Introduction of the Cost Plan Module of a Facility Management Software System

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Abstract: Computer-aided facility management system is an information system integrating multi-disciplinary activities within the built environment and the management of their impact upon people and the workplace. The present paper introduce the cost assignment part of the SeaFM facility management system.

Keywords: computer-aided facility management, intelligent information system, cost management

1 Introduction

In the business activities, facility management (FM) is an effective methodology for the management of buildings and services. FM, combining resources and activities, is vital to the success of any organization. At a corporate level, it contributes to the delivery of strategic and operational objectives. On a day-to day level, effective FM provides a safe and efficient working environment, which is essential to the performance of any business – whatever its size and scope.

The International Facility Management Association (IFMA) defines facility management as the practice of coordinating the physical workplace with the people and work of the organization. [1] Within this fast growing professional discipline, FM has an extensive responsibilities for providing, maintaining and developing of a lot of services. These range from property strategy, space

management and collaborative interaction among maintenance, administration and document management.

The object of SeaFM Facility Management Project [2] is a design and implementation of an integrated computer aided facility management system (CAFM) for the properties and facilities of companies. The project is supported by Hungarian Baross Gábor Grant and realizing by consortium of SeaCon Europe Ltd, Budapest Tech, and BakonySoft Ltd. The present paper contains the introduction of the cost assignment module of the system.

2 Cost Assignment in SeaFM System

The essential part of increasing the functional efficiency is an optimal controlling activity. The most important part of the controlling activity is the measurement of the costs and fees occuring during the activity of the company. These data lead to any important decisions that can influnce the economical status of the company.

The cost assignment module of the SeaFM system scores the cost originates from the facility management of the companies, and let to split them into several levels.

According to the data in the module the costs derived from the properties, workplace assets (furniture and equipment), public and private utilities, projects, companies, organizational units and activities can be recovered from the system.

The cost assignment can be placed in divers steps in the CM module.

2.1 Support of Cost Assignment in SeaFM System

The strategic decisions of the company take place at the bottom of the cost estimation and assigment hierarchy. The automatical assignment can be done:

- by an assignment definition,
- by an arrangement or records of services,
- by the data in the REG module of the system,
- by the record of the area of the facilities,
- by an assignment of an other bill item in fix or per cent configuration.

2.2 Definition of the Assignment

The cost assignment by an assignment definition stands pre-eminent among the other automatical assignments, because this function affects all of the assignment levels. Only one of valid cost assignment definitions could belong to every

objects. The assignment definition can be represented by a tree structure. This is presented on the Figure 1.

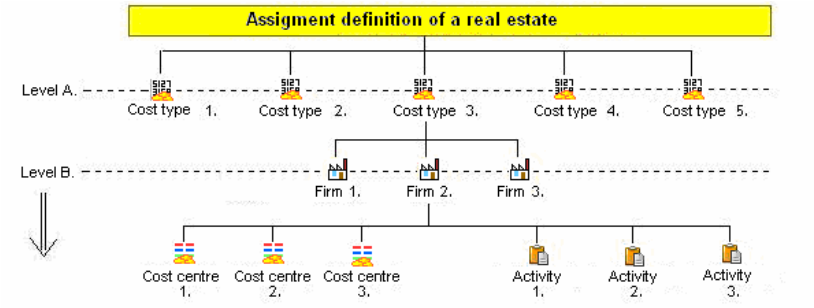

Figure 1
Assignment definition of a real estate

In the assignment definition the assignment hierarchy can be recorded by cost type. The aim of the assignment definition is that the cost debit of the object can be assigned automatically.

An important data of the automatical assignments is the 1st level item (object or project), for what the assignment can be extended. One of the reason for that is the 2nd level assignment has to be done in objects and in projects.

The other important data of the automatical assignment definition is the cost type. The cost type is defined from an item of an account by the application. The importance of defining the cost type is indicated by the build up of the assignment definition.

3 Levels of the Cost Assignment

3.1 Item of an Account Assigned by an Object or Project (1st level)

The 1st level of the cost assignment is the cost type debiting of the cost for object or projects. The costs can be debited for facilities, devices and equipments recorded in REG module. The undermentioned functions can help the user to create a 1st level assignment:

- New items according to an agreement,
- Calculation according to REG areas,
- Calculation according to percentages in an agreement.

