The Methodology to increase the productivity of Management Information Systems like Tenement MIS in Iran

Seyed Mohamad Mahdi kazemi
Department of Industrial Engineering, Damavand Branch, Islamic Azad University, Tehran, Iran, sm_kazemi@aut.ac.ir
Seyed Mohamad kazemi
Department of Industrial Engineering, Lenjan Branch, Islamic Azad University, Isfahan, Iran
Naser Shams
Department of Industrial Engineering, Amirkabir University, Tehran, Iran

Abstract

Today, the development of modern information technologies from one side and gathering the information from the other side has made designing and implementation of reliable systems for collecting, storing, maintaining and reporting to monitor the market inevitable. In this regard Real estate sector has a large share of gross domestic production (GDP) is one of the parts which designing and implementing management information system (MIS) can play an effective role in organizing the information and increase the productivity.

This study aims to find the ways to increase the productivity of Management Information Systems like Tenement MIS in Iran, analyze the implementation of this system, and identify its strength and weaknesses.

Keywords:
Tenement, Management Information System, Real estate

1. Introduction

Context of providing housing for citizens and also monitoring the housing market and price are some of the main tasks of governments. To achieve these goals, governments are adopting policies to organize the market. During recent decades, increasing population, information, communications technology, industry growth, migration to cities and increasing urban population caused problems for the providing appropriate house for households in the country.

Home and housing is a durable consuming good and its price must be balanced based on supply and demand, but due to high efficiency of investment in housing, product factors are directed toward it, and entering non-professional and wandering assets, causing speculation in this area and due to the housing has become a good investment and its prices easily increases by the supplier and because of the needs of applicants, they pay the presented prices.

One of the problems that exists in housing transactions is lack of information about real estate transactions. To organize the supply and demand of housing, having information on domestic transactions is very important. Therefore the system of transactions and real estate registration has launched by the leading information services company. Since 2008 this company is related to ministry of Commerce and registers all the information of real estate on the system throughout the country. On the other hand the institutionalization of the system and identifying strengths and weaknesses can improve the transaction process and also reduce the administrative complexities of this sector, resolve people's concerns in the housing market.

Results from 24 months operation of system and tracking code requirement show that more than one million contract are registered by permitted real estates in this system throughout the country (Raahbar,2011). Although this system is young, it has helped to organize the housing market and to manage transactions in this area. Moreover population growth requires the government to organize the
field of housing and have special attention to this area. This project has been launched in other
countries and implemented as a subset of the cadastral plan. The evidence shows that there were
primary cadastral in ancient Roman, some old towns of Belgium and some other parts of the world
(Bonnie,2010:4).Among these regions Cadastre has been implemented in Turkey, which has had some
good results (Demir et al.,2009).

Cadastre foundation is the foundation of organization, manpower and equipment and its role in
government is providing the systematic organization of property, rights and responsibilities relating to
land(Harvey,2009).The benefits of this plan for citizens are (IR Cadastre Office,2010, Buhler,2009)
Harvey,2006):

1. The speed and ease of access to property information
2. Documentation of land information relating to citizens
3. legal and precise citations in the court to achieving the public rights
4. Increasing legal security and facilitate the trading

In these types of projects, transactions and financial transactions related to property such as
mortgages, easement, right of redemption, survivorship, the right to reside, the right of area are
registered(melbourne,2009). Also there are similar cases in Brazil (Mueller,2008) and 30 to 50
countries that implemented the Cadastre (Konecny,2010). It should be noted that 50 countries are
setting up Cadastre and about 90 countries have still no facilities in this regard (Konecny, 2010).

-Organizations associated with the project in Iran
In order to establish an integrated information system and a comprehensive real estate database
necessary interaction have been done with relevant organizations and this information exchanges
through the automated system. These organizations are National Trade Centre, Real Estates, Notary
Registration Organization, National Organization for Civil Registration, Post Compony of Iran

2- Research methodology
This study is functional with regard to purpose, and a survey method with regard to the kind of
collecting data, and is conducted from 2008 to 2010. Statistical sample of survey are of over 5,000
permitted real estates, all project managers and a number of experts using the system and also data
base of system. Sampling method is panel data.
Data have been gathered through library research, review documents, interviews and also questionnaires, but the main focus is on the questionnaire and information that extracted from the database. To study the success of the project, a questionnaire was prepared by consult of experts and university professors. The reliability of the project is evaluated by using the statistical software. Accordingly the coefficient alpha for the questionnaire is 0.83 which demonstrates that validity of the questionnaire is appropriate.

