

# CoIL Challenge 2000

## Submission for the Description Task

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The attributes that give the best prediction are:

### geodemographic attributes

- customer main type
- purchasing power class
- middle management

### policies attributes

- car policies contribution
- fire policies contribution
- moped policies contribution
- boat policies contribution

In our analysis we found that attributes related to insurance information allowed us to detect more easily those persons with low probability of purchasing a Caravan policy. On the other side, the geodemographic attributes indicated the people with high probability of purchasing.

From the beginning we believed that those people with high purchasing power, generally large families would be the most probable buyers. This was proven in several rules obtained in our models. The ownership of a car policy has an obvious strong relationship with the Caravans, caravans must be pulled by a car, although it was not indicated if it was a motorized caravan or not.

We found that young people, single people or low social class people have a very low probability of having a Caravan. People on the top of the social classes, don't have caravans, either. We found that there is a restriction on the age of a caravan policy owner, usually it is required to be 25 or more. This fact from European insurance companies is easily detected in the model rules.

The most important rules are:

household_with_children between < 75% AND contribution_boat IN [f 1 , f 4499]	p(caravan)=43%
middle_management IN [76%, 88%] AND purchasing_power_class IN [76%, 88%]	p(caravan)=36%
social_class_A IN [76%, 88%] AND contribution_car IN [f 1000, f 4999]	p(caravan)=34%
contribution_car < f 999 AND contribution_moped IN [f 1, f 4999]	p(caravan)=0%
contribution_car =0 AND customer_main_type = 'Living Well'	p(caravan)=0%

Something curious was that rural people has a very low probability of having a caravan. In our country, Argentina, it is common that caravans are owned by rural people, who uses them as a temporary house during the harvest.