

Appendix D

EU-Rent Car Rentals

Examples in this document are based on the following Case Study. This case study was developed by Model Systems, Ltd., along with several other organizations, and has been used by other organizations. The material below may be copied and used freely, if its source is clearly acknowledged.

EU-RENT CAR RENTALS

EU-Rent is a car rental company owned by EU-Corporation. It is one of three businesses ~ the other two being hotels and an airline ~ that each has its own business and IT systems, but with a shared customer base. Many of the car rental customers also fly with EU-Fly and stay at EU-Stay hotels.

EU-RENT BUSINESS

EU-Rent has 1000 branches in towns in several countries. At each branch cars, classified by car group, are available for rental. Each branch has a manager and booking clerks who handle rentals.

Rentals

Most rentals are by advance reservation; the rental period and the car group are specified at the time of reservation. EU-Rent will also accept immediate ('walk-in') rentals, if cars are available.

At the end of each day cars are assigned to reservations for the following day. If more cars have been requested than are available in a group at a branch, the branch manager may ask other branches if they have cars they can transfer to him/her.

Returns

Cars rented from one branch of EU-Rent may be returned to a different branch. The renting branch must ensure that the car has been returned to some branch at the end of the rental period. If a car is returned to a branch other than the one that rented it, ownership of the car is assigned to the new branch.

Servicing

EU-Rent also has service depots, each serving several branches. Cars may be booked for maintenance at any time provided that the service depot has capacity on the day in question.

For simplicity, only one booking per car per day is allowed. A rental or service may cover several days.

Customers

A customer can have several reservations but only one car rented at a time. EU-Rent keeps records of customers, their rentals and bad experiences such as late return, problems with payment and damage to cars. This information is used to decide whether to approve a rental.

EU-RENT BUSINESS RULES

External constraints

Each driver authorized to drive the car during a rental must have a valid driver's license.

Each driver authorized to drive the car during a rental must be insured to the level required by the law of each country that may be visited during the rental.

Rented cars must meet local legal requirements for mechanical condition and emissions for each country that may be visited during the rental.

Local tax must be collected (at the drop-off location) on the rental charge.

Rental reservation acceptance

If a rental request does not specify a particular car group or model, the default is group A (the lowest-cost group).

Reservations may be accepted only up to the capacity of the pick-up branch on the pick-up day.

If the customer requesting the rental has been blacklisted, the rental must be refused.

A customer may have multiple future reservations, but may have only one car at any time.

Car allocation for advance reservations

At the end of each working day, cars are allocated to rental requests due for pick-up the following working day. The basic rules are applied within a branch:

only cars that are physically present in EU-Rent branches may be assigned.

if a specific model has been requested, a car of that model should be assigned if one is available. Otherwise, a car in the same group as the requested model should be assigned.

if no specific model has been requested, any car in the requested group may be assigned.

the end date of the rental must be before any scheduled booking of the assigned car for maintenance or transfer.

after all assignments within a group have been made, 10% of the group quota for the branch (or all the remaining cars in the group, whichever number is lower) must be

reserved for the next day's walk-in rentals. Surplus capacity may be used for upgrades.

if there are not sufficient cars in a group to meet demand, a one-group free upgrade may be given (i.e., a car of the next higher group may be assigned at the same rental rate) if there is capacity.

customers in the loyalty incentive scheme have priority for free upgrades.

If demand cannot be satisfied within a branch under the basic rules, one of the 'exception' options may be selected:

a car may be allocated from the capacity reserved for the next day's walk-ins.

a 'bumped upgrade' may be made. For example, if a group A car is needed and there is no capacity in group A or B, then a car allocated to a group B reservation may be replaced by a group C car, and the freed-up group B car allocated to the group A reservation.

a downgrade (a car of a lower group) may be made.

a car from another branch may be allocated, if there is a suitable car available and there is time to transfer it to the pick-up branch.

a car due for return the next day may be allocated, if there will be time to prepare it for rental before the scheduled pick-up time.

a car scheduled for service may be used, provided that the rental would not take the mileage more than 10% over the normal mileage for service.

If demand cannot be satisfied within a branch under the 'exception' rules, one of the 'in extremis' options may be selected:

pick-up may have to be delayed until a car is returned and prepared.

a car may have to be rented from a competitor.

Walk-in rentals

The end date of the rental must be before any scheduled booking of the assigned car for maintenance or transfer.

If there are several available cars of the model or group requested, the one with the lowest mileage should be allocated.

Handover

Each driver authorized to drive the car during a rental must be over 25 and have held a driver's license for at least one year.

