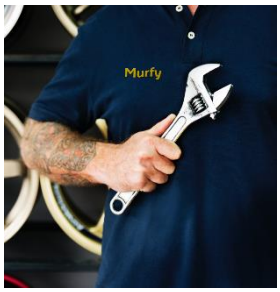
MURFY

SCALING A NATIONAL NETWORK OF DOMESTIC APPLIANCE TECHNICIANS



Aim:

to create a national network of technicians to cover 85% of the French population.

Solution:

- network design model adapted to the specific features of Murfy technicians' routes
- simulation of several penetration rate projections (8-12 daily callouts for 450,000 homes)

Results:

- interim network of 50 technicians covering 55% of the population
- target network of 100 technicians covering 85% of the population

"Thanks to EURODECISION, we managed to improve our planning and organization and thus better optimize our growth" *enthused Guy Pezaku, MURFY's CEO.* ***"We directly targeted the most attractive areas for us and thus concentrated on hiring technicians"****.*

The MURFY start-up, founded in July 2018, offers a white goods troubleshooting and repair service for private customers in their homes. Given that 28 million household appliances break down every year, and only 5 million of them are repaired*, the firm seeks to combat waste. It demonstrates through its waste reduction approach, that in more than one out of two instances repairs are neither costly nor complicated to carry out, and thus could be applied to a potential of 9 million appliances.

The MURFY website features free DIY repair tutorials for faulty appliances or the option of booking an appointment with a technicians who will arrive at the customer's home in under 48 hrs. for a flat-rate service fee of € 75. The rapidly growing start-up (70% per quarter), has a team of 23 employed technicians who currently make more than 2,500 repairs per month.

MURFY started to roll out its nationwide repair service on the strength of its success in the Paris region. Its presence in the major cities has given it the ambition to cover 85% of the French population within the next few months. In order to achieve this, it needs to calculate its technicians recruitment needs, and in particular, their optimal location to satisfy call-out requests in the advertised timeframe (while having enough appointments to fill the technicians' days).

MURFY called on EURODECISION, the business analytics specialist renowned for its modeling and network design expertise to support it through the project. The two companies were no strangers, as one of the start-up's founders was a former EURODECISION employee.

EURODECISION integrated all MURFY's business constraints as well as its aims into the mathematical model (80% of callouts performed within 24 hrs., >50% repair rate in a single visit, 7-9 callouts in a day per technicians, word-of-mouth impact, and so on). The mission's difficulty was to design an optimization model flexible enough to factor in MURFY's abnormally high growth rate as well as the parameters that change very frequently.

Once the simulations had been made, the optimization algorithm experts provided mapping that indicates the optimal location for technicians as well as the sectors each one should cover if MURFY's strategic aims are to be achieved. The results of this study will enable the start-up to make projections, by setting up a national recruitment plan. Several scenarios will be studied in line with MURFY's estimated penetration rates, to build a month-by-month recruitment plan that will allow it to reach target. Incidentally, once the technicians have been hired, EURODECISION will be able to make new simulations to perfect sectorization.

**Source: ADEME 2014*