3- Conclusions

The following results are obtained from the analysis of questionnaires and. It should be noted that the system has added the cost of real estate. The related causes and solutions are as follows:

1. One of the important issues that should be considered in relation to such countries is the infrastructure development related to high-speed network to establish the integrated MIS system. It is necessary to secure these networks in terms of both hardware and software. Details are not mentioned due to commercial reasons.

2. In the study of organizations associated with the project it's discovered that Some of the infrastructure of associated organizations should be upgraded or modified. Including software of municipalities and registration organization. Details are not mentioned due to prolongation.

3. Such changes will require cultural and technological changes which investing in both areas is needed. In the cultural field, many permitted real estates are old business, and before the implementation of the plan, they have been doing their transactions manually and by using traditional methods. The project has some costs like purchasing computers and using Internet and in some cases cost of hiring people who are familiar to computer system. It seems the important step in this direction is the work culture which can be achieved through education and consulting units for people who work in the system. In order to improve the usage of system this education can be in different ways including in-person training, distance education or training through a call center. With regard to technology, it is necessary that the related organizations assist the project with minimum cost by providing broadband services and hardware (Kazemi et al., 2011).

4. The results show that some actions such as setting up digital signature and paying the cost of Tracking Code through the site is effective to strength the system. The result shows that the topic for the digital signature can be improved by performing these two actions: using the modern hardware and using a mobile phone. It is proposed that the cost reduce stepped downward. In the way which the cost of contract registration is reduced by increasing the number of contracts registered in a specific time period. For example, if someone records 50 contracts in a year he will pay 8000 units and if 50 to 100 contracts recorded 6000 units will be paid and therefore the cost continues downward turn. It certainly helps to motivate the users to use the system and make it institutionalization. More ever with further use, corrective suggestions are offered by users which improve the system and increase productivity (Kazemi et al., 2011).

In response to the question of system convenience, the respondents are not completely satisfied cause of the weakness must be found in being the system new, changeability of the system, adding new opportunities to the system, the possibility for electronic payment, etc. In this regard the following actions need to be carried (Kazemi et al., 2011).

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1 Calculated by using Cronbach's alpha software SPSS16
5. Considering that some cities and towns do not often have high-speed Internet, there is less satisfaction in these areas. In large cities which have high-speed internet, there is more satisfaction. But in big cities which use dial-up Internet there is less satisfaction. It is suggested that to use wired and wireless high-speed internet, the mobile service can also be used. In this regard it is recommended using software such as text messaging through mobile banking software (Kazemi et al., 2011).

6. The other problems are transactions recording and getting tracking code. Getting the tracking code is usually associated with various parameters and the bugs in each of these parameters may cause not receiving the tracking code. Also communicating with the post, having entered the wrong zip code or postal code or national code is also effective in decreasing satisfaction. Therefore, to increase the user satisfaction reforming the system should be noticed (Kazemi et al., 2011).

7. Analysis the results indicates the information real estate is pretty appropriate. It seems that there is parallel model. The system is designed to get full information about the property transaction and both sides of contract. These information are gathering in official documents offices and the tax affairs. These parallel actions can be resolved by making the system concentrated or organizations permission to use related parts of information. If property transferring would perform, concentratly and applicants purchase or sell in the same place people will save time and money, and the non-essential shuttles will stop. More ever it can increase efficiency and productivity and satisfaction of users (Kazemi et al., 2011).

8. In addition to above analysis, the following elements can also be extracted from the results of this study (Kazemi et al., 2011):

- At present time a call center is established in Tehran to respond to customers and users by phone or via e-mail. A concentrated answer Center in Tehran can make some problems for consultants in cities because coming to Tehran is difficult and costly. For more satisfaction, it is recommended that we spread answering in cities or at least in provincial capitals.
- Giving operators code and following number by system can resolve their problem and it can increase system performance.

4-References

8. Kazemi, S., S. Kazemi, and N. Shams Ghareneh. The Methodology to increase the productivity of Management Information Systems which are use in Tenement in 41st
International Conference on Computers and Industrial Engineering (CIE41). 2011. campus of the University of Southern California in Los Angeles, California, USA.


