

# MASC

Management of Acute  
Supply during Crises

# Table of Contents

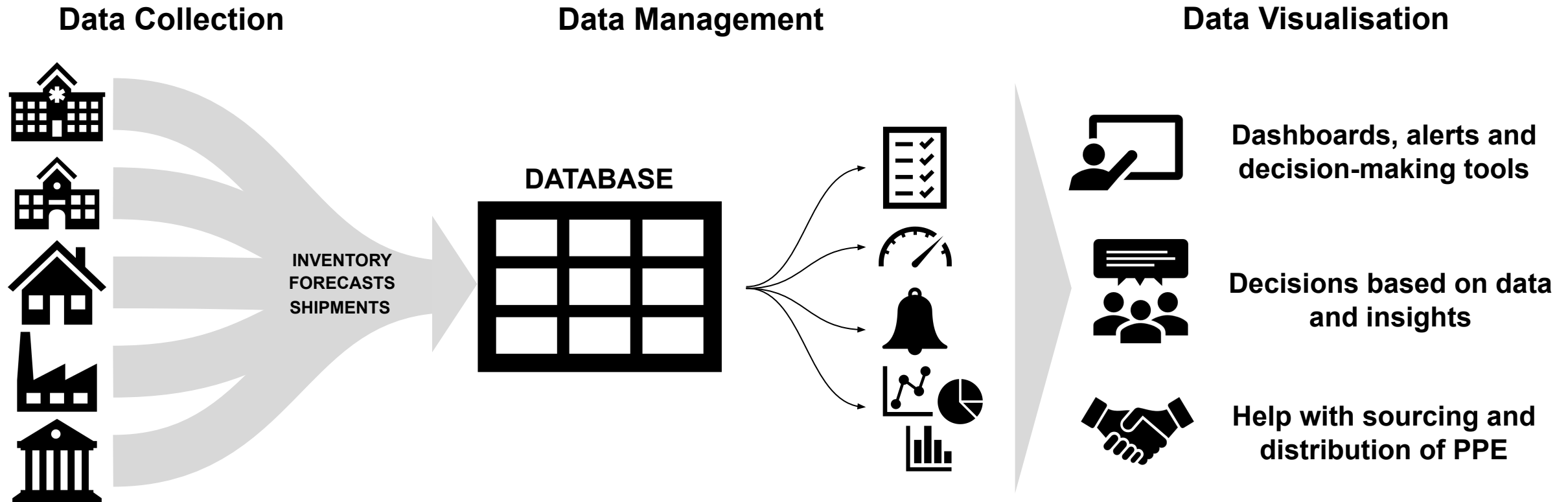
- 1 Challenge
- 2 Vision
- 3 Solution & Key Benefits
- 4 MASC for Governments
- 5 MASC for Institutions
- 6 Design, Security and Scalability
- 7 Value after the Crisis
- 8 Other MASC Solutions
- 9 MASC Team

# Challenge

1. During COVID-19 crisis, **making informed decisions** on procurement and distribution of **personal protective equipment** (PPE) has been challenging
2. The difficulty in decision-making is mainly caused by the **lack of data** on PPE inventory, forecasts and usage across institutions in both public and private sector
3. Without the necessary tools, unforeseen crises such as COVID-19, can lead to **unstructured data collection** and analysis
4. Various needs at different levels can cause **overwhelming** reporting demands, **confusion** in reporting, and **fragmented** data management
5. Inefficient and overloaded processes contribute to **increased error rates on all levels**, from frontline reporting to strategic decision-making

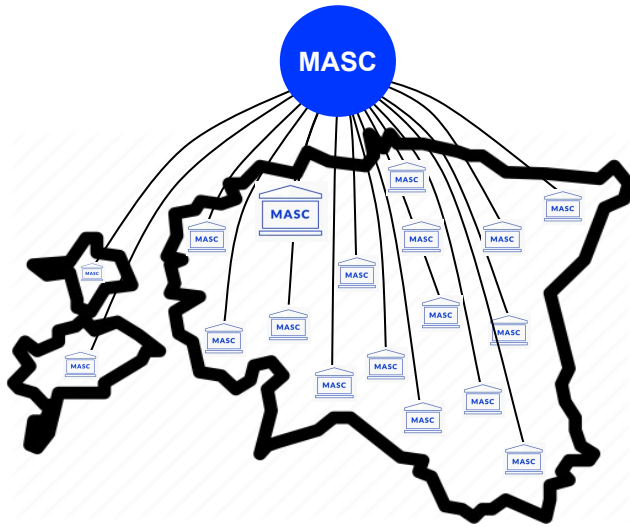
# Vision

Seamless **data flow** from institutions to the central **database** for effective **decision-making**



No central, automated platform across hundreds/thousands of organizations exists today

# Solution & Key Benefits



**MASC Gov** solution went live in **Estonia** on 21 April 2020, and is today **used by over 300 institutions** (including all hospitals)

**MASC Gov** is a PPE inventory and demand monitoring platform for governments and crisis response teams.

The purpose of MASC GOV is to help ensure the people in need of PPE receive the needed equipment.

