# Specification of business processes

## 1. Business goals of the organization

"Hamilton" is a real estate agency that provides services of advertising and brokerage in selling real estate. Hamilton agency is a medium, it is not selling its own properties. It has its own website on which customers can see available properties. The main goal of Hamilton is to achieve the highest possible profit from the sale of their services. To achieve this goal Jack Collins - the CEO of the company - assumes annual profit increase about 5%. In addition, Collins want to increase the number of customers by 10% within a year.

Jack Collins monitors two main metrics: monthly profit of individual salesmen and the number of sold estates within a year. It assumes that the company is successful if there is a rising trend for both of these metrics at a level not lower than 0.5% per month.

Currently the biggest problem of the CEO is to answer the question why in the analyzed year the profit from services has increased or decreased.

Each estate belong to one of categories: residential, commercial, industrial, land.

- Residential includes both new construction and resale homes. The most common category is single-family homes. There are also condominiums, co-ops, townhouses, duplexes, triple-deckers, quadplexes, high-value homes and vacation homes.
- Commercial includes both new construction and resale homes. The most common category is single-family homes. There are also condominiums, co-ops, townhouses, duplexes, triple-deckers, quadplexes, high-value homes and vacation homes.
- Industrial includes manufacturing buildings and property, as well as warehouses. The
  buildings can be used for research, production, storage and distribution of goods.
  Some buildings that distribute goods are considered commercial real estate. The
  classification is important because the zoning, construction and sales are handled
  differently.
- Land includes vacant land, working farms and ranches. The subcategories within vacant land include undeveloped, early development or reuse, subdivision and site assembly.

Each estate is managed by one person. Jack Collins would like to analyze the influence of a season and economic situation on the sales amount. Moreover Jack Collins want to know who are the best sellers, what kind of real estates genres the biggest profit and which advertisements generate the biggest traffic on the website.

### 2. Business processes

#### Real estate brokerage

a. A general description of the business process and a description of the performance metrics generated by this process, possible current analytical problems.

The process of estate brokerage service is as follows: the customer enters the Hamilton agency and indicate willingness that she/he would like to buy or sell a property. The buyer/seller goes to the one of desks and talks with the salesman. They determine the customer's needs and expectations. The salesman show him/her the offer on a screen and ask to sign a fee contract. After signing the contract they go to the property...

#### 2 scenario

1) service for seller

The worker makes photos of customer property and collect all needed informations about it. In addition, the worker helps in processing of formalities.

2) service for buyer

The salesman show the property to customer and describes advantages and disadvantages of it. In addition, the worker helps in negotiating a price and processing of formalities.

#### b. Typical questions

What areas are the most popular?

What types of properties are the most popular?

What sizes of apartments are most commonly sold?

Does the proximity of schools influence the buyers' decision?

Which worker make the biggest profit for the company?

How to make a property more attractive to customers?

Give the average monthly profit for the last year.

Give a total profit for the last year.

What is our ROI?

Is the ROI growing or getting smaller?

\*ROI - return on investment

#### c. Data

The data about all managed properties, the clients we work with as well as any contracts related to said clients and properties are stored in a single database system. Frequent communication with clients requires that their contact information is also stored on our servers and easily accessible. We also store the information about which of our employees contacted our clients. The data about the properties contains all the details, such as their area, value, address. Such information is also frequently checked in order to answer the inquiries of potential customers.

### Advertising property for sale

a. A general description of the business process and a description of the performance metrics generated by this process, possible current analytical problems.

We start the process of advertising a property by choosing a market we are trying to appeal to. This is when we decide whether we want to advertise the house as a family home, a fixer-upper or an apartment for young adults. Here is where we take pictures of the house, create plans and gather information which is not yet available in our database such as proximity to nearby schools and supermarkets.

Once we have enough data to launch our campaign we need to decide what kind of advertisement we want to use. The type and amount of data collected from different types of advertising can differ greatly. The success of all types of advertisements is measured using the number of open house visits, the number of potential customers contacting us about the property and the time it took to sell said property. When using targeted advertising online we gather information about the number of views, clicks and the type of audience our advertisement target (age, status, gender).

We also use neighbourhood marketing through flyers and posters nearby the property itself. Those methods are more difficult to measure precisely and are usually stated only as a simple boolean value. Once we launch the campaign we save the date of launch and begin collecting data.

#### b. Typical questions

How soon after launching the campaign was the property sold?
Did the number of phone calls increase after launching the campaign?
What kind of advertising is most effective in bringing attention to the property?
What target demographic responded the most to our advertising?
What is the most effective type of advertisement?

#### c. Data

Most of the data about the property used in advertising is taken from our database of all our properties. This is also when all missing data is filled in. Data about the chosen advertisement method is then set and tied to the respective apartment. All properties are observed and each call and open house visit is saved in the database.