The credit card used to guarantee a rental must belong to one of the authorized drivers; and this driver must sign the rental contract. Other drivers must sign an 'additional drivers authorization' form.

The driver who signs the rental agreement must not currently have a EU-Rent car on rental.

Before releasing the car, a credit reservation equivalent to the estimated rental cost must be made against the guaranteeing credit card.

The car must not be handed over to a driver who appears to be under the influence of alcohol or drugs.

The driver must be physically able to drive the car safely — must not be too tall, too short or too fat; if disabled, must be able to operate the controls.

The car must have been prepared — cleaned, full tank of fuel, oil and water topped up, tires properly inflated.

The car must have been checked for roadworthiness — tire tread depth, brake pedal and hand brake lever travel, lights, exhaust leaks, windscreen wipers.

No-shows

If an assigned car has not been picked up 90 minutes after the scheduled pick-up time, it may be released for walk-in rental, unless the rental has been guaranteed by credit card.

If a rental has been guaranteed by credit card and the car has not been picked up by the end of the scheduled pick-up day, one day's rental is charged to the credit card and the car is released for use the following day.

Return from rental

At the end of a rental, the customer may pay by cash, or by a credit card other than the one used to guarantee the rental.

If a car is returned to a location other than the agreed drop-off branch, a drop-off penalty is charged.

The car must be checked for wear (brakes, lights, tires, exhaust, wipers etc.) and damage, and repairs scheduled if necessary.

If the car has been damaged during the rental and the customer is liable, the customer's credit card company must be notified of a pending charge.

Early returns

If a car is returned early, the rental charge is calculated at the rate appropriate to the actual period of rental (e.g., daily rate rather than weekly).

Late returns

If the car is returned late, an hourly charge is made up to 6 hours' delay; after 6 hours a whole day is charged.

A customer may request a rental extension by phone — the extension should be granted unless the car is scheduled for maintenance.

If a car is not returned from rental by the end of the scheduled drop-off day and the customer has not arranged an extension, the customer should be contacted.

If a car is three days overdue and the customer has not arranged an extension, insurance cover lapses and the police must be informed.

Car maintenance & repairs

Each car must be serviced every three months or 10,000 kilometers, whichever occurs first.

If there is a shortage of cars for rental, routine maintenance may be delayed by up to 10% of the time or distance interval (whichever was the basis for scheduling maintenance) to meet rental demand.

Cars needing repairs (other than minor body scratches and dents) must not be used for rentals.

Car purchase and sale

Only cars on the authorized list can be purchased.

Cars are to be sold when they reach one year old or 40,000 kilometers, whichever occurs first.

Car ownership

A branch cannot refuse to accept a drop-off of a EU-Rent car, even if a one-way rental has not been authorised.

When a car is dropped off at a branch other than the pick-up branch, the car's ownership (and, hence, responsibility for it) switches to the drop-off branch when the car is dropped off.

When a transfer of a car is arranged between branches, the car's ownership switches to the 'receiving' branch when the car is picked up.

In each car group, if a branch accumulates cars to take it more than 10% over its quota, it must reduce the number back to within 10% of quota by transferring cars to other branches or selling some cars.

In each car group, if a branch loses cars to take it more than 10% below its quota, it must increase the number back to within 10% of quota by transferring cars from other branches or buying some cars.

Loyalty incentive scheme

To join the loyalty incentive scheme, a customer must have made 4 rentals within a year.

Each paid rental in the scheme (including the 4 qualifying rentals) earns points that may be used to buy 'free rentals.'

Only the basic rental cost of a free rental can be bought with points. Extras, such as insurance, fuel and taxes must be paid by cash or credit card.

A free rental must be booked at least fourteen days before the pick-up date.

Free rentals do not earn points.

Unused points expire three years after the end of the year in which they were earned.

EXAMPLES OF 'RULES FOR RUNNING THE BUSINESS'

(not really the same kind of rules as those above)

Each branch must be set targets for performance — numbers of rentals, utilization of cars, turnover, profit, customer satisfaction, etc.

Where performance requirements conflict (e.g., profit vs. customer satisfaction when a customer requests a reduction in charges after an unsatisfactory rental) heuristics must be provided to guide branch staff.

Performance data must be captured.

If performance targets are not met, control action must be taken. Control action may include:

- changing the resources at branches (e.g., numbers of cars, quotas of cars within each group, number of staff),
- changing responsibilities (e.g., having transfers of cars managed by groups of branches, rather than by negotiation between individual branch managers),
- changing operational guidance (e.g., what proportion of cars should be kept for walk-in rentals), but not external constraints (e.g., legal requirements) or company policies (e.g., rentals must be guaranteed by a credit card, a customer may have only one car at a time).