The solution **frees up time**, **saves money** on procurement, and **helps save lives** by:



standardising how institutions report their needs



presenting that data in a comprehensible way



distributing the equipment optimally to ensure sufficient inventories of PPE

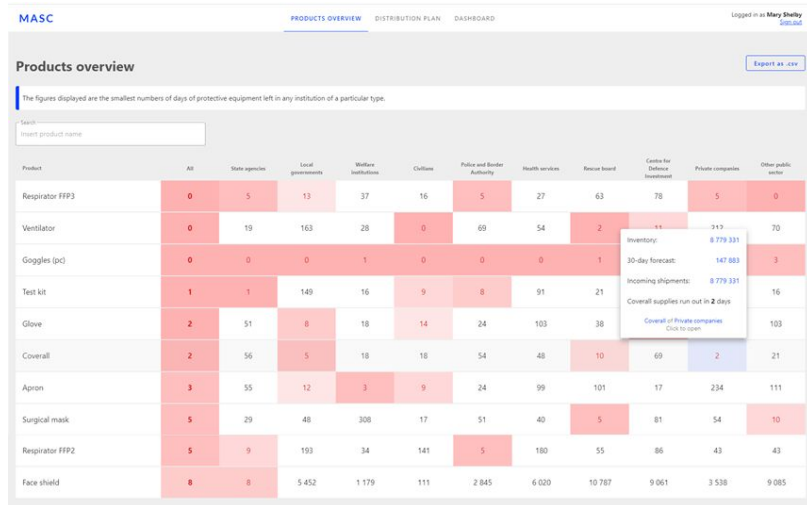
[Website](#)

[Introductory video](#)

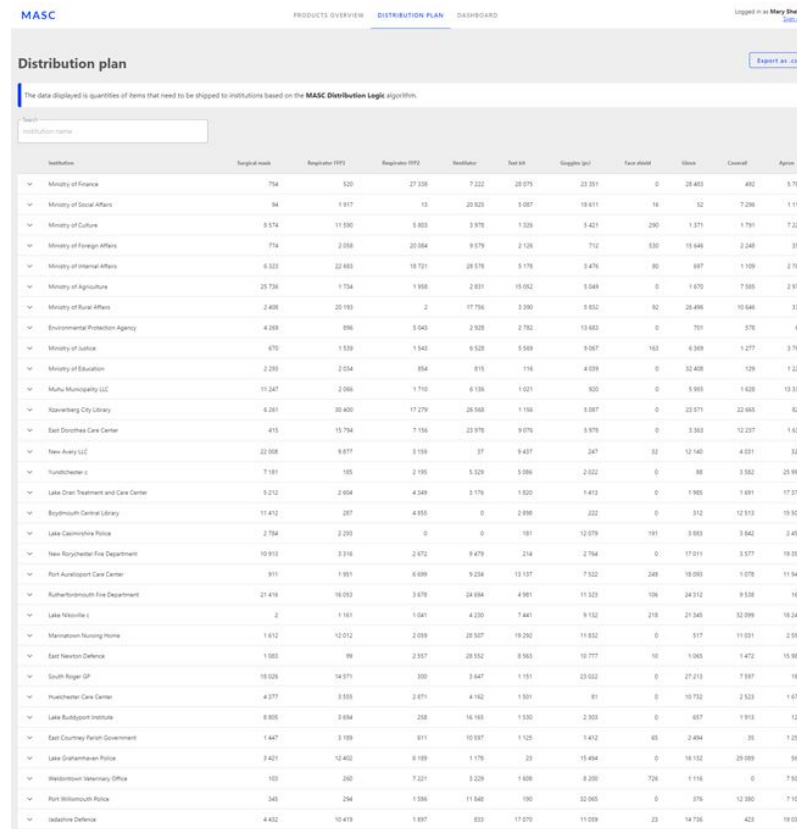
[Try our demo](#)

