

CASE STUDY

HeyTu
Telecomunicaciones
Peru reduces digital
divide with Nokia
Wavence microwave
transport

NOKIA





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“At HeyTu, our aim is to drive reduction of the digital divide in underserved communities, a goal made even more achievable with Nokia’s Wavence portfolio.”

With Nokia’s multiband microwave backhaul solutions, we are able to connect remote areas with high-performing, reliable and cost-effective links. This is something that has been especially relevant in Peru, where we have areas that require high-performing transport networks to connect people and industries. Nokia is our preferred partner as their products and services are the best match for our requirements. Reliable microwave backhaul opens the door for connecting unconnected areas like oil and gas exploration fields and reducing the digital divide by providing broadband access to people in remote areas.”

Fabricio Zagarra

Business Development Manager,
HeyTu Telecomunicaciones

HeyTu, a new player in bridging Peru’s digital divide, deploys Nokia Wavence portfolio to bring connectivity to underserved communities.

HeyTu Telecomunicaciones is an up-and-coming business in Peru with the aim of improving network connectivity in the country’s rural areas. While they may be newly entering the microwave scene, HeyTu is dedicated to making a difference in areas of Peru that are not yet serviced by 2G, 3G, 4G and 5G. As a company, HeyTu values professionalism, integrity, perseverance, and respect, as well as sustainability through growth. Their goal is to serve businesses and consumers in extreme, rural areas and industries, and associated communities where satellite cannot provide needed capacity.

HeyTu provides connectivity to large-scale industries in rural areas such as gas and oil exploitation zones and mining units. Their vision is of a country where everyone has access to the Internet, thus improving quality of life, without neglecting the importance of a sustainable future.

OBJECTIVE

Contribute to closing the digital divide in Peru by bringing mobile connectivity to rural areas

HeyTu is a new player in Peru's operator or neutral hosting space, with an ultimate goal of bridging the gap in the country's digital divide. Recent new legislation has allowed companies such as HeyTu to enter the market, opening up greater opportunities to deliver connectivity to areas currently without high performance in 2G, 3G, 4G, and 5G. HeyTu has been successfully providing access and transport network services for both operators and large companies, thereby furthering the reach of wireless connectivity.

In cases where fiber is not an option, due to terrain or feasibility, or where satellite does not provide needed capacity, microwave transport is deployed, an even further development in bringing connectivity to previously underserved communities.

HeyTu operates the networks as a neutral host and their objective is to serve mobile operators in extreme, rural areas, as well as industries and associated communities.



SOLUTION

Modular product architecture allows different deployment options with minimized warehouse assets

Initially, in this case study, Nokia introduced the Ultra-Broadband Transceiver Twin (UBT-T) family to the Peruvian technological landscape. Through the strategic implementation of wideband receivers that are designed to be sub-band free, the solution had even greater area coverage than it would have had with a singular band. This approach lessened the number of hardware units needed for configuration, reducing operational efforts, and leading to an overall decrease in the energy consumption of the system. This also caused there to be fewer spare stock items, enhancing the inventory spendings and minimizing warehouse assets.

Power consumption was also a critical factor in the customer's decision-making process, considering their reliance on solar power for their stations. The integration of Nokia's energy efficiency features resulted in an average 25% decrease in energy consumption, aligning with the customer's sustainability objectives.

Moving forwards, Nokia and HeyTu's target is to double the number of radio frequency channels in the network from four to eight, resulting in even greater capacity and throughput for the citizens of Peru.

