**Important to mention:**

Problem and Impact

* **3 parties, thousands of people, 1 platform to connect ‘em all.**
* Immediate response to live demand requests
* Filling the communication gap for supply and demand

Design and Technical Aspects

* **Equal opportunity for manufacturers**
* **Integrating Data science at an early stage of demand prediction allows for an optima allocation of efforts**
* Tender and quotation platform.

Originality

* Bridge demand and offer via a single platform
* One platform involving the three parties doesn’t exist. Separate solutions for logistics and manufacturers and GGD.
* Crisis is new. LCH is founded in 20-03-2020 a unified platform for medical equipment ordering and shipping.

Implementation

* **Can be integrated with current situation/PBM Corona App**
* Applicable during crisis
* Does not require additional registration on part of health institutions, does not require time from them.
* Tried to contact GGD.

Business model practicalities

* **Optimizing manufacturing lines generates money for manufacturers.**
* **Giving chance to SME’s in medical equipment and transportation industry to connect and work efficiently.**
* Low price help government safe money.

Why do you need to win?

* **Bring this platform into a running system.**
* Later adapt it as a project for feasibility of implementation worldwide.
* Provide the idea to start-up.

**Storyline 1**

* This crisis is growing tremendously. Last week the number of the case passed 1 million and we must stop this by having medical equipment at right time at right location.
* 1.36 million. This is the number of people working in healthcare in the Netherlands. For these people working on the frontline of this crisis, having access to the right protective equipment, such as masks, is essential.
* But these masks are lacking, as are other medical equipment. A survey by the FNV showed that over 82% of healthcare professionals are already careful with the equipment they use, or are scared they are running out.
* At the same time, there are hundreds of private persons and companies who are ready to help out, by producing these products.
* Our solution aims to connect these new producers to the health institutions through one single platform.
* Solving this challenge needs the collaboration between three main parties: Healthcare institutions, Manufacturers and the Landelijk Consortium Hulpmiddelen**. 3 main parties, thousands of people, and one platform to connect them all.**

**Storyline 2:**

* Let’s talk about demand and supply.
* This is a story of 3 main parties, thousands of people, and one platform to connect them all.
* This is the story of 6 data scientist who believe that the integration of demand prediction at an early stage, could help prevent shortages in medical equipment at hospitals. That it could help prevent doctors from walking around infected patients without any protective equipment, or equipment of low quality. (I think it's good to also involve patient here.)
* **So where does this story start?**
* It starts with demand. There are over 1.36 million people working in healthcare, and with the current spike in demand of protective equipment, the regular delivery and distribution processes are lacking. The result? People that are not protected well, or that worry about the quality of their protective equipment.
* What follows, luckily, is supply. There are people there who are ready, and willing to help. Over a hundred people, private persons as well as organizations, have indicated their willingness to contribute as new manufacturers of protective equipment such as masks. (Current situation will end by collaboration of all of us)
* **So where does the story end?**Ideally, our story would not end here. Implementing the platform requires more time than three days. Most of all, it requires having contacts in the right places.
* **Thank you.**

**Use Case**  
**a hospital sends a request of shortage of a N95 mask through corona app, gets reported on eViz(our platform), forecast based on demand generated an alert and issued a tender online. Relevant manufacturers immediately put qoutation and the GGD uses this to order 95 in advance to fullfil request! Immediately on board logistic companies are involved for shipment .**

 We predict demands ~1 week in advance.

 We assist LCH to place order based on forecasting.

 LCH monitors hospitals demands and available manufacturers.

 LCH places order.

 Equipments is on the way.

**Storyline 3:**

More than 1.36 million people in the Netherlands work in healthcare, and now, many of these people are on the frontline, battling the crisis that we try to hack this weekend. For these people, having access to the necessary protective equipment is essential, but the current rise demand has led to a situation where the availability of certain products, such as protective masks, is no longer a given.

National organizations and the government recognize this problem, and have recently created the Landelijk Consortium Hulpmiddelen (LCH), to centralize the ordering and distribution of new medical equipment, and monitor current stock levels and shortages in health institutions around the Netherlands. This, is the organizations that we aim to help.

We are six data scientists currently working on our post-master at the Jheronimus Academy of Data Science. Our backgrounds range from media, to software engineering, to physics, but all of us share a passion and belief in the power of data. We propose an integrated system which addresses the needs of the LCH, different companies, both medical and non-medical who are willing to help, health institutions and ultimately, healthcare professionals.

Our solution helps in two important ways: First, it facilitates the communication between the LCH and the producers of medical equipment (both those they are regularly in contact with, and new producers). Second, it distributes the medical equipment currently available in a more efficient manner.

1.36 million people work in healthcare in the Netherlands.

The current pandemic crisis is resulting in a shortage of medical equipment.

How can we make sure all healthcare professionals receive the right protective equipment, such as masks, on time?

The government receives a lot of e-mails from medical and non-medical manufacturers who are willing to help. How can we handle those and assure the quality of these new products?

How can we make this process faster?

We are a group of data scientists with various backgrounds and different nationalities. We believe we can solve this problem.

Here is Soti. Soti is an e-platform that helps the LCH (the Landelijk Consortium Hulpmiddelen) bridge the gap between healthcare institutions and manufacturers who are ready to help. Our aim is to build upon what is already available. One of the significant **advantages** of our system is an AI component which adds predictive power. Our machine learning model predicts number of patients in hospitals and calculates number of the needed equipments. Our logistics platform can suggest the ordering of equipments based on predicted demand. Local transportation companies can register, so they can assist in urgent situations. Hospital to hospital communication is also an added value of the system. Hospitals can track orders and see when orders will arrive. In the manufacturer's platform, both small, and big manufacturers can register. , they can see the demand for products.

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Soti shows the demands from the hospitals. People in LCH can observe the demands and available sources, and place orders.

We predict the upcoming demands and show in the system. People in LCH can monitor these demands, see available manufacturers. Our logistics platform can suggest the ordering of equipment based on predicted demand. How does prediction help? Right now, hospitals register how much equipment they use every day in the PBM Corona App. We take the equipment usage If we know, how much hospitals will use in the next week, or next two weeks, we can send alerts if there is space to move equipment around, from hospital A to hospital B, or if it is necessary to place new orders.

Local transportation services can register, so they can assist in urgent situations. Hospital to hospital communication is also an added value of the system. Hospitals can track orders and see when orders will arrive. In the manufacturer's platform, both small, and big manufacturers can register.  , they can see the demand for products.

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Our solution helps LCH to save money and precious time in this moment .It helps create business opportunity for the small businesses to participate equally, big names to optimize their manufacturing lines , Logistic companies to offer help. In short three main parties, thousands of people and Soti connects them all.

Pitch notes:

* Who would get access to the data on this platform?
  + Perfect balance in ordering
* How to prevent suppliers increase the price?
* Business model (who pays for that?)
* Why we are special?
* Willingness of parties to collaborate?