately in less time.
- Sales Manager with his experience and knowledge of customer domain will show the right way to implement this system.

1.4. Justification

Introducing the customization platform will add another wing of business that will be customer satisfying. This satisfaction will increase customer base. Other alternatives were considered but having Drone Pro will give out the most edge over other competitors. It introduces a variety of technology that can be implemented. Taking this platform online will get us more customer reach. Exact prices, accurate time of assembling, look of drone and services like experts’ advice, reviews and discussion, endorsements which were nowhere used before can be added.

- 15% reduction in overhead costs in the first 12 months
- 10% decrease in employee turnover in the first 12 months
- 25% immediate decrease in the amount of time it takes to resolve payroll issues

2. BUSINESS CASE ANALYSIS TEAM

The following individuals comprise the business case analysis team. They are responsible for the analysis and creation of the Drone Pro Project business case.

Role	Description	Name/Title
Executive Sponsor	Provide executive support for the project	John Doe, VP Operations
Project Manager	Manages the business case and project team	Omkar Daphal, Project Manager
IT Manager	Responsible for mobile application development and UI	Soumiya Roy, IT Head
Operations Analyst	Functional flow, Training and License Check	Vaishali Lambe, Strategy Analyst
Solutions Engineer	Hardware-Software integration and embedded programming for drone chips	Shruti Mehta, Solutions Engineer

3. PROBLEM DEFINITION

3.1. Problem Statement

Crime has become one of the biggest threat to people nowadays. This creates a vicious circle: crime is attracted by insecurity, underdevelopment and weak governance, while the latter are exacerbated by crime. The problem here is that the personnel can't always be present to protect the nation in the wilderness and terrains with the least population and there are higher chances of threat, it has become equally important to have a device which does surveillance to get the information

- 1) With increase in marketplace sectors such as amazon, best buy, a remarkable increase in warehouse is seen. These have valuable within and needs to be guarded well. Agencies now looking for more upmarket technology to suite specific need of each warehouse.
- 2) Influenced and wealthy people are always seeking for personal security because of rivalries and threats. Having personnel hired for safety of a person These manual tasks further add to the burden and expense of the company.
- 3) Construction sites have some difficult sections. And when in problem, this needs lot of efforts for engineers to take a look and understand. This results in loss of time.
- 4) CCTV footages are sometimes not clear and unable to record the 360 degrees view of the event where theft or crime is happening, there is a dire need of improved safety measures.

3.2. Organizational Impact

The Drone Pro project will impact National and private safety in several ways. The following provides a high-level explanation of how the organization, tools, processes, and roles and responsibilities will be affected as a result of Drone Pro project implementation

Tools: the drone pro with all the necessary surveillance toolkit will be launched for the security of an individual. They can customize their drones according to the specifications, size and budget.

Processes: with the Drone Pro project comes the safety, security and constant surveillance of an area, individual and goods. This project will lessen the burden on government and provide autonomy to individuals in managing their safety and goods.

Roles and Responsibilities: in addition to the Drone pro project allowing greater safety to people and less burden on government, the manpower required to appropriately staff military personnel and bodyguards will be reduced.

Hardware/Software: in addition to the hardware for the project, we would need to launch a mobile app in order to trace the movements of drones and signals need to be sent if the suspicious objects are found. Hardware components can be added according to the individual's customization and need.

3.3. Technology Migration

In order to effectively launch the Drone Pro we would need to install the circuit board with the embedded devices on it. Apart from that the chip needs to be coded to perform various functions which will be traced by the mobile app. The following is a high-level overview of the phased approach:

Phase I: Hardware will be customized by the customer while purchasing the drone pro from our company.

Phase II: Once the drone pro is purchased, it will be linked from the mobile app.

Phase III: All personnel can receive training from the user manual.

Phase V: The drone pro can then successfully be used for surveillance and tracking purposes.

4. PROJECT OVERVIEW

The Drone Pro Project overview provides detail for how this project will address Centurion Drone's business problem. The overview consists of a project description, goals and objectives for the Drone Pro Project, project performance criteria, project assumptions, constraints, and major milestones.

4.1. Project Description

The Drone Pro Project will review and analyze potential way to provide customization web platform for customers and reach to larger customers. This will be done by determining and selecting a common feature for a drone and giving customization options for few most used and in demand parts of a drone. Once selected, the drone will get into a phased implementation approach and be completed once delivered to the customer.

This project will result in reaching out to larger customer zone and their satisfaction. Additionally, managers will once again be focused on satisfying their customers and in turn increasing the business.

Centurion Drones will issue a Request for customization of drone, once the product is request is received, all implementation will be conducted with internal resources.

4.2. Goals and Objectives

The Drone Pro project directly supports several of the corporate goals and objectives established by Centurion Drones. The following table lists the business goals and how it supports them:

Business Goal/Objective	Description
Timely and accurate reporting	Web based tool will allow real-time and accurate reporting of all payroll and administrative metrics
Improve staff efficiency	Fewer HR and payroll staff required for managing these activities will improve efficiency
Reduce employee turnover	Greater autonomy and flexibility will address employee concerns and allow managers to focus on billable tasks
More profit	With customization with web platform, increase number of customers and in turn gives more profit

4.3. Project Performance

The following table lists the key resources, processes, or services and their anticipated business outcomes in measuring the performance of the project. These performance measures will be quantified and further defined in the detailed project plan.

