# CUSTOMER RELATIONSHIP MANAGEMENT IN FACILITIES MANAGEMENT

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*ABSTRACT: Customer Relationship Management (CRM) is one of the fastest growing IT area today. This paper studies needs and benefits of this kind of environment in Facilities Management (FM) and compares the used systems with another business field. The changing business environment challenges the facility managers and whole construction sector to serve their customers better by using CRM-tools. CRM includes systems like middleware, electronic customer service, data warehousing and knowledge management. This paper presents CRM in two cases: FM company and electronic engineering company.*

KEYWORDS: *Facilities management, Information technology, Customer relationship*

## 1. INTRODUCTION

The aim of this paper is to study what kind of needs and information technology possibilities there are to improve the customer relationship in facilities management (FM). *FM* can be defined to be:

> *"The continuous management of the workplace and operating environment of the organisation at all levels with the purpose of providing user satisfaction and value for money." (Svensson 1998 p. 9)*

The term workplace is understood here in the broadest sense to denote those locations where people might also congregate for a purpose other than work. Levels include at least operational, tactical and strategic level. User covers anybody occupying the facility for whatever reason. Traditionally FM has meant technically competent work within a relatively static environment and in a typically reactive manner. To achieve maximum benefit from the corporate resources the facilities manager must also work proactively. This requires good knowledge of the current and future needs of users of buildings. (compare Svensson 1998, Barret 1995).

According to the definition the user satisfaction is one of the most important things in FM because of that customer relationship management (CRM) is one of the most important areas as information systems of FM are improved. *CRM in FM* can be defined to be

> *the interaction of facility department with core business or users of the premises at all levels of FM.*

This paper studies how information technology (IT) is and can be used in CRM in FM.

## 2. INFORMATION TECHNOLOGY IN CUSTOMER RELATIONSHIP MANAGEMENT

CRM-system (figure 1) is related to marketing systems (compare Kotler 1997). CRM is understood in such a way that facility manager aims to build a long-term satisfactory relation with customers, users of the building – in order to retain long-term preference and business. IT can support contacts with the customer. One reason why it said that CRM is one of the fastest growing areas in business is the fact of increasing amount of Internet applications that deal with the customer relationship area by delivering information from the industry to potential and present customers. In many business fields the user manuals are not printed in paper but the reference to the www-page is given to the customer. Usage of Internet is one example of new customer service and communication method.
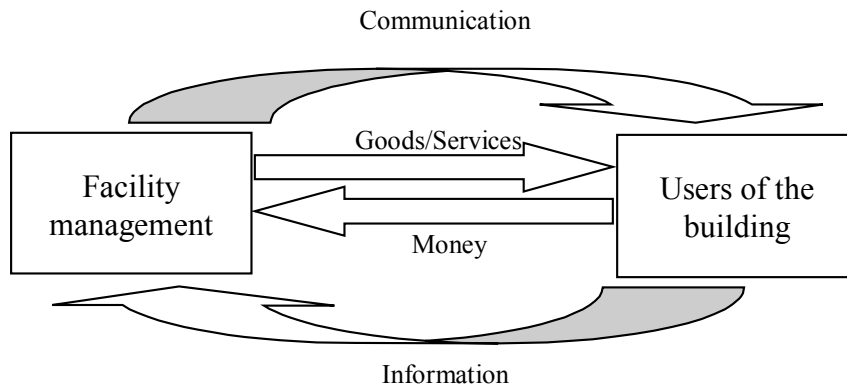
*Figure* 1. CRM-system in FM.

