

Organizational Plan

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“Secure Messaging and Location Tracking”

1. Executive Summary

Secure Communications Center (SCC) Associates has been founded by 6 shareholders in order to provide secure messaging on mobile phones and location tracking. The main aim of the company is to produce innovative and secure messaging system combined with location tracking in the smart phones' accessories market that can meet the demand.

The target customer of our company is especially military and police, maybe any other customers like friend group, tourist group that want to use location tracking system. Considering the importance of secure communication issues and customer's need to use or buy the equipment, the company would be able to sell its products directly to customers and make profit.

Aim of the Secure Communications Center (SCC) Associates is to have the most of the share in the secure communication system on smart phones market in Turkey. The product we are planning to produce helps to military and police service via both secure messaging and location tracking. This product can be called as a messenger program being run on smart phones (Android operating systems) and having the feature of enabling users to see the positions of each other on a map. All the information shared within the group is encrypted. Via this product, providing secure communication to the users is the main target. The benefits of the product are known but security problem hadn't been considered by any other producers. However, when we produced it with feature that satisfies security, customers will be tend to buy the product.

The power of innovative thinking and serious research of the market is done by the establishers of the company to establish Secure Communications Center (SCC) Associates. Considering the capabilities of the company, the innovative product that is designed, Secure Communications Center (SCC) Associates aims to dedicate itself to serve for the military and police service according to their needs. According to demands of companies, customers or institutions, the needs may differ like more powerful encrypting system or any other features which can be implemented on our product. Basically, our product is flexible to any further development since the codes and design are completely controlled by our engineers.

Company Mission

Our main ambition is to satisfy the needs of security of messaging and location tracking by using cryptographic device with reasonable cost. It is important to be useful and to ease customer's security concerns for us. In the light of this vision we want to become indispensable company in this sector.

Company Vision

Our firm aims to improve military and police service by increasing their security level while communicating. The product has many useful properties that have benefits for both military and police service even for civil use. We try to produce and universalize our product in principles of quality, reliability and business ethics.

2.Organizational Plan

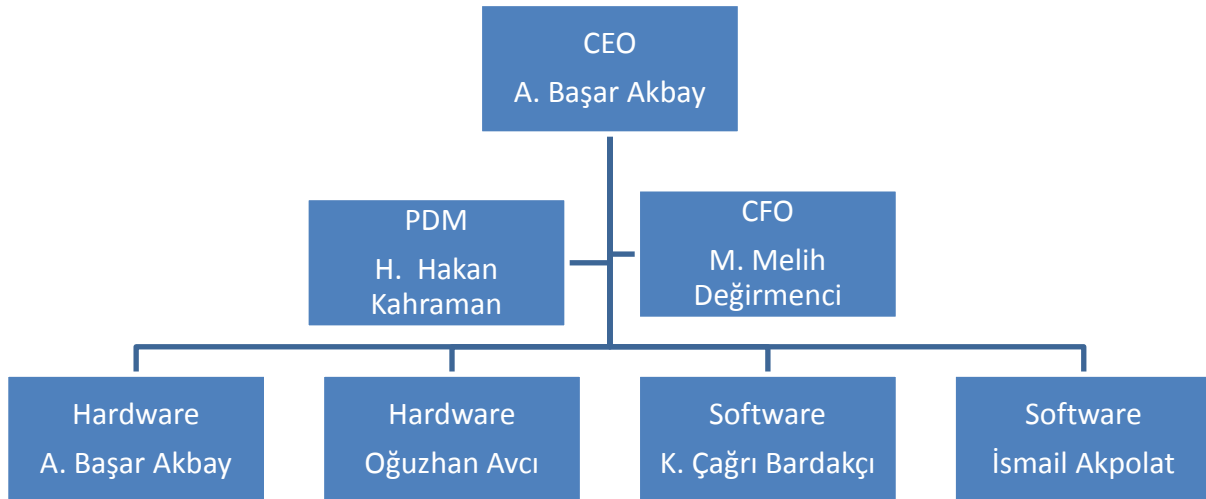
Description of Business

Secure Communications Center (SCC) Associates was established in 2011 to meet the demand for security for the messaging on mobile phones and location track system industry. Our product title is "Secure Messaging and Location Tracking". This product can be called as a messenger program being run on smart phones (Android operating systems) and having the feature of enabling users to see the positions of each other on a map. All the information shared within the group is encrypted. Via this product, providing secure communication to the users is the main target. Industry projections indicate a growing demand for this type of products due to its useful features that satisfy the needs in the sector. Secure Communications Center (SCC) Associates maintains a competitive edge with security and useful features. The company, initially, is housed in EE building in Bilkent University which will provide the opportunity for excellent laboratory to produce accurate system.

Organization and Management

Secure Communications Center (SCC) Associates is formed by 6 shareholders. Each person in the organization has different duties, disciplines and skills. Responsibilities of members of company are as described below. In the starting period, 6 founder will manage the company and no major employment is needed in short term period.

Organization chart



CEO of Project

Abdullah Başar AKBAY is the CEO of the company because he brought the all member together and know complete information about each production process of our product. He is in charge for all operations and decisions taken in the company. he decides about the product development and investment plans and analyzes the final reports. he is responsible for the general progress of the project.

Hardware

We have two hardware engineers in our team whose names are Oğuzhan Avcı who is hardware director and Abdullah Başar Akbay. They are responsible to produce hardware of the Secure Communications Center (SCC) by combining mobile phone to a cryptographic device which encodes the data sent from the mobile device. This device should be designed small enough to be portable. The connection between the cryptographic device and mobile phone is done through Bluetooth technology.

