A Study on the Customer Relationship Management Model Adaptability with the Municipality Services and Duties Environment

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Abstract

Transition from traditional to modern economy and the resulting highly competitive environment has caused the organizations to view the "customer" as the main pillar and orientation of all their activities. From the competitive point of view, the organizational survival and sustainability is highly dependent to identifying new customers and retention of the present customers. Municipality is a public-oriented organization, responsible for managing the city. Citizen is the customer of this organization. The municipality decisions are a function of the citizens' needs due its indigenous nature and its adaptability with the conditions in each city or town. In this study, an abstract three-partite framework including "functions", "process" and "sub-process" was established and the related data were accumulated. Four main processes of Citizen Relationship Management including "service", "service marketing", "support" and "analysis" were introduced. In continuation of the work, after identifying eight major refined functions from the first line experts' opinion, "adopted model of customer relationship with the municipal services and duties' environment" accompanied with 64 sub-processes was formed. Seven items were defined for measuring the acceptability rate, the final results of which were exploited after summing up of the second line experts views.

Keywords: Municipality, Service Marketing, Citizen, Customer Relationship

1. Introduction

There is no consensus among the experts about the definition of the Customer Relationship Management; Some perceive it as "strategy", some "technology", some consider it as "process" and others as "information system" (Thompson, 2004). In general, the Customer Relationship Management can be defined as a means of customer retention and establishing correct methods of relationship with them (Payne, 2000).

Customer Relationship Management was first introduced by Peter Drucker and Theodore Levitt in 1960s (Cunningham, 2002). Communication means and marketing were used for better understanding the customers during 1980s, and from the year 1990, supporting the service provider processes was entrusted to the computers. "Customer" meant in the past times: an individual or group who pays money in exchange of receiving goods or services; "Customer" means in the present time: an individual or group who exchanges a value with you. Patricia Seybold, an early advocate of the

customer support systems and automation systems and a pioneer of the Customer Relationship Management remarks three principles (Seybold & Marshak, 2001):

- 1. The customers are under control
- 2. Relationship with the customers is valuable
- 3. The customer experience is an important issue

Customer Relationship Management is a general strategy of relationship whose components are changeable relative to the type of application. Hence, in the area of urban services, the term "customer" can be replaced with the term "citizen", and instead of provision of goods in its initial concept, the component "service" can be used. Accordingly, the municipality can be defined as an organization in need of establishing a service based formation—for managing urban areas—whose body has been built based on Citizen Relationship Management. Many of the concepts introduced in relation with the Citizen Relationship Management are derived from the Customer Relationship Management concepts, with the difference that in Citizen Relationship Management, the service provision is emphasized, while in Customer Relationship Management, what are laid stressed on are "sales" and "profitability". In fact, the Citizen Relationship Management deals with a group of management methods and the technological solutions of Customer Relationship Management relying on their generality. In fact the Citizen Relationship Management is based on the principle that providing various services does not mean mere acquiring the citizens' satisfaction; whereas the important thing is recognizing the citizens' needs and meeting them based on the Customer Relationship Management.

1.1. The Research Problem

Considering the citizens' ever-increasing growth of needs and expectations due to the rapid changes in their life style, providing them with urban services to the required quality and quantity within the least amount of time would be possible only by employing the Customer Relationship Management principles throughout the municipality environment. Taking notice of the undeniable role of such adaptation and its useful effects—including minimizing the urban traffic, environmental pollution, decreasing the citizens' dissatisfaction concerning the service provisioning, etc. two principal questions were considered:

- 1. What are the citizen's expectations requirements concerning adaptation of the Customer Relationship Management principles in municipality?
- 2. What will be the implementation framework of the adapted Customer Relationship Management model in the municipality?

2. An Overview of the Research Theoretical Basics and Background

The first structured sparks of the Customer Relationship Management began from the early 80s. The pioneers of the movement were companies like Oracle[®], Onix[®], Clarify[®] and Vantive[®]. The core activity of such companies was producing automation and standardization software for absorption, service provisioning and customer retention activities (Elahi & Heidari, 2005). The origin of such costly and complicated process was "sales" and its destination, after sale services (Cartwright, 2003). After the advent of the internet as the epidemic phenomenon of web usage, the Customer Relationship Management application was dramatically changed; for the interaction between the companies and the customers became easier, faster and imperative. The Electronic Customer Relationship Management (E-CRM) which is totally network based was commenced from this time (Bemanian, 2008). From the major activists of the area, the Silknet[®], Octane[®], Talisma[®] and eGain[®] can be referred to whose initial activities were focused on the customer requests follow up through E-Mail and Chat. Gradually other interactive channels were added to this area such as Voice and Call Center. The gradual evolution path of the Customer Relationship Management has been represented in Figure 1 (Nykamp, 2002).

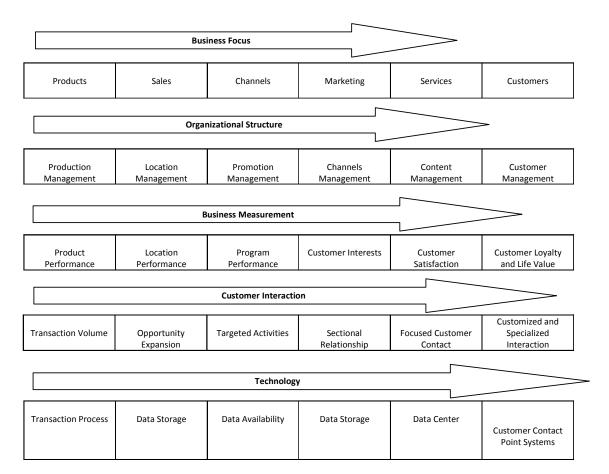


Figure 1: Evolution Path of the Customer Relationship Management (Nykamp Consulting Group, 1999)

The sudden jump of the Customer Relationship Management for the following reasons (Davenport, 1993):

- 1. Highly increased competition, so that differentiating between the products is by far harder than before and the product oriented attitude of the companies has changed into customer oriented attitude.
- 2. Technology, internet and network progresses have provided for better management of the customers' combined and complicated information. Such integration is so spread that makes it possible to gather the customers' information from among all the enterprises into a single system. The most important result of such a process is decreasing the number of parallel systems.