Key Resource/Process/Service	Performance Measure
Customization of Drone	More permutations and combinations leading to more diverse shopping place, high number of customer turnout, increased revenue.
Software and System Maintenance	Decrease in time of handling and processing of an order. High informative and detail oriented portal giving tons of data to work on with.
Staff Resources	Elimination of 5 staff positions in HR and payroll which are no longer required as several functions will now be automated.
Experts advice, Discussion forums, Reviews	Gain more customer engagement and trust.

4.4. Project Assumptions

The following assumptions apply to the Drone Pro Project. As project planning begins and more assumptions are identified, they will be added accordingly.

- All staff and employees will be trained accordingly in their respective data entry, timesheet, and reporting tasks on the new web-based system
- All customizable parts are available to customize a drone as per customer demand
- Delivery system is efficient
- All requirements are in Max allowable size/weight/speed
- Cost will be increased as per customizable part value and shown on web system immediately.
- Funding is available for purchasing hardware/software for web-based system
- All department heads will provide necessary support for successful project completion
- Project has executive-level support and backing

4.5. Project Constraints

The following constraints apply to the Drone Pro Project. As project planning begins and more constraints are identified, they will be added accordingly.

- There are limited IT resources available to support the Drone Pro Project and other, ongoing, IT initiatives.
- There are a limited number parts available to produce a customizable drone
- As implementation, will be done internally and not by the product developers or vendors, there will be limited support from the hardware/software providers.
- Delivery of drone may get delayed due to certain issues

4.6. Major Project Milestones

The following are the major project milestones identified now. As the project planning moves forward and the schedule is developed, the milestones and their target completion dates will be modified, adjusted, and finalized as necessary to establish the baseline schedule.

Milestones/Deliverables	Target Date
Design	01/01/2017
Design Review	03/01/2017
Construction	03/10/2017
Phase I Complete	04/15/2017
Phase II Complete	06/15/2017
Phase III Complete	08/15/2017
Completion	10/15/2017
Delivery System - dispatched	12/15/2017
Delivery System – Delivered to customer	12/31/2017

5. STRATEGIC ALIGNMENT

The Drone Pro Project is in direct support of several of Centurion Drones' strategic plans. By directly supporting these strategic plans, this project will improve our business and help move the company forward to the next level of maturity.

Plan	Goals/Objectives	Relationship to Project
2017 Centurion Drones Strategic Plan for Home Security	Improve intruder and invasion alert system at commercialized and personal properties	This project will allow for real-time tracking and alert system, increased reliability, and a consolidated repository for all access to the property

Plan	Goals/Objectives	Relationship to Project
2017 Centurion Drones Strategic Plan for Technology dominance	Utilize new technology to dominate the security market	This project allows the customers to go beyond the basic security devices and broaden the accessibility.
2017 Centurion Drone Strategic Plan for Drone acquisition	Introduction of drones to proactively approach a platform which using both hardware and software components	New technology will allow many closed circuit security systems to widen the scope of detecting invasion and reducing the levels of staff required to manage it.

6. COST BENEFIT ANALYSIS

The following table captures the cost and savings actions associated with the Drone Pro Project, descriptions of these actions, and the costs or savings associated with them through the first year. At the bottom of the chart is the net savings for the first year of the project.

Action	Action Type	Description	First year costs (anticipated savings)
Purchase Web-based product, licenses and government permissions	Cost	Initial investment for Drone Pro Project	\$400,000.00
Software installation, hiring and training	Cost	Cost for IT group to install new software and for the training group to hire and train all employees	\$150,000.00
Vendor onboarding and hardware acquisition	Cost	Third party vendor training and purchase of pre-order drones	\$200,000.00
Adapting the existing hardware available in the market to test and improve functionality	Savings	By reusing the hardware available for research purpose, we can save significantly and avoid overhead costs associated with the purchase	-\$120,000.00
Automate sales and operational duties and replace with CRMs	Savings	Decrease employee count and payroll by automating several departmental role and digitalizing it	-\$180,500.00
System maintenance required every 6 months instead of monthly	Savings	Less frequent use of IT resources working on non-value added tasks	-\$54,000
Net First Year Savings			\$342,738.00

Based on the cost benefit analysis above we see that by authorizing the Drone Pro Project, Centurion Drone will save \$342,738.00 in the first year alone. This represents a significant improvement in our development and operating costs and is a clear indicator of the benefit this project will have on the company.

7. ALTERNATIVES ANALYSIS

The following alternative options have been considered to address the business problem. These alternatives were not selected for a number of reasons which are also explained below.

No Project (Status Quo)	Reasons For Not Selecting Alternative
Keep the on-ground security legacy system in place	<ul style="list-style-type: none">• Unnecessary expenditure of funds for increased device demand• Continued occurrence of a high number of internal technical glitches• Poor and untimely alerts and reporting• Lack of automation
Alternative Option	Reasons For Not Selecting Alternative
Outsource the implementation of software component	<ul style="list-style-type: none">• Significantly higher cost• Expertise already exists in house• Vendor's lack of familiarity with our internal software requirements
Alternative Option	Reasons For Not Selecting Alternative
Integrate hardware internally	<ul style="list-style-type: none">• Lack of qualified resources and expertise• Significant cost associated with materials• Timeframe required is too long

8. APPROVALS

The business case is a document with which approval is granted or denied to move forward with the creation of a project. Therefore, the document should receive approval or disapproval from its executive review board

The signatures of the people below indicate an understanding in the purpose and content of this document by those signing it. By signing this document, you indicate that you approve of the proposed project outlined in this business case and that the next steps may be taken to create a formal project in accordance with the details outlined herein.

Approver Name	Title	Signature	Date
Stark, T.	President and COO		
Potts, P.	Executive VP		