# IOT ENABLES REMOTE HEALTH MONITORING

SUMMARY

The World has been stricken with a huge crisis over the past few months with the emergence of COVID-19. While all the hospitals have experienced a massive influx of people infected with the virus and clinics had to shut down, the other patients suffering from various illnesses and disabilities lost their access for sufficient treatment and monitoring. It became apparent that the current healthcare system might be insufficient to handle a challenge of this scope and some changes need to be implemented.

CHALLENGE

With hospitals getting fully occupied and other healthcare establishments getting temporarily shut down, it has become risky if not impossible for patients to get the necessary care. With healthcare professionals getting sick and the government imposed safety requirements of isolation, it became obvious that it is essential to implement remote healthcare monitoring solutions to save lives. While various companies have been working on a range of tools and platforms to make such remote healthcare monitoring possible, the crisis of COVID-19 highlighted a problem that has been previously overlooked in many cases. The implementation of social distancing has led a lot of organizations, education, and government establishments to conduct their activities purely online. Such a sudden change imposed great connectivity issues and therefore the systems which were working sufficiently until recent days, have become significantly less reliable and inefficient.

TOPOLOGY

- - - - - WIRELESS DATA CONNECTION
————— WIRED DATA CONNECTION
————— BLUETOOTH
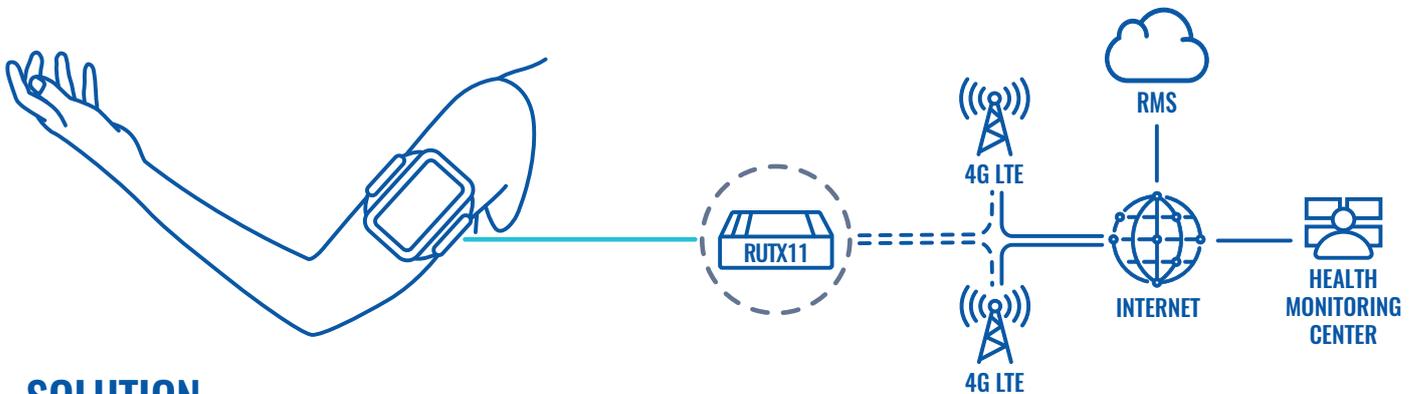
SOLUTION

One of our clients has recently been affected by a similar challenge. Their initial process seemed quite uncomplicated. A user would receive an arm-band collecting data on various health metrics. The information would then be sent to the Cloud and processed to view results via a custom app for the users and system operators. However, the practice has shown that the process had hiccups. Some of the clients appeared to not have a fast and stable Internet connection, the application did not always work well with their routers and the setting-up procedure was too complicated for the elderly or not as tech-savvy users. Working together with our client we developed a simpler and more reliable solution. Having the profile of a target user and the needs of our client in mind, it has been decided that most of the issues would be avoided by sending out a packet product: an arm-band that is already connected to our Teltonika Networks RUTX11 router.

BENEFITS

- Ease of use – the package comes ready to use and requires no complicated set-up from a user.
- Reliability – RUTX11 with 4G LTE Cat 6 offers speed up to 300Mbps and has dual SIM, which is important for users living in remote areas and provides Failover functionality to secure the data transmission at all times.
- Security – RUTX11 offers high-security protocols (VPN, Firewall, IPsec, Access Control) to protect the data of a sensitive nature.
- Remote functionality - possibility to manage remotely via RMS for technical issues and maintenance.
- Experience in the field - proven record of previous successful product implementation in the healthcare field.

WHY TELTONIKA?

In Teltonika Networks, we offer a personalized approach to each client's problem. Our extensive experience in the field combined with a wide range of products created in-doors provide us with flexibility and creativity to fulfill a project from an idea to a solution in a timely and efficient manner. Besides that, our work does not stop once the project is completed and support to our customers remains our top priority.