MOBILE DATA:
Anonymized network location service supports public health authorities during COVID-19
CHALLENGE

As world governments everywhere confront the COVID-19 pandemic, they face the universal challenge of not understanding enough about the spread of the virus through their populations and across geographies to combat it effectively.

As the Government of Sweden grapples with the risks, it is trying to make the best possible public health decisions—based on evidence and data, not conjecture or anecdotes.

Sweden abstained from implementing a lockdown. It is instead making recommendations such as avoiding all non-essential travel and relying on individuals taking responsibility themselves.

To stay on top of how these advised restrictions are working out, the Public Health Agency of Sweden (Folkhälsomyndigheten) were seeking up-to-date information about people's travel within cities and across the country and region.
Nordic telecom company Telia collaborated with Accenture to leverage an existing mobility analytics service to analyze travel trends, which the two companies created in 2017 and has been commercially available since.

The Crowd Insights service captures movement data from Telia customers’ cellphones across the network, which is adapted to compensate for their market share of the population. All data is aggregated automatically before use to protect personal privacy and can never be traced back to an individual.

We were able to apply it to learn more about the public’s anonymous travel patterns within Sweden, Finland, Norway, Denmark and Estonia during the pandemic, with a focus on urban centers where the most virus cases have been reported. The data insights about where people are moving to and from enable authorities to understand citizens’ behavior, and see local variations and changes over time. This knowledge can be useful when they tailor specific initiatives to slow the spread of the virus, including social distancing policies and travel restrictions, to the reality on the ground.
Throughout the development of Crowd Insights, ‘privacy first’ remained an underlying principle.

The Telia network is divided into geographical areas large enough to ensure individuals cannot be identified. And all data input is irreversibly anonymized before being aggregated so the only thing analyzed is crowd patterns and the privacy of all network users is always protected.

Amid the global health emergency, Telia Crowd Insights helped the Public Health Agency of Sweden and other Nordic country authorities to evaluate the effect of measures to tackle the contagion.

It proved that despite no formal restriction of movement being imposed, the people of Sweden were heeding Government advice to stay at home.

Trips out of the capital Stockholm, for instance, were shown to be down by nearly 90 per cent compared to the same time period last year.

Plus, as the solution is being used by governments in multiple countries, authorities can compare the impact of different national strategies in combating COVID-19, and evaluate and adapt their approach accordingly.
VALUE DELIVERED

Building on their existing relationship, Telia and Accenture were able to rapidly assemble the team to get this urgent job done quickly and smoothly.

In fact, during the recent Easter weekend, less than a week after the project began, the first insights on changed movement patterns were delivered. This demonstrates how we can apply a proven platform to a new context at speed.

Governments and public health authorities in all Nordic countries sought the unique insights to inform their ongoing national COVID-19 strategies. And media has requested information on the findings and visualizations, with the results being broadcast in national news across the region. A sign of the acute public interest.

Revelatory knowledge is key in the wake of the unprecedented global virus outbreak, as authorities try to slow the spread of an invisible enemy. This project successfully illuminates movement trends so the effect of measures, such as recommendations on keeping distances and avoiding unnecessary traveling, can be evaluated.