

Al's Impact on Self-Organizing Networks & Data Monetization

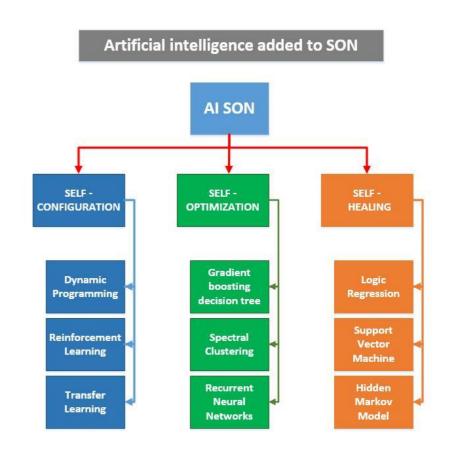
The speed of development and increased optimization in AI has led to increased adoption in several industries including telecom, which is realizing the benefits of AI in both current and future applications.

Two of these applications are data monetization, and SON (self-organizing networks).

The need for more automation has placed AI at the center of the SON discussion

Service providers are making it very clear that to further automate their network optimization, AI is the key component needed for autonomous and efficient decision making. The SON engine needs to carry out an increasing number of tasks by itself, which is where AI comes in, with help from machine learning. These key ingredients will enable the fully autonomous network to become a reality.

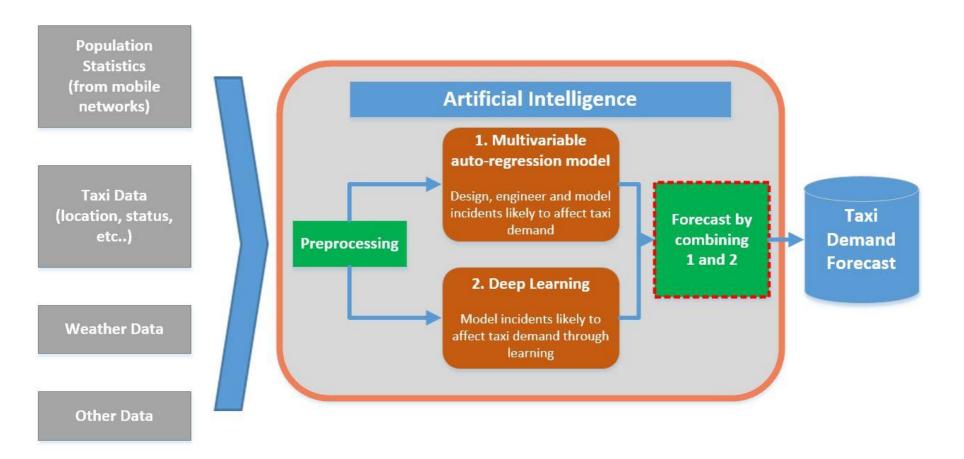
For example, in the context of SON, a neural network would be able to analyze thousands of KPIs along with all SON use cases and perform automatic detection and removal of failures and automatic adjustment of parameters as specified in 3GPP Rel. 10.



Al is enabling improved data monetization

Monetizing the vast amounts of data has been a challenge for telcos for the last decade. However, new use cases are surfacing that are making big money from subscriber data and AI, and one of those is from a tier 1 APAC operator, who forecasts demand for taxis in Tokyo.

By matching the operator's massive subscriber base with taxi fleet tracking, and adding in other parameters like weather and traffic, a real-time forecasting system was built. The operator not only designed the system, but also sold its subscriber database as part of the package. The process works as shown in the below chart.



The system ignores areas with no pedestrians, such as residential neighborhoods at night, and forecasts taxi demand for the next 30 minutes in 500 square meter areas.

Conducted from December 2016 to March 2017, the field trial showed that taxis equipped with the system increased sales by 49%.

The Mobile Infrastructure Intelligence Service from IHS Markit Technology provides global, detailed coverage of mobile equipment, software, services and subscribers, including 2G, 3G, 4G, LTE, LTE-Advanced (LTE-A), emerging 5G, voice over LTE (VoLTE), centralized RAN (C-RAN) and self-organizing networks (SON). Learn More