**TEMPLATE**

For the purpose of assisting in the filling in of the online application form in Arial Font, size 11, the required information has been summarised in this document, so that it can be prepared in advance.

# **SUMMARY**

## Project Name / Name of the Project: Smart Alarms (13/85)

## Team D:

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## Project Summary (Max. 2,000 characters)

Desenvolvimento de um sistema eficaz de localização de stock em lojas de retalho físicas, que possuam um sistema antifurto já instalado. Alternativamente ao sistema de alarme existente, pretendemos criar um novo produto que incorpore dentro do alarme um localizador. Proporcionar aos lojistas que encontrem rapidamente os produtos perdidos pela loja, mantendo-a sempre organizada por outro lado melhorar a satisfação dos clientes. Cada alarme teria um identificador único, para eliminar a necessidade de estar a reprogramar o alarme, sendo depois associadas na base de dados as características do produto que se achassem relevantes dependendo do negócio em causa.

# **PROBLEM**

## Which problem / difficulty does the project intend to address / minimize (market opportunity)? (1,436/2,500)

Particularly during sales and holidays, messy stores are a constant. This proves to be an adverse situation not only for the customers, but also for the employees of the store. The employees will have a harder time helping with the customers’ wishes and keeping the store organized, while the costumers, on the other hand, will experience a less pleasurable shopping trip, which will take longer than necessary and, often, result in failure. Obviously, this is an issue for the stores’ owners, since they are losing possible buyers. It is this exact pain that we intend to solve. And so, we came up with Smart Alarms – an innovative product that incorporates a locator into the alarm system and, therefore, provides an easy way of locating items inside a store. Our product will provide a powerful tool in keeping the stores organized and finding items for customers who know exactly what they want.

With the development of this concept we also intend to improve the actual method of tracking the stock in a store and the anti-theft systems. Since currently, an average of 1.23% of the gross income in the retail industry is lost due to unknown sources (as per example, administrative losses, fraud in the dressing rooms and theft, either by customers or employees), the control and location of the merchandise proves to be of major importance. In Portugal, the value of unknown losses adds up to an average of 0.90% of the gross income.

## In what way is the said problem currently being solved / minimized with products / solutions already available on the market? (834/1,500)

The problem is not being solved efficiently by any of the available products on the market. The current solution are the Electronic Article Surveillance systems (EAS systems), which are usually constituted by a transmitter, a receiver and a security tag or label. There are essentially four types of EAS systems, which differ mainly in the technologies being used and include electromagnetic, acousto-magnetic, radio-frequency and microwave systems. However, the main purpose is common to them all and consists only in helping retailers to protect merchandise from theft. None of them provides a way of organizing the store, by locating items that are lost or misplaced, or keeps track of the stock. Our product will have its advantage in the incorporation of these three qualities: the anti-theft, the locator and the inventory keeping.

# **YOUR SOLUTION**

## In what way will the new product / solution address / minimize the problem? (1,363/1,500)

Smart Alarms will allow the easy location of items within a store. That way the organization of the stores will be easier, the theft will diminish and a better track of the stock would be possible. But how does the product work exactly? Well, Smart Alarms can be implemented in stores who already possess the EAS system by substituting the typical security tags or labels for an improved version of this piece of equipment, which possess both an alarm and a locator. Then, the characteristics of the products associated with the respective alarm would be inserted in a data base, so that a product will correspond to one and only one alarm. Note that each alarm would have a unique identifier, in a way that when we are searching for a specific item, we will be looking for one and only one alarm. Each time an item is bought and the alarm removed, the data associated with the article would be deleted from the data base, being the alarm ready for reuse. While the data of the item is removed from the database, the item would be discounted from the inventory’s list.

It is important to mention that, since administrative losses and theft by the employees are two major causes for the loss of merchandise, source tagging (the application of the technology at the manufacturing level rather than the retail level) is a potential solution and should be considered.