Internet is more than just way of searching new customers. Biggest benefits can be gained by using information networks in improving the present relationship between customer and producer. Internet is not only a new advertising media. It is part of the new infrastructure of the information society. Meeting customer varies as the customer can choose the media he/she uses. Even though there are new ways the opinion of the company is got from face to face contact. Some of these contacts are critical since their failure may end the relationship. However, the customer may be satisfied in the relation but the service is too expensive or otherwise unsuitable and will end the relationship because of that. The moment of truth describes the fatality of that type of contact. That moment can be supported by IT. (Storbacka et al. 1999)

There are at least following software tools available to support CRM:
- Internal tools
  - Document management
  - Call centre services
  - Customer information in the FM-system
- Communication with the customer
  - Internet pages one way communication
  - Electronic customer service like applications and/or agreements
  - Bulletins and different kind of booklets in extranet, for example new rules
  - Emails and letters to the customer
  - Databanks: For example, space descriptions - like drawings etc. to produce their own advertisements and plans - might mean some kind of datawarehouse for customer use. Middleware or use of IFC make it possible to use different software.
  - Groupware for communication, co-ordination, collaboration. The aim of these applications is to support people working together to share information regardless of time and place. They also take care of security, finding of information, project management
  - Troubleshooting services where to reach the maintenance people etc.
  - Storage data e.g. the easily possible furniture change
- Information from the customer
  - Customer satisfaction reviews
  - Fault reports
  - Wishes and plans different time span.
- Financial communication
  - Agreements with the banks
- Service of the company
  - Maintenance and all contact service

Storbacka (1999) argued that Internet can be seen to be the logic step of automating customer relations further than EDI applications have done.

Current IT supports FM in operational level (Barret 1995). The customer relations should be managed in all levels also in tactical and strategic levels. This means managing the future scenarios of the business, for

example, by using simulation tools; and analysing the business needs and current reality in order to create tactics.

## 3. CASE DESCRIPTIONS

This chapter describes the cases. The focus is on what is new in CRM in the companies. The case descriptions are based on interviews in the companies during 1999-2000. The writer worked with the companies as IT strategies have been formulated and new IT-tools were selected. Cases are a FM company and an industrial electrification and automation engineering company (IEA company). The case descriptions contain also information of such tools that are planned to be implemented.

FM company that this case is describing is a office that manages rental blocks and some other buildings. They choose their tenants by using social criteria. They made this winter a customer satisfaction review. About eighty percent of their customers were satisfied or very satisfied in their services. The only thing the tenants were not satisfied was the difficulty to contact the employees. Needs of users are planned to be gathered on regular bases. The tenant associations of real estates invite the FM representative to participate their meetings. The information from the tenants is gathered also via boxes in the buildings where they can leave a message to the maintenance company or FM organisation.

The FM organisation communicates with their customers mostly orally as tenants contact the personal. However, written information is delivered via bulletins, letters and small hand-written notes on the bills. The tenants are given information booklet of the house when they sign the contract. Instructions of the responsibilities of each party are given to tenants, for example responsibilities of tenant and maintenance company and when the tenant needs a permit to implement a change.

There is a possibility to use more often email or such interface instead of oral. The customer service uses databases to find descriptions of the apartments and the service history of the person with whom they are talking to. The face-to-face meeting with the customer are found to be important especially when selecting new tenants. However, the town recommends that the services funded by town should be applied via Internet. The FM organisation is planning to make it possible to apply the apartments via Internet. Attaching often required appendices (for example, medical certificate) to the emailed application requires skills or probably first they have to mail them separately. Today most of the applicants have not skills to attach the appendices to the application and sending them separately causes a mess. This kind of reasons have avoided the use of Internet.

FM company uses or plans to use IT to help CRM:
- Document management system for drawings, letters, memos, etc. and contract files
- Bookkeeping system linked to customer and space register.
- Email messaging.
- Extranet for maintenance manual information and fault reports.
- Internet homepage to introduce the facilities and services. The plan contains the possibility to report the faults and apply for the accommodation via Internet.

In the company there are no call centre services available, but the company is very interested in such interface. That interface would help the communication by providing easy access to relevant information and delivering news to those who should be concerned. Nowadays employees should take direct phone calls and only if they are not present the operator gives forward the possible message left on the phone. The operator does not email the calling

requests because, for example, maintenance manager has no possibility to read the messages enough often. All the site workers have portable phones, in theory they can be reached all the time. Office worker phones the urgent messages to them and the other messages are written on paper and left on the table. Tenants do not use enough often Internet that they would be willing to report faults by using email – although that is possible. In near future this is predicted to change.

