

## **Project for Business Modeling**

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### *Car rental*

Worldwide companies for car rental (or vehicle rental in general), such as AVIS, Hertz, Syxt, etc. provide a range of services to different kinds of customer: private drivers interested in short term car rental or van rental on special occasions; small businesses interested in medium term rentals; companies needing to rely on prompt availability of high-end models, or interested in leasing opportunities. In some cases, they operate on local markets through local branches, or through sub-companies which retain some kind of autonomy (e.g. Maggiore operates in Italy separately from the local branch of AVIS, although it has been absorbed by the AVIS group).

They can also associate with travel companies in order to offer combinations of renting with travel solutions, or with commercial malls to facilitate customers who need to immediately rent a van for a short term in order to transport their buys. Customer can proceed to place their requests through the Web portal of the company, through metasearch engines such as Rentalcars, Rentcars, Autorentals, or by direct interaction with some local agency. Customers can also subscribe insurance policies covering the risks connected to the rental. Policies made with the agency protect the customer from disbursing money in case an accident occurs, while those made with the metasearch engines allow them to be reimbursed of advanced costs.

Whichever the channel through which the reservation is placed, the actual starting of the rental requires customers to present themselves physically to the point of collection, where employees will proceed to: check the required documents (which might differ from country to country); define the commercial transaction; inspect the state of the car; and finally deliver the keys for the car and the relevant instructions.

In order to run their business with customers, rental companies must engage in activities such as buying new cars, maintaining them, whether revising and restoring their state after each rental episode or going through repair interventions in case of major problems, discharging them after they have reached an age or mileage limit defined by some internal policy, or after a major accident for which repairing is not a viable option. Companies can also resell cars which they do not plan to use for rental anymore. This kind of activity may require that companies maintain their own mechanics workshop or that they sign agreements with some independent one, or that they collaborate with one another to setup some maintenance centre. Policies dictating how to operate these activities may be decided centrally, or left to national or local

branches. Similarly, companies can sign contracts with insurance companies for providing coverage for their fleet in general, as well as for individual rentals.

**The project consists in the following.**

Assuming a scenario where you are managing (either at central or national level) such an enterprise (either an existing one or a supposed competitor) and want to assess the health of your business processes, or establish a process-oriented approach, conduct the following:

Identify the main processes in the enterprise and organise them into a process architecture (thereby classifying them as core, with identified value chains, support or management).

For at least two of these processes provide a verbal description of them and perform a linguistic analysis, identifying pools, lanes, tasks, data objects, data stores, events, gateways. For at least one of these processes, provide one model using BPMN, including all possible variants.

Perform a qualitative analysis, of the process you have chosen to model, providing a breakdown into simple steps of some selected tasks, discussing which of the identified steps can be deemed as Value Adding, Non-Value Adding, or Business-Value adding. Based on such an analysis, discuss opportunities for business process re-engineering.