Case study
No Isolation

Friendship when you need it the most

No Isolation and Vodafone IoT robot alleviates the seclusion of children with long-term illness
No Isolation has devised a smart way to support socially isolated children with long-term illness

The risk with children and young adults with long-term illness is that they may become socially isolated. A fast-growing Norwegian company called No Isolation has devised a smart way to alleviate this kind of loneliness. It is a robot named AV1 that remotely keeps children closely involved with school and in touch with their friends. The robot uses innovative Vodafone Internet of Things (IoT) technology that facilitates the transmission of relatively large amounts of data. AV1 is online anytime, anywhere, which enables audio and video communication.

The challenge

Creating an avatar for children

The idea for establishing No Isolation came about in 2015 while the founders were discussing the loneliness facing children with long-term illnesses who are unable to go to school. “We decided to do something about it by means of state-of-the-art communication technology,” says Anna Holm Heide, Chief Communications Officer at No Isolation. “Ultimately, this resulted in an initiative to develop a robot capable of helping children with long-term illness.”

This robot was named AV1. AV stands for avatar, because it is in fact an actual avatar for the children in the class. AV1 acts as the child’s eyes, ears and voice in the classroom. AV1 is controlled by an app on a smartphone or tablet. The robot is equipped with a camera that can rotate 360° and weighs no more than one kilogram. This means AV1 is easy to move around, enabling the robot to go on school trips and attend birthday parties. It means the children do not lose complete contact with day-to-day life when diagnosed with a long-term illness.

Interaction

AV1 enables children with long-term illness to follow what is happening at school and to communicate actively with others from a distance. “As the interaction with their friends also takes place outdoors where there is no Wi-Fi, for instance, in the school playground, the connection must always be over the 4G network. However, since many school buildings are so well insulated that a mobile signal is not possible indoors, the robot is also Wi-Fi enabled,” says Heide.

“Many of the children who use the robot are so ill that even with the robot they are unable to actively participate in class, but they do want to be able to watch and listen. Therefore, the robot has the option of going into passive mode, indicated by a blue light on AV1’s head. Keeping in touch with classmates also facilitates their return to school once they feel better,” explains Heide.

The solution

Growth

The first AV1 robots were developed in 2016. Today, over 400 robots are in service in various countries. Although No Isolation began in Norway, the company is already supplying the robots to Sweden, Denmark, France, Germany and the United Kingdom. A number of robots are now also being used in the Netherlands.

In the spring of 2017 the first two AV1 robots in the Netherlands went into service at the Emma Children’s Hospital in Amsterdam; now more robots are in use. “The acceptance of new technology and innovation is very high, and the Netherlands is technologically highly advanced, particularly when it comes to medical technology,” explains Heide.

No Isolation opened a Dutch office in February 2017. Ten people out of the company’s total workforce of 65 employees now work there.

Cooperation

Vodafone supplies the communication technology for the AV1. However, this is more complex than a standard IoT connection. “Various IoT technologies are available on the market. But video is an important feature of the AV1, so for that alone we need a relatively large amount of bandwidth.”

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Chief Communications Officer
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Anna Holm Heide, Chief Communications Officer, No Isolation

“In Vodafone we have a supplier that can support our ambitions. We are very satisfied with the technology,” says Heide.

“Vodafone is one of the largest telecom operators in Europe, so when we started to expand outside Scandinavia, it was the logical choice. What’s more, we wanted more than just a technology supplier. We wanted a collaboration partner we can grow with, a partner which helps us to see the possibilities and want to achieve them together.”

The future

Expansion

No Isolation has a lot of ambition, and is spreading its wings into even more European countries. “Vodafone is the ideal partner for this. The great thing about Vodafone is that it’s a global operator, not a local player. This supports our expansion. For example, for our launch in the United Kingdom we are also using Vodafone.” It will not be limited to AV1. “We have also launched KOMP, a one-button computer that allows families to share photos, messages and make video calls across generations. In this way we can also combat loneliness among senior citizens by leveraging technology to stave off social isolation,” concludes Heide.

The bottom line

- Vodafone has the largest 4G network in Europe available for transmitting large amounts of data
- AV1 robot is capable of handling large amounts of data, including video streams
- No Isolation products function reliably and securely anywhere
- Working with a worldwide market leader in IoT, and supplier of cutting edge IoT-communication technology
- Vodafone takes an active role in product development, provides logistic support and assists with the go-to-market. Vodafone can help distribute these products globally in a simple, controllable and safe way

About No Isolation

- Supplying robots to Sweden, Denmark, the United Kingdom and the Netherlands
- The first AV1 robots were developed in 2016
- Over 400 robots are in service in various countries
- Opened an Amsterdam office in February 2017, and a London office in September 2017. Ten people out of the company’s total workforce of 65 employees work at these offices
- www.noisolation.com