TrueMove H
Baicells Case Study

Overview

There are around 13,000 7-Eleven locations around Thailand, marking it as the number one convenience store in the country. The typical store front contains everything needed for daily life and often contains full-service cafés with dedicated seating for consumers to enjoy their purchases. Included in the 7-Eleven experience is free internet access that can be used while patrons are in the shop.
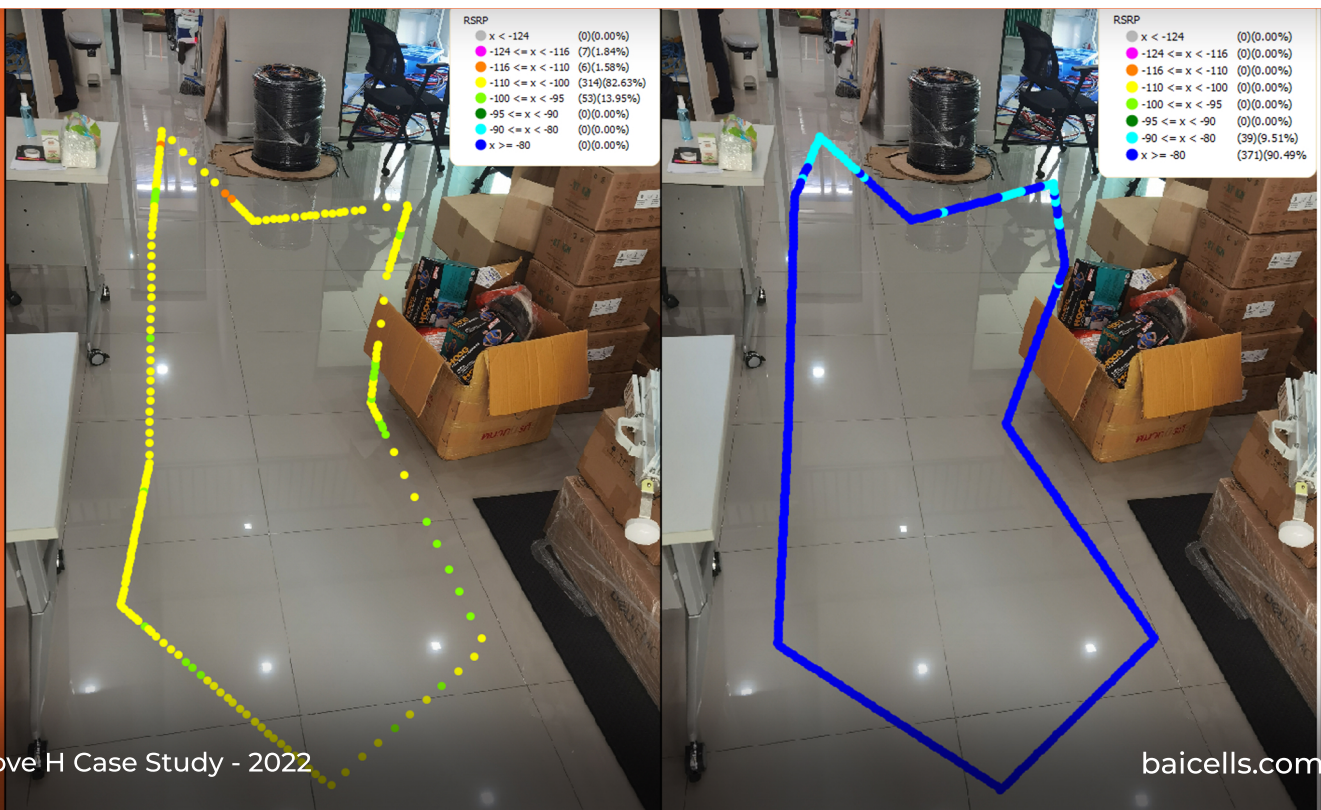
Overview - Cont.

It is important to note that the typical internet user in Thailand is on the internet for about 10 hours a day. The internet, like in many parts of the world, has become ingrained with the culture and the growing economy. Alongside this avid internet consumption is an expectation for wide-spread connectivity, and if a shop doesn't have internet, or has spotty internet, the respective reputation of the store tends to suffer.

The Problem

Over 5,000 7-Elevens in Thailand were suffering from poor internet connectivity within the stores due to wireless dead zones. As a result, the store's reputations were being negatively affected, and patrons were spending less time in the shops which meant they were spending less money in the stores. While searching for solutions that could help solve the store's coverages problems, equipment cost could be prohibitive.

RSRP		
⬤ x < -124	(0)(0.00%)
⬤ -124 <= x < -116	(7)(1.84%)
⬤ -116 <= x < -110	(6)(1.58%)
⬤ -110 <= x < -100	(314)(82.63%)
⬤ -100 <= x < -95	(53)(13.95%)
⬤ -95 <= x < -90	(0)(0.00%)
⬤ -90 <= x < -80	(0)(0.00%)
⬤ x >= -80	(0)(0.00%)

RSRP		
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⬤ -110 <= x < -100	(0)(0.00%)
⬤ -100 <= x < -95	(0)(0.00%)
⬤ -95 <= x < -90	(0)(0.00%)
⬤ -90 <= x < -80	(39)(9.51%)
⬤ x >= -80	(371)(90.49%)

The Solution

7-Eleven contacted TrueMove H, one of the largest LTE providers in Thailand to find a solution to their problem. The stores needed an LTE wireless solution that could eliminate the wireless dead zones within the stores and provide a fast and reliable voice and data connection. This solution needed to be cost-effective and easy to install and maintain so it could be rolled out across many stores in a short time.

TrueMove H chose Neutrino220 to meet the needs of the 7-Eleven stores. This is an indoor LTE eNodeB, that has an all-in-one integrated design that is perfect for small shops. The device comes equipped with Baicells plug-and-play functionality and utilizes a flexible backhaul platform that can connect to any Internet IP. Further, the devices can support up to 32 concurrent users while covering an area of 100m2, making it ideal for the limited spaces that 7-Eleven occupies.

The Neutrino220s were able to easily connect to a cloud-based EPC platform to offer full 4G LTE coverage within the stores and then be remotely managed through Baicells Operational Management Console (OMC). These changes let 7-Eleven greatly improve the customer experience within the stores and customers were no longer restricted to slow 3G connectivity or subject to wireless dead zones. In the 7-Eleven's where the Neutrino220s were installed, the average download speed increased from 5.14Mbps to 102Mbps and the average upload increased from .223Mbps to 29.6Mbps! Ping was reduced from 216 to 56Ms. Overall, the stores were able to see a considerable improvement after installing the Neutrino220s.

Conclusion

In today's world, wireless connectivity can make the difference between a happy customer and an upset one. Internet demands grow daily, and if you are unable to keep up with the expectations you can be left behind. 7-Eleven locations in Thailand found themselves in this predicament, and were under threat of losing their stellar reputation they had worked so hard to build. To find a solution, they approached TrueMove H, one of largest wireless carriers in Thailand. True, in turn, tapped Baicells Neutrino220 to solve the connectivity problems that were plaguing the 7-Eleven locations.

The Neutrino220 was chosen by True because it eliminated the dead zones that the stores were experiencing. But further than that, the Neutrino220 was simple to setup and maintain, it accepted a flexible ethernet backhaul , and it was affordable and had minimal operational expenses. In short, the indoor eNB was everything 7-Eleven and more. It met all the expectations of the stores and greatly improved the internet connectivity within the locations.

To discover if a private LTE network is right for your next festival or event, please contact our sales team to discuss your options.