

# Attribution Modelling for Toyota

## *Digital Attribution in the MENA region*

### THE CHALLENGE

Toyota Middle East is one of the car maker's leading markets with approx. revenue of USD 14B. Toyota MENA (ALJ) did not have a digital attribution model, but with the rapid expansion of digital budgets, it was becoming a hostage of advice from media planning agencies with vested interests.

### OUR SOLUTION

Our model was based on an ensemble combination of Random Forest & SVM and incorporated digital but also offline touchpoints, with customer names pre-matched to social media and cookies/tags by a pre-existing 3rd party supplier. Digital device usage & digital engagement levels in the MENA (esp. Middle East) market are very high, especially amongst Automotive customers, and many successful paths had 100+ digital interactions pre-purchase – hence why only machine learning was really an appropriate approach to consider. Our ensemble model achieved 84% accuracy in predicting paths. The model ran on top of the pre-existing MS SQL Server databases with daily update cycles.

### THE RESULTS

In a heavily competitive market with strong economic headwinds and declining sales, our customer used the model to optimise spend across digital channels, improving their budgeting process and reducing digital spending by as much as 50% in some markets with minimal to no impact on sales from the decreased spending.

