



## **DigiEduHack Solution**

**Lappeenranta - Digital Twins & Raw material sustainability - Global better future for next generations**

**Challenge: Lappeenranta - Digital Twins & Raw material sustainability - Global better future for next generations**

**Challenge 2020**

## **Agriculturing Corona**

### **Recycling of used masks into spunbond coatings for agriculture.**

Face coverings are now a legal requirement in many public spaces around the world. But masks is causing litter problems on land and at sea. We suggest taking used medical masks and making them into a special coating for agriculture. This will solve the eco-problem of an oversupply of used masks.

### **Team: I&Y**

#### **Team members**

Grachev Ivan and Burcev Yuri

#### **Members roles and background**

Grachev Ivan - the Leader and the one who came up with the rework of the used medical masks. Since he was the one who suggested this solution, he did most of the work, such as consumer identification and developing the pipeline. Ivan gave the name of our project and the name of our team. Participated in the development of the presentation. And he defended our project at the pre-defense and final presentation. Thanks to him the final product looks exactly like this.

Burcev Yuri - the support. Before the idea with masks was revealed, I participated in the discussion of the topic and the proposed solutions, which were later rejected due to finding a better solution. Also made small improvements to the pipeline, and neatly redrawn it. I also

designed the main part of the presentation (topic, information, pictures, etc.). Also, since the hackathon was held online, I once again reminded or informed Ivan about the time of certain events.

## **Contact details**

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# **Solution Details**

## **Solution description**

First of all, our goal was to take care of the ecology of our entire planet, therefore one of the products that we are offer to produce is cleaner nature around us. But if talk about a more material product, then this is a spunbond coatings for agriculture maded from used medical mask.

The success of our solution can be measured by evaluating the improvement in the environmental problem caused by the oversupply of medical masks.

Such a solution can solve a global environmental problem with a clear positive financial effect for the person who will implement this project.

## **Solution context**

Our task was to solve the ecological problem of environmental pollution through the reuse of resources. And, from our point of view, we were able to offer a solution to this problem, taking into account the economic feasibility of this project.

## **Solution target group**

The target group of our solution is agriculture.

## **Solution impact**

Our project has a positive effect on the environmental situation around the world and on the financial situation of the person who implements this project.

## **Solution tweet text**

Agriculturing Corona! everyone thought what to do with used medical masks, but we figured it out and make the world a better place!

## **Solution innovativeness**

In a sense, our solution can be called innovative, because the medical masks used now are often simply stored, and we propose to recycle them into something useful. Of course, the final product is not something unique, but our path is unique and everyone benefits from it.

## **Solution transferability**

Yes, of course our decision can be applied not only to agriculture. This craftsmanship is used in many industries, we just decided that the processing of resources that pollute the environment, and the direction of the processed product in the agricultural sector is quite symbolic.

## **Solution sustainability**

Our decision makes sense only in the medium term, as the oversupply of used medical masks was caused by the coronavirus pandemic, and humanity will be able to defeat this virus in the near future. But the effect of the implementation of our project has a positive effect on the environment in the medium and long term.

## **Solution team work**

My teammate and I have worked quite well together and I am confident that in the future we will also collaborate and participate in similar events.