## In what way is the new product / solution innovative compared to others already on the market? What are its advantages / benefits compared to competing products / solutions? (394/1,500)

As already mentioned before, Smart Alarms is unlike any other product already available in the market. It is the only system capable of not only preventing theft but also locating items and keeping the inventory up-to-date at every moment. All the other alarm systems only prevent theft, and so, that will be our main advantage when compared with all the other products.

## What is your view on the evolution of the market in which you intend to enter? In what way does it differ from that of the competition? (407/1,500)

In terms of innovation, the market in which we intend to enter (EAS systems’ market) has been frozen. The devices currently being manufactured and used have not evolved for years.

In terms of statistics, it is known that the EAS systems’ market has grown 0.2% in the years of 2012 to 2017 and that its forecast grown from 2017 to 2022 is of 2.2%. For that reason, it is a good time to invest in our project.

# **CUSTOMERS**

## Who are the project’s potential clients? (36/1,500)

Our potential clients are retailers.

## If you have a web or mobile project please state the project’s traction metrics, namely the number of unique visitors, registered users, paying users/subscribers, the number of transactions, the average transaction value as well as their time evolution. (Max. 750 characters

## How have you validated the project’s business model / value proposition; namely, what contacts with potential clients / industry experts have been made? (393/1,500)

For stores of big dimension who have trouble keeping the store organized our Smart Alarms provides a way of locating items in stores unlike the conventional alarm system.

Since it is difficult to directly contact our potential customers, large retailers, we contact employees at large stores who deal with this problem on a daily basis and have allowed us to take a closer look at the reality.

# **COMPETITION**

## Who are the current competitors? Who could become a competitor in the future? Is it likely that the big market players will offer a competing product / solution? Which competitors present a high-risk to the project? (Max. 2,500 characters)

Nenhum dos produtos disponíveis no mercado tem as funcionalidades que pretendemos oferecer com os Smart Alarms. Presentemente para combater os roubos temos disponível os Eas Systems. No entanto estes não são capazes de proporcionar a localização dos produtos. O nosso produto é, portanto, inovador acrescentando potencialidades ao que já existe. Outra característica que torna o nosso produto apelativo é o facto de ele ser reutilizável, o facto de cada alarme possuir identificador único, eliminar a necessidade de estar a reprogramar o alarme sendo apenas necessário repor os consumíveis ao fim de um grande período de tempo, tal como já acontece com o EAS Systems.

# **TOTAL AVAILABLE MARKET / TOTAL SERVICEABLE MARKET**

## How is the project’s Total Available Market quantified:

Our total available market is 5926 retailers, this value takes into consideration a minimum of 5 stores or a minimum volume of 3 million euros.

## Total number of clients / customers

## How did you estimate/calculate the figures indicated in question 7.2.1 and 7.2.2? (Max. 750 characters)

## How would you characterize the project’s Serviceable Available Market? (121/750)

The Serviceable Available Market is the number of clothing parts in the Inditex company has in all its stores worldwide.

## How is the project’s Serviceable Available Market quantified:

7405 stores in the world

# **BUSINESS MODEL**

## How will the project’s revenue be generated? If you have a web or mobile project please also state the estimated average annual revenue per user. (Max. 1,500 characters)

## What is the project’s value proposition? Why will clients pay for this? (512/1,500)

For stores of big dimension who have trouble keeping the store organized our Smart Alarms provides a way of locating items in stores unlike the conventional alarm system.

Smart Alarms is unlike any other product already available in the market. It is the only system capable of not only preventing theft but also locating items and keeping the inventory up-to-date at every moment. All the other alarm systems only prevent theft, and so, that will be our main advantage when compared with all the other products.

## What are, in your opinion, the main limitations to the project scalability? (297/500)

Updating the software of the currently used alarm system so that it is compatible with our system may be a limitation. It is necessary training the employees how to use the new system without spending too much time and to obtain a better performance: a faster service and more efficiently service.

## In what way is the project difficult to replicate by other players in this market? (67/1,500)

Our product will be patented so it isn't possible to be replicated.

# **Road Map of the Project (1000 characters)**

# **Annex**

Include all tables from your financial statements.

https://www.amitracks.com/2013/10/simple-cost-analysis-for-rfid-options/