Software

We have two software engineers in our team whose names are İsmail Akpolat who is software director and Kemal Çağrı Bardakçı. They are responsible to design software of the Secure Communications Center (SCC) whose user interface which displays the locations of the other users on a map is designed. Also it enables the user to send and receive encrypted messages. The encrypted information is transmitted to the other users via a HTTP Server application. Moreover, they will deal with creating a logo and a webpage for the company.

Quality Control and Product Development Manager

Hilmi Hakan Kahraman is the Quality Control and Product Development Manager of the company. His main jobs are to manage the quality control process before,during and after production, to procure of correct raw materials with due consideration to compliance to revelant production standarts, to make coordination the relations between the sales,production,quality control departments and the customers in an optimum manner, to maintain safe working places in the laboratory and to give the formulations to production and to back up production manager for production processes.

CFO of Project

The Financial Director of Secure Communications Center (SCC) Associates is Mehmet Melih Değirmenci who takes the responsibility of financial decisions in the company. He manages the financial risks of the business. The Financial Manager takes decisions about the business; develops a business plan, a financial plan and a marketing plan. He is responsible for everything about the financial aspects of the company. In the future, the company may need to do the accounting management separately so these positions are considered for any future needs.

Location

The company's office and workshop as well will be located in Ankara because our primary customers Turkish land, air and naval forces located in this city. Moreover, Bilkent University-Cyberpark and ODTU-Teknokent Hacettepe-Teknokent are able to provide good cooperation and assistance in technical issues and also opportunity to find qualified employee. In the future possible mini R&D companies that we are going to engage in are generally located in those special zone. As Ankara Development Agency declared "Ankara is the center of R&D and inovation in Turkey."1

Also it would be easier to have the office and the workshop in the same city for the first few years, because the communication between these two needs to be well-settled; otherwise there may be a lot of problems due to lack of proper contact.

One of the disadvantages of choosing this location may be the lack of marine transportation especially while distribution of the products. We won't be able to benefit from cheap transportation.

Product Definition

This project can be called as a messenger program being run on smart phones (Android operating systems) and having the feature of enabling users to see the positions of each other on a map. All the information shared within the group is encrypted. In this project, a cryptographic device which encodes the data sent from the mobile device will be designed. This device should be designed small enough in order to be portable and it should not discomfort the user. The cryptographic method will be the most advance feature. The connection between the cryptographic device and mobile phone is done through Bluetooth technology. Bluetooth technology is chosen due to increasing portability and being a standard protocol which is supported by the vast majority of the smart phones. It also provides easy hardware and software configuration. It is more secure connection type and more convenient in narrow range applications. Since our product is flexible, Wi-Fi or Usb can be used but it has some disadvantages such as it might be already used for other operations that may decreases the performance of Wi-Fi.

The location information is read from the integrated GPS chip inside the smart phone. Obtained coordinates are interpreted and users are demonstrated on the map with symbols. A user interface displays both the locations of the other users on a map is designed and the

encrypted messages which is sent and received. The received and transmitted messages are stored during the session. Last few locations of the users are also stored internally in the program in case of a GPS or Internet connection loss. In such unexpected emergency cases, other users who still have the connection can reach the last location of the user who has lost his connection.

Product and Services

Our product's hardware part has compact design. In hardware, encryption is implemented with FPGA chips and its programming language is VHDL. The exact model of chip hasn't determined yet. However, at most it will be 20 \$. As a further development, if the customer demands more secure system which can be implemented by using more advanced and expensive chips.

Public Key Encryption method will be implemented which is widespread and so many different algorithms realised. Like RSA, ElGamal encryption or Diffie-Hellman Key Exchange algorithms are used in different secure communications applications. The final algorithm has not decided yet. However, the choice of FPGA programming allows us flexibility. More coherently, without changing the circuit configuration, we could change the algorithm.

Lastly, software of the product has no cost.

Market and Industry Analysis

We are the private company working over the secure messaging and location tracking. With this product, as it is declared in the vision, we are aiming to serve military and police service. As Under secretariat for Defense Industries declared Turkish Defense Industry satisfy their R&D and technological developments with projects of Aselsan, Meteksan and Tübitak which are semi-government institutions. While these institutions operating these projects, they cooperate with domestic R&D companies by sharing the contract values.² At that point, local companies are preferred since those issues require high-level security as we offered.

SWOT Analysis

Strengths

The strengths of our company is initially a small-scale and newly founded company because it has hardworking ambitious members who are able to begin risky but high returns idea. Its location is also one of the strengths; it is easy to reach to the customers who are Turkish land, air and naval forces and police service. Another aspect of our company is its competitive advantage which is promoting users' security concerns. . It is also open to be developed by adding new features according to the needs or demands of the customers after some years with the latest technologies. Our competitive advantage and target customers are completely matching in few years, the positive effects of it will be clearly seen. Since we are using our product via smartphones, rising trend, this is good opportunity to be popular and fashionable in a short time.

Weaknesses

The weaknesses are; since it is a newly founded company, experience is significant weakness of us. Also it has no reputation or reliability in the sector. Due to lack of confidence, the target customer might be problematic in that point. They are dealing with extremely important governmental issues. How can they trust us?

Opportunities

The opportunities can be counted as the security is getting more important all through the world recently and such communication projects will be more important in the future. Also in Turkey this market is not fully-developed yet. People are getting more aware of the security problem in communication, therefore it is highly probable that the demand will increase in these years. As a trend, using smart phones is extremely popular like iPhone, HTC, Samsung Galaxy etc. Although it may seem expensive and luxury expenditure for military and police, smartphones are the most rising trend. It won't be concern for us. So, the market is getting bigger and being appropriate for our product.

Threats

The biggest threat will be entrance of well-known and trustworthy brand or company into the market. In the future, these companies can managed to get the big share of market. Existing competitor firms may produce similar products in a short time.

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2

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