# Government Views

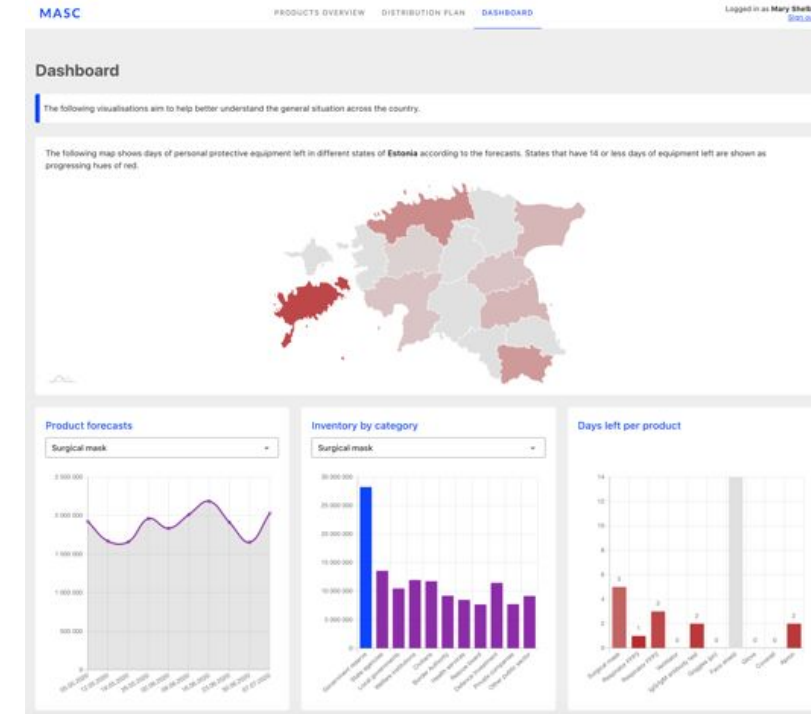
## Control Center



## Distribution Plan



## Dashboards



based on the **MASC Distribution Logic** algorithm

# Institution Views

## Overview of Data

MASC Logged in as Mary Shelly

Muhu Municipality LLC  
Inventory, forecast, and shipments

[Start updating](#)

Product	Inventory	30-day forecast	Incoming shipments
Surgical mask	488 829 pc	11 247 pc	488 829 pc
Respirator FFP3	207 475 pc	2 069 pc	207 475 pc
Respirator FFP2	211 751 pc	1 710 pc	211 751 pc
Ventilator	33 391 pc	6 136 pc	33 391 pc
Test kit	103 071 pc	1 021 pc	103 071 pc
Goggles (pc)	1 602 pc	920 pc	1 602 pc
Face shield	402 495 pc	0 pc	402 495 pc
Glove	184 479 pc	5 955 pc	184 479 pc
Coverall	84 106 pc	1 628 pc	84 106 pc
Apron	888 954 pc	13 238 pc	888 954 pc

## Simple Data Updates

MASC Logged in as Mary Shelly

[Update inventory](#) [Update 30-day forecast](#) [Update incoming shipments](#)

**Well done. Now, please enter your 30 day forecasts.**  
How many of each item will you spend in the next 30 days?

Product	Inventory	30-day forecast	Incoming shipments
Surgical mask	0 pc ✓ previous amount 488 829 pc	<input type="text" value="30-day forecast pc"/> previous amount 11 247 pc	488 829 pc
Respirator FFP3	50 000 pc ✓ previous amount 207 475 pc	<input type="text" value="30-day forecast pc"/> previous amount 2 069 pc	207 475 pc
Respirator FFP2	0 pc ✓ previous amount 211 751 pc	<input type="text" value="30-day forecast pc"/> previous amount 1 710 pc	211 751 pc
Ventilator	100 000 pc ✓ previous amount 33 391 pc	<input type="text" value="30-day forecast pc"/> previous amount 6 136 pc	33 391 pc
Test kit	0 pc ✓ previous amount 103 071 pc	<input type="text" value="30-day forecast pc"/> previous amount 1 021 pc	103 071 pc
Goggles (pc)	0 pc ✓ previous amount 1 602 pc	<input type="text" value="30-day forecast pc"/> previous amount 920 pc	1 602 pc
Face shield	0 pc ✓ previous amount 402 495 pc	<input type="text" value="30-day forecast pc"/> previous amount 0 pc	402 495 pc
Glove	0 pc ✓ previous amount 184 479 pc	<input type="text" value="30-day forecast pc"/> previous amount 5 955 pc	184 479 pc
Coverall	0 pc ✓ previous amount 84 106 pc	<input type="text" value="30-day forecast pc"/> previous amount 1 628 pc	84 106 pc
Apron	0 pc ✓ previous amount 888 954 pc	<input type="text" value="30-day forecast pc"/> previous amount 13 238 pc	888 954 pc

[Back](#) [Confirm](#)

## Sending Comments

MASC Logged in as Mary Shelly

Muhu Municipality LLC

**You're all set.**

Additional comments

Thank you! Come back on Monday next week!

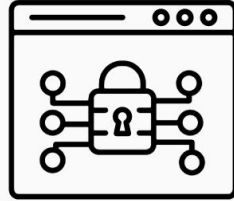
[Submit and return to Dashboard](#)

Built on powerful front-end design based on user feedback

# Designed with Security and Scalability in Mind



Secure database solution



End-to-end encryption used



User verification

## Global Readiness

MASC is **flexible** and **easily scalable**, able to fulfil a nation's different requirements for processes, application hosting, and APIs.