IEA company is a small consultant office. The office has close co-operation with three consultant offices: structural planning, building technology and project management. The small offices have combined resources in the customer relations and IT. They have united their forces in phone, IT and some other office services. Phone service uses email to deliver messages. Email or databank is used to deliver messages between designer and customer. Databank makes it easy to save the messaging when the project has ended. The company provides a databank service regardless of their connection to the project. The biggest benefits of such interface is possibility to ensure and adjust requirements easily as the project is . One customer had difficulties to use databank since the FTP connection does not fit in their IT infrastructure – they were forced to use middleware when using the connection. FTP connection was used in order to avoid extra design costs.

Once a project has been completed IEA company continues to keep an eye on the results by following the customer's satisfaction which, together with other feedback, has a decisive influence on their future projects. In addition, IEA company has recently been involved in a technology improvement programme with their customer. That resulted a guide to improve IT tools in their customer relations including the groupware and exchange standards of their projects. In addition , IEA company uses quality manual which defines also customer relations among other process definitions.

Table 1 summarises the use of different kind of IT tools in the case companies.

| CRM | FM company | IEA company |
|---|---|---|
| *Internal tools* | | |
| Document management | Test use of a system to help the finding of information for example letters | Not in use |
| Call centre service | There is not available any suitable software | Email messaging is good enough |
| Customer information system in the company | Special space/customer information database | Customer history database |
| *Communication with the customer* | | |
| Use of EDI standard | Not possible to use | Not possible to use |
| Use of Internet, Extranet | WWW-homepage introduces the facilities | Homepage introduces the company services and way of producing quality<br>No projects are introduced |
| Bulletins, information booklets | Paper format | Meetings |
| Emails and letters to customer | Some individuals use email mostly mailed letters | All customers use email |
| Databanks | No databank available for customers<br>Planning to use in the next projects – some user groups may have access to the databank | Databank use<br>- like a folder system<br>- FTP connection |
| Groupware | No groupware | Some projects use groupware |
| Middleware | Not in use | Some projects have to use |

| | Customers do not want to use the information | since exchange does not succeed |
|---|---|---|
| Troubleshooting services | In the paper format the contact phone numbers are given<br>Boxes in buildings were people can leave messages | Old projects are saved on CD<br>Contacts also after the design project is finished |
| Storage data | No service | No service |
| *Information from the customer* | | |
| Customer satisfaction reviews | Paper format | Paper format |
| Fault reports | Phone calls | Meetings or phone calls or paper documents or emails or files in the databank |
| Wishes and plans | Different kind of questionarees | Meetings |
| Financial communication | Rents | Bills |

Table 1. IT supported CRM in the case companies

## 4. FUTURE DIRECTIONS IN FM

In general the thrust is that customer relationship has to be continuous and highly interactive, with customers and FM professionals working together and complementing each in terms of knowledge base and interest. This section summarises the main features necessary to achieve better customer relationship in FM.

There are available some applications that support CRM –new types of Internet application have potential benefits but are not yet in use. The table 1 concludes the possibilites formt he literature and case study results. FM can be predicted to become self-service based like shops. This can mean following features:

- Easy selection of space properties among the selection set. Space property descriptions have to include also the influence on the rent.
- Customer may if he/she wants to follow how the spaces are managed, for example when the space has been cleaned what has been the temperature. He/she has information of the rent and may alter the properties. This selection is made on the bases of the data given by FM.

In the future FM will use Internet and call centre in fault reporting and customer service. The customers of business premises may use databases of FM in their own planning processes. The relationship between customer and FM shall be improved by using groupware in order to take care of quality, cost and timetable control of renovation or new construction project.

## 5. ACKNOWLEDGEMENT

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