INTERACTIVE REMOTELY CONTROLLED PLAYGROUND SYSTEM

SUMMARY

The World Health Organization has reported that more than a quarter of the world's population is insufficiently physically active. In fact, the levels of physical activity have not increased since 2001. These changes are driven by motorized transport, increasing screen time and a sedentary lifestyle. The WHO (World Health Organization) has even prepared an official plan to increase physical activity across communities. So, what can we do to achieve that?

CHALLENGE

One way to make outdoor activities more enticing is to integrate IoT technologies to bring more interactive elements. Some technological interactivity can be implemented to enhance the experience, as people naturally like to compete with each other and be entertained.

However, each solution has some essential conditions that need to be met — power and connectivity. A playground with IoT elements needs to have access to the internet to have all the software updated and send data to keep things working in an orderly fashion as the environment in which it needs to operate can be pretty harsh.

PARTNER - play alive

PlayAlive is a Danish company that has been creating innovative play solutions since 2008. They focus on integrating smart technology for interactive playground systems, and their goal is to make the play areas more engaging and incite movement outside. PlayAlive's products are already implemented worldwide in such regions as the USA, Australia, Asia and most of Europe.
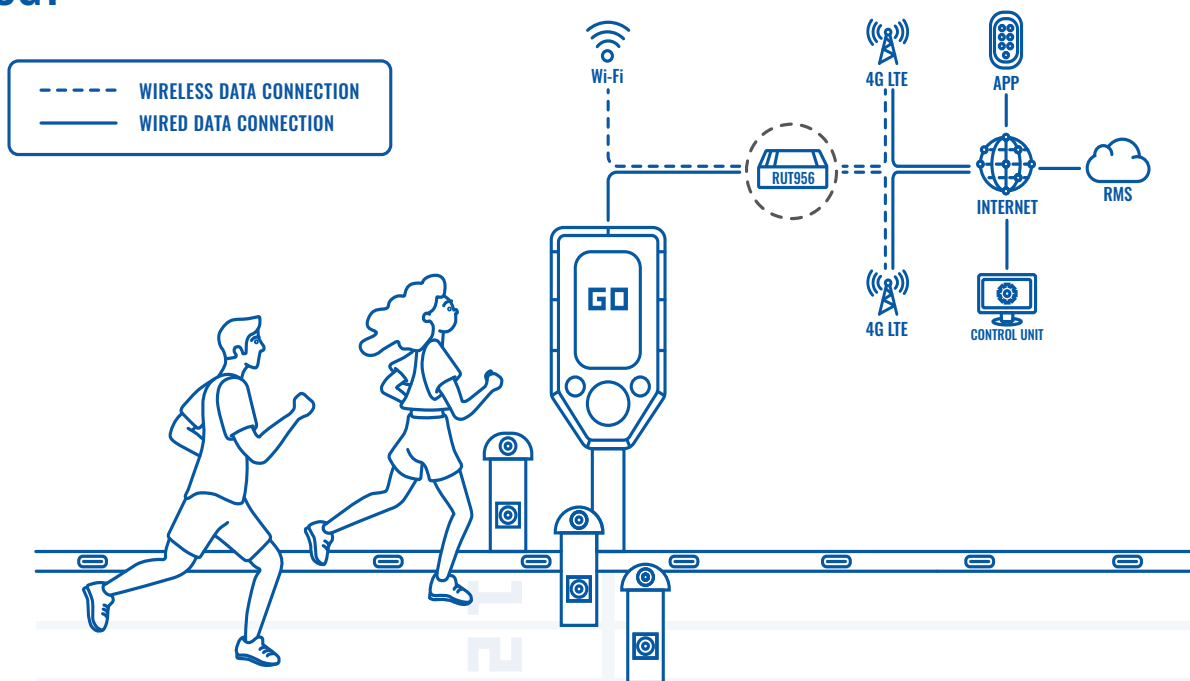
SOLUTION

PlayAlive has designed a Running Light pacer system that helps increase physical activity in outdoor zones by introducing interactive elements. Their smart solution consists of LED lights, a display unit that acts as the game controller and sensors. You can choose between several different racing game types. The run timer starts and stops as sensors detect someone passing the finish and start lines. While running, depending on the game type, you have to follow the LED lights that move beside the running track.

This solution gets its connectivity thanks to Teltonika Networks RUT956 industrial cellular router. RUT956 provides primary connectivity for the display screen while enabling Wi-Fi for any other elements not directly cabled to the central unit by a physical wired connection. All the other modules connect to the router through its I/O connections.

Furthermore, Teltonika Networks RMS enables remote monitoring, gathering statistics and powering on or off various system components. Also, RUT956 gives remote access to the control units, which can then change the available games, volume, and other settings.

TOPOLOGY

WIRELESS DATA CONNECTION
WIRED DATA CONNECTION

Wi-Fi · 4G LTE · APP · RUT956 · INTERNET · RMS · 4G LTE · CONTROL UNIT · GO

BENEFITS

- Multiple RUT956 I/O connections enable remote powering up or down.
- The industrial cellular router can shrug off most extreme environmental factors like temperature and moisture.
- RUT956 features a dual SIM slot for alternate operator and failover.
- RMS allows to remotely update the software, firmware and collect analytical data.

WHY TELTONIKA NETWORKS?

PlayAlive chose Teltonika Networks device due to its robust design that could withstand harsh weather conditions, offering all the necessary connections needed to enable their IoT solution. They also made great use of Teltonika Networks RMS, which provided all of the essential functions with high-customization possibilities.