Integration and launch can be executed in a matter of weeks.



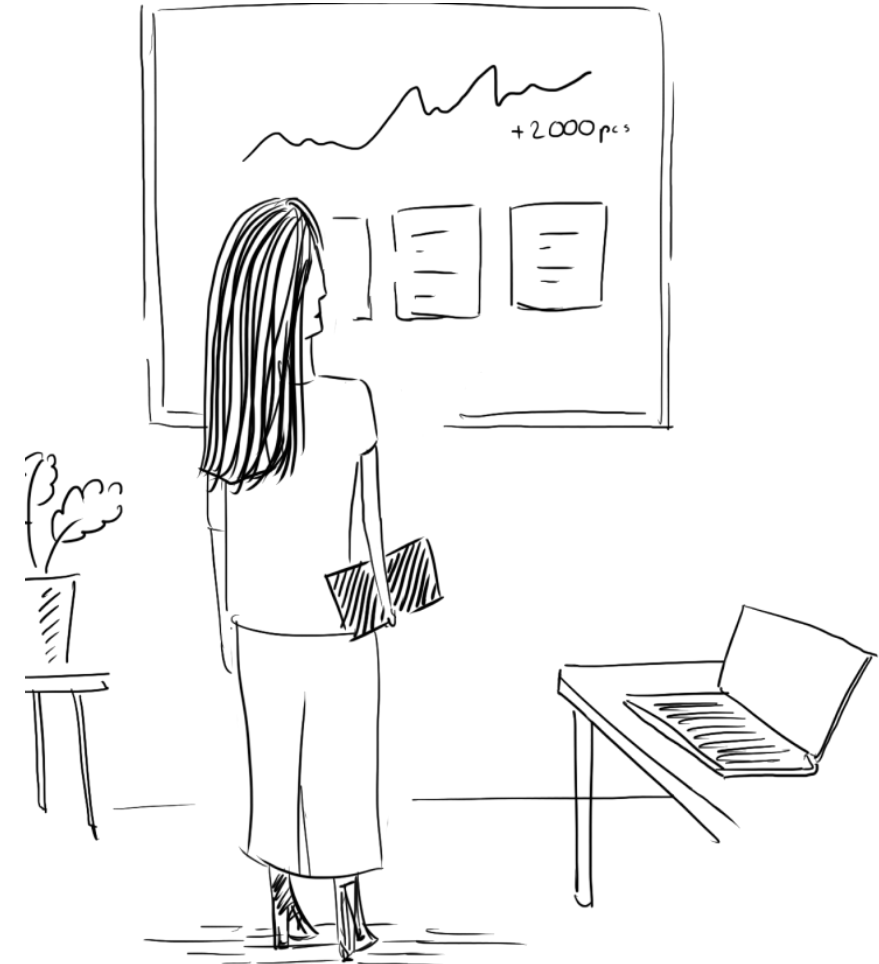


# Value After the Crisis

MASC provides **immediate relief** to the COVID-19 crisis and will help to make sure that **we are better prepared for the next crisis**

Routine data reporting and analysis allows **early intervention**, helping to **avoid the next global outbreak**

MASC **can be adapted** to any crisis situation, enabling to track relevant items **beyond PPE**



# Other MASC Solutions

## MASC Supply

B2B marketplace for PPE (trustworthy supply)

- Connecting trustworthy PPE suppliers with demand
- Focus on B2B and B2Gov partnerships
- All product certificates verified by consumer protection and technical regulation authority

Link:

<https://supply.masc-global.com/>

## MASC Vacc

Equitable COVID-19 vaccine distribution tool

- Equitably distributing vaccines across countries
- Created MASC Equitable Distribution algorithm
- Generates a proposal for vaccines distribution based on various key considerations

Link:

<https://distribution.masc-global.com/>

# MASC Team

Team who helped their native country **Estonia** through participation at The Global Hack\*



**Sten-Erik Mägi**

**Partnerships**

Governmental Affairs  
Shangri-La Group, Beijing  
University of Amsterdam



**Kert Pütsepp**

**Product**

Healthcare and Pharma  
AstraZeneca, Washington DC  
University of Cambridge



**Oliver Viljamaa**

**Software**

Full Stack Developer  
TransferWise, London  
University of Tartu

\*Brought together volunteers across the world to find solutions to help with management of the COVID-19 crisis, endorsed by the President of Estonia, Kersti Kaljulaid

# Contact us

Have any questions?

Want to work together?

[info@masc-global.com](mailto:info@masc-global.com)

[masc-global.com](http://masc-global.com)

