

Example: A Hotel Checkout System

Current system:

- ↳ The customer's account is updated twice a day with charges including:
 - room charge per day,
 - room service charges (for such things as snacks delivered to one's room)
 - room movie charges (if the customer uses the room's pay-TV)
 - restaurant charges (if the customer dines in the hotel's restaurant and charges the bill to her room)
- ↳ When the customer leaves she is supposed to mention any recent charges, which are then added to the bill and the bill is paid in full.

Hotel management want to change it because:

- ↳ there are often billing errors, such as:
 - customers leaving without paying some charges;
 - sometimes customers are double-billed because they declare a certain charge, for which they have already been billed.
- ↳ management expects business to grow
 - a major extension to the hotel is being built
 - manual updates of customer records will become problematic
- ↳ So they'd like continuous on-line updates of customer accounts from:
 - the hotel catering service (responsible for room service)
 - the pay-TV system (charge a customer as soon as she starts viewing a movie)
 - and the hotel restaurant (assume there is only one).

Analysis

What are the problems?

What are the alternatives?

What are the selection criteria?

What recommendation would you make?