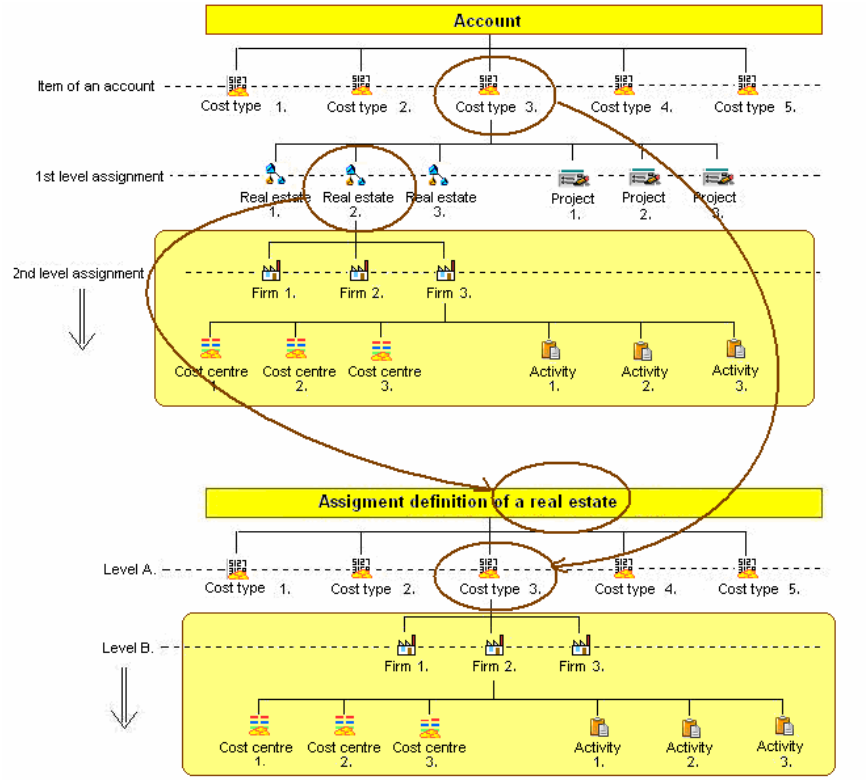

Figure 2
Automatical assignment

3.1.1 New Items According to an Agreement

This function generates new items automatically. In the CM module the agreement identified by an account contains information about the facilities, devices in the agreement.

If an account has links to an agreement, than the function adopts the object linked to the agreement into the assignment.

3.1.2 Calculation by Squares Defined in REG Modul

This function divides the items of an account among objects, in the ratio of the square of them. The function calculates a squaremeter value for the object in the assignment list. The results are presented in the modul.

After the calculation, the function summarizes the results, and divides the square of the objects with the total value. The quotient shows the ratio of costs belong to the present object.

3.1.3 Calculation According to Percentagees in an Agreement

The function divides the item of an amout according to ratios in an agreement.

For objects, recorded in an agreement it is available to record weighting factor. Usually, the facilities, equipments recorded in the agreement or not paricipate in equal degree from the amounts of the agreement. This participation is represented by the weight factor.

3.2 Assignment of Items of an Account in the 2nd Level

The assignment by firms has to be done by objects or projects. Two automatical assignment functions support the user to create the assignment:

- Automatical assignment according to assignment definition,
- Automatical assignment according to REG data.

The result of the automatical assignments can be arbitrary modified by the user.

In this section, the user can make queries for the results of the assignments or creating new assignments. If the user requires a new assignment, the former assignment will be deleted.

The assignments in the 2nd level have straight rules. The assignable costs has to be assigned sharply.

3.3 Assignment of Items of an Account in the 3rd Level (Cost Centre and Activity)

The assignment by firms has to be realized by objects or projects. The amounts specified by firms can be assigned for:

- cost centre,
- activity.

In these assignments the nett taxes and consumption values has to be assigned among different cost centers, or activities. The cost centre and activity level assignments are located in the same level. The user can decide not to assign the costs of firm in this level.

Conclusions

Cost assignment plays an important role in the life of firms and companies. Nowadays, budgetary institutes also has to think of cost management. It is necessary to use accurately developed systems to make lighter the task of employee in the calculation process of the companies. The SeaFM system can bear a considerable hand in this.

References

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