RESULT

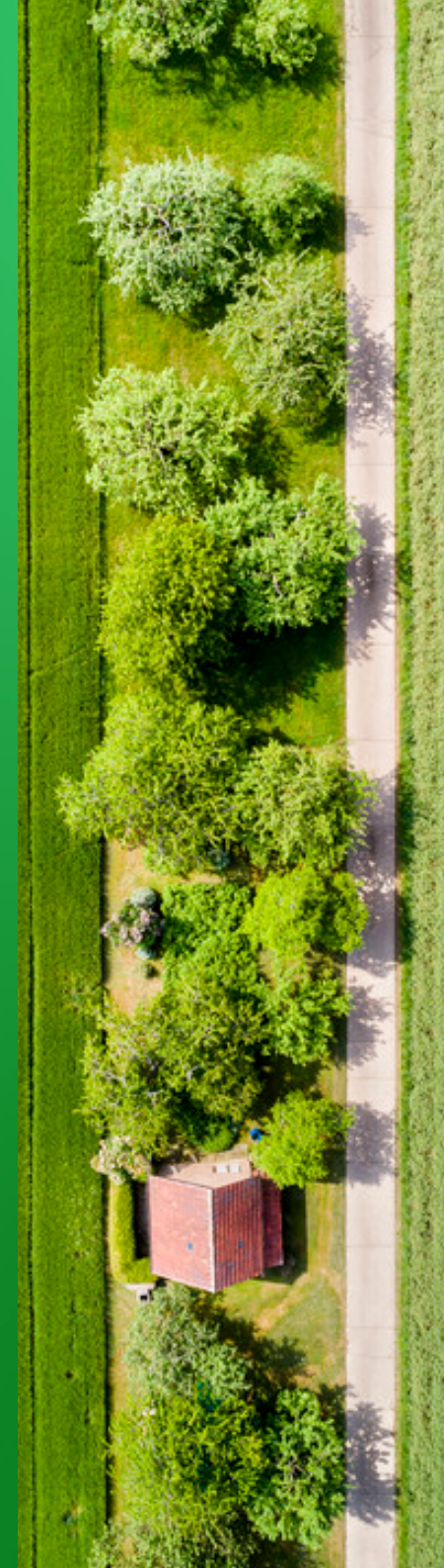
Greater network connectivity between the Camisea and Quillabamba regions

Nokia's solution aimed to increase connectivity from the Camisea to the Quillabamba regions, covering a 133km route with the longest link spanning 57km.

Through the use of wider bandwidths and dual-band antennas, Nokia and HeyTu were able to serve Peruvian citizens with increased network capacity, distinguishing HeyTu from its competitors with advantages such as lower power consumption. Not only that, this solution guaranteed customers a system availability of 99.5%, highlighting the efficiency of the communication network.

The infrastructure deployed across Peru included towers taller than 50m for enhanced signal propagation, versatile last-mile transportation with fiber optic and microwave, and mobile access options spanning 3G, 4G and 5G. Diverse power sources, such as solar, AC with backup and hybrid systems were also utilized to ensure citizens have uninterrupted service reliability.

Successful deployments such as this demonstrate that optimal network design combined with dependable equipment infrastructure and installation enable faster, more reliable networks with expanded coverage in rural areas.



GLOBAL PERSPECTIVE

Microwave portfolio to connect underserved communities

In order to reduce the global digital divide, the strategic implementation of microwave networks is vital to expanding connectivity in underserved communities. Bridging this digital gap not only connects individuals and businesses, but also promotes socio-economic development on a global scale, unlocking a myriad of opportunities for individuals and companies who were previously unconnected. Recognizing the potential for microwaves to efficiently extend connectivity to underserved areas is paramount to creating a more inclusive digital landscape, where the benefits of digital revolution reach communities of all sizes and geographical domains.

Nokia and HeyTu's success in Peru is a key example of the transformative impact microwave products and solutions can have on areas that

are currently underserved by mobile connectivity. By leveraging innovative solutions and technologies, Nokia and HeyTu have played a pivotal role in connecting remote and underserved regions in Peru, contributing to reducing the digital divide. This accomplishment in Peru showcases the opportunity for other countries facing similar connectivity disparities. The strategic use of microwaves and advanced telecommunications solutions can bridge gaps, unlock opportunities and contribute to a more interconnected global society.



Visit the Wavence
Microwave Transmission
webpage to learn more



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As a B2B technology innovation leader, we are pioneering the future where networks meet cloud to realize the full potential of digital in every industry.

Through networks that sense, think and act, we work with our customers and partners to create the digital services and applications of the future.

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