



# MSc in Technology, Innovation & Entrepreneurship

# Recycling Stock Market using Information & Communication Technologies

An innovative service to create a micro-trend for the environment

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This report is the Research Description of the proposed subject, regarding the Dissertation thesis to be undertaken for the Master of Science in Technology, Innovation & Entrepreneurship. It comes before the Research Proposal and aims to inform essentially the potential supervisor.

#### Introduction

The aim of this short report is to inform the potential supervisor about the proposed research. We intend to explain what we expect to achieve through the dissertation process, why this is important and how we plan to fulfill the whole concept, implying the methodology and the means to use.

### What we expect to achieve

We want to create a company which will administer recyclable products (aluminum, glass, paper and plastic) and will incorporate the philosophy of auctioning in order to create a microtrend to make people recycling. To achieve this, information and communication technologies will be exploited to assist in this effort.

In the proposed service the participants will be: people as consumers, our company which will administer the process, the companies which sell the products, the recycling industry, the environmentalists, the governments.

#### How this will work

People buy products to consume them. Most of these products could be recycled. We collect these recyclables in quantities from certain collection points. In return, we give to the consumers a receipt, as a proof, for what they have given to us. We store the recyclables in our store or in cooperators' stores. We place the quantities of the available recyclables in a private on-line auction system (like ebay). In this system we give access to all interesting parts (recycling industry, original companies, liaisons etc). They place their bids in the specific available quantities. The auctions have specific period of time. Also they may be of free-starting price or with a fixed starting price, according to the international prices of the specific recyclable (e.g. aluminum). The highest price at a given period wins and takes the quantity. We receive the payment. This is the standard process.

Moreover, we negotiate with big companies (industries) the return of their used products (reverse logistics) at a given price, since these recyclables could not be used otherwise (e.g glass milk bottles, coca-cola glass bottles etc.).

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In addition, we approach companies that are interested in participating in the whole concept of recycling, through their Corporate Social Responsibility programmes and are willing direct funds to our auction system. In return they will gain access to the network of our customers and secure their brand awareness as well as small advertisements on offers on their products.

Consumers that keep a receipt of the recyclables that have contributed into the system will be rewarded under the following scheme: in the end of each auction we will appoint a final price to each recyclable product and in continuous arrange the price of its share. According to what products a consumer has recycled this will equal to a number of shares at that time. These shares will be valid to super markets and in exchange of a price. Consumers will have the opportunity to purchase products and pay part or a whole of specific products. These products will be the products of the companies that will participate in the whole concept (through CSR and marketing).

Our initial motive is to contribute in saving the planet and minimize the catastrophes caused by human consuming. Thereby, we have concluded in the idea to establish this smart way of making people recycling and get in return some kind of reward. There is a belief that, people are primarily utility maximizers, motivated by costs and benefits. This belie we will try to exploit. Besides that, the aim is not to offer simply a new product or service but instead a real utility to people and planet. In other words, this will be done through a "Recycling Stock Market using Information and Communication Technologies".

#### Why this is important

The problem of low-recycling has global characteristics. Although there are regions with fairly high rates of recycling (almost 50% achieved in some recyclables), this is not an adequate percentage comparing to the given potentials. Mostly this problem has been identified due to the low correlation between attitude and behavior of individuals. The problem starts from the individual-consumer and ends to the environment and the economy. Recycling saves precious natural resources, energy, time and money.

There is a distance among attitude and behavior on most individuals. Although advertising and campaigns affect people's beliefs, who accept the need for saving the environment they follow a different practice. This is usually due to the contrast among what we perceive and what we actually do. In this gap we interfere and try to affect.

At a first research made so far, we have also identified that there is no similar idea applied in terms of the environment and doing innovative things to contribute in its value.

#### How we plan to fulfill the project

#### Research questions

- 1. How individuals would evaluate such a service?
- 2. How companies would like to participate in this effort and are they willing to contribute through their Corporate Responsibility Programmes or similar actions?
- 3. What affects the new company would create in the region?
- 4. What obstacles may be raised from other entities or involved parts that would consider that their profits are offended from the new status?
- 5. What is the opinion of such an effort from the researchers' point of view?

#### Aims and objectives

The overall aim is to investigate whether such a service, could contribute in creating a microtrend adequate to change the general aversion of people of doing recycling. Thus, (a) making people recycle, (b) giving value to the environment and (c) creating growth through financial tools. In addition, we would like to investigate the financial sustainability of this service according to the proposed income tunnels.

#### Research Plan

We intend to use the tool of questionnaire, with a number of questions adapted to the research questions. We have identified that different questionnaires should be addressed to different groups involved such as, (a) the consumers, (b) the companies and (c) the researchers that have made research in any of these three fields so they could give us their feedback on this effort.

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