

Digital society ensures that nobody is left out, especially during crisis



There's no doubt that having a fully digital society in normal conditions is efficient, time-saving and just super convenient. In emergency situations such as the current COVID-19 outbreak, we experience first-hand how digital society is a true necessity. 99% of our government services are online and therefore fully functional, but this is not where we stop. In a constantly evolving crisis e-Estonia clearly has an advantage which we are happy to share.

While doctors are working hard in hospitals to take care of the sick, the public and private sector have worked on e-solutions to tackle the crisis with innovation. Since the moment that the government announced the state of emergency on March 13th to manage the spread of the virus, countless amounts of digital initiatives have emerged to help. Here are just a few from which several could be used internationally while others could serve as an inspiration.

Hacking the crisis

On the same day when the state of emergency was declared, a public-private cooperated e-hackathon was held to hack the crisis. Many useful solutions came out of the hackathon that are already live or in the process of being deployed. Several other innovations that came out of the hackathon are still being evaluated such as a cheap digitally supported CPAP machine.

Already working solutions:

- ▷ A **map of corona virus**, which visualizes our Health Board data about the coronavirus in Estonia. <https://koroona kaart.ee>
- ▷ A **chatbot** to answer typical queries about the crisis which is already live at <https://kriis.ee>. although it is still being trained so might give some odd answers occasionally.
- ▷ A **self-assessment questionnaire** to inform people about their potential risk about being infected with coronavirus, and to gather data about people who could be at risk of having the virus: <https://coronatest.ee>.
- ▷ A **website for medical volunteers** for hospitals to recruit people if they need more resources. This gathers people with medical backgrounds who do not already work in the medical sector. <https://vanemuine.org>



Ed-Tech solutions available for free globally

As the leading education nation in Europe (No 1. in PISA test in Europe), Estonian government announced that all of our digital education tools are free for use globally to support other countries' education systems during the COVID-19 crisis. When all schools closed down in Estonia on March 16, children have had to continue their studies remotely basically overnight. This, however, has not been difficult, as most Estonian schools have already been using e-solutions for schooling. Now the other



countries can benefit from our solutions too.

Soon after Estonia's announcement, seven more Nordic countries followed our lead and now Sweden, Finland, Lithuania, Denmark, Latvia Norway and Iceland have also made digital education tools free for everyone. All Estonian free tools can be found here: <https://education-nation.99math.com/>.

Interactive map about transit possibilities

Many countries have closed their borders to non-citizens. This creates a challenge for foreigners who want to travel home by land and use some countries as transit. With some countries locking their borders down even for transit, it is helpful to know about alternative routes.

Estonian government had the data, but the private sector jumped in for help and created an interactive map of Europe reflecting the most recent information about transit possibilities. The map is continuously updated with the help of Estonian embassies around Europe. <https://bit.ly/2U1fQxu>

Cyber hygiene for all

In the new normality of global pandemics, the number of people relying on online security has skyrocketed. So has the amount of cyber crimes. Unfortunately, cybercriminals are aggressively taking use of the crisis and the cyber security community has witnessed the steep rise of COVID-19 virus related cyber incidents.



This is why one Estonian cyber security company has created a cyber hygiene course for public use at <https://mycyberhygiene.com>. This is an interactive site where everybody can learn and test their cyber hygiene skills and prepare against the threats in the digital world. At the end of each individual session, users receive a profile indicating the level of risk in different areas of cyber hygiene.

Volunteer platform

Self-isolation and quarantine cuts many people off from the access to food and medicines. As COVID-19 is especially dangerous for elderly and people with already existing health conditions, they should avoid going to public space at any cost. At the same time there are people who want to help, but do not know how to reach the ones in need.

Location-based volunteer platform “community helps” was created a few days after the beginning of the crisis. It is designed to bring together the ones in self-isolation or quarantine and the ones, who can in fact go to grocery shopping and pharmacy or help in other ways. <https://kogukondaitab.ee>

Sick leave made online

With growing numbers of people having to take a sick leave at once, the family doctors practices would be flooded with people. This would contribute to the spread of the virus and hinder doctors from providing help to very ill persons.

To prevent this, the central e-health agency reacted quickly and launched a new service that allows people to initiate sick/care leave online through the national patient portal <https://www.digilugu.ee>. Their family doctor later reviews the request and either confirms or denies it. This service will be available until the crisis ends.



Remote doctor

There have already been multiple remote doctor services available in Estonia. In the face of the COVID-19 outbreak, the national Health Insurance Fund added remote specialist care into their list of refundable services. This means that doctors no longer have to see their patients face to face at the tertiary level. So far this was only available at the primary level.



Helping together

The good relations and great cooperation between the public and private sector in Estonia may sound mythical to some. However, when the crisis began and the state of emergency was declared, entrepreneurs flooded the government with offers to help. Our IT minister claimed that the amount of offers that came via e-mails became so unmanageable that a website had to be launched. Now it is integrated to Estonian national portal <https://www.eesti.ee/pakunabi/>.

Anybody who wishes to offer extra devices, skills, knowledge or any kind of resources free of charge to help combat the crisis, can sign up on this page so that they could be contacted if help is needed. Crisis management is always better, if all who can, help.

Like all nations, Estonia was not prepared for this crisis. Our private and public sector have, however, worked for years to make it possible to continue doing business even if all employees work from home for a month. More information about our innovative IT masterminds, their e-solutions and contact information can be found here: <https://e-estonia.com/>.