The Customer Relationship Management includes three initial (absorption), intermediary (promotion) and final (retention) steps, each requiring its own specific organizational focus and strategies, having been described in Table 1 (Johanson & Storm, 2002).

Table 1: Customer Relationship Management Steps, and the Corresponding Organizational Focus and Strategies (Johanson, 2002)

Step	Organizational focus	Strategies
Absorption	Differentiation	Innovation
Promotion	Categorization	1. Reduction of Costs
		2. Services Provisioning For the Customer
Retention	Adaptation	1. Paying Attention to The Customer
		2. Providing New Products

2.1. Customer Relationship Management Concept

Numerous definitions have been introduced for the Customer Relationship Management; though no unique definition is felt necessary, for the final goal is obvious. The Customer Relationship Management as comprehensive approach, aiming at establishing appropriateness and coherence between the sales, marketing, service provisioning and customer support departments (Treacy & Wiersema, 1997). Customer Relationship Management mission's is maintaining and developing the relationship with the customer via the most beneficial method, around a broad area of customer contact points (from sales department personnel to the contact centers) (McBride, 2001). As it can be seen from the Figure 2. The Customer Relationship Management process consists of four components of "discovering the knowledge", "customer interaction", "market planning" and "analyzing- refining", all gathered around the "learning-action" core (Swift, 2000).

Discovering
The
Knowledge

Learning

Practice

4

Analysis and
Refining

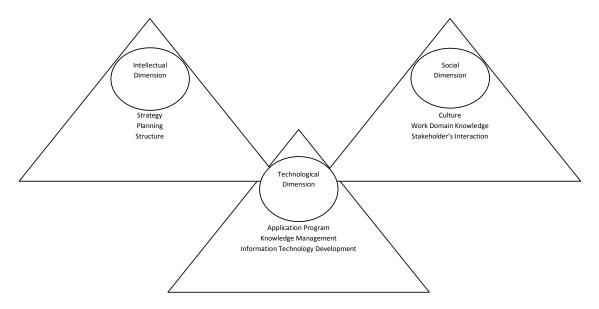
Market
Programming

Figure 2: Customer Relationship Management Process (Swift, 2001)

2.2. Evaluating Organizational Readiness for Implementing Customer Relationship Management

Improvement of the Customer Relationship Management potential and the present uncertainty about its implementation attempts has caused introduction of a new attitude towards the determining factors, affecting the organization decision for investing on it. Accordingly, numerous models have been introduced for measuring the readiness level of the organizations for implementing the Customer Relationship Management. Ocker and Mudambi have designed a theoretical model for this purpose, which takes form from three "intellectual", social and technological dimensions including 9 groups (Ocker & Mudambi, 2003). The intellectual dimension in this model includes three groups of "strategy", "structure" and "planning"; the social dimension includes the "culture", "beneficiaries' interaction" and the "work area knowledge"; ultimately, the technological dimension encompasses the three groups of "Customer Relationship Management application software", "information technology capabilities" and "knowledge management". These researchers have referred to the customary factors called the "readiness factors" useful for measuring the organizational readiness level in each of the mentioned 9 groups. Figure 3 shows the three dimensions of the organizational readiness model for implementing the Customer Relationship Management.

Figure 3: Organizational Readiness Model for Implementing the Customer Relationship Management (Ocker & Mudambi, 2002)



2.3. Customized Customer Relationship Management

The Customer Relationship Management is not a product or service; rather it is a general strategy of relationship and is not necessarily peculiar to the commercial organizations. In public organizations, the terms "client" (instead of customer), "service provisioning" (instead of marketing) and legitimacy and survival (instead of profitability) can be used. Also in service institutions, the word "client" is used instead of the word customer, and the phrase "service providing" is used instead of "supplying the goods". Table 2 shows the correspondence between the customer and the citizen.

 Table 2:
 Correspondence between the Customer and the Citizen

Municipality	Manufacturing organization (Company)			
Service	Product			
Services Provided for the Citizen	Products Purchased by The Customer			
Publicity Through The Media (TV, Mail, Internet, Urban Advertising)	Marketing			
Providing Urban Approved Services	Sales			
Planning for Providing Optimum Service and Acquiring The Most	Sales Forecast			
Satisfaction of Citizens	Sales Polecast			
Identification of Key and Influential Citizens in Local and Regional	Sales Opportunities			
Dimensions	Sales Opportunities			
Assisting Citizens in Solving Problems	Service and Support			
Analyzing The Behavior of Employees, Citizens and Events	Analysis			
Public and Private Citizens	Customers' Database			
	Competitors' Database			

2.4. Municipality

A city is a climatic, human, economic and social phenomenon, having been established and survived within a historical context with specific conditions (Kazemiyan). Two key features of the city are growth and variability. Political, administrative, security and religious factors determine the future of a town. According to Country Divisions Law of IRI, the municipality will be established in any location with a population of at least 10 thousand people (Divisions). Municipality is a public organization responsible for running the city and is governed under the supervision of mayor. Prior to the revival of the city councils, the mayor of each city was appointed by the region's governor and in Tehran, by the Ministry of Interior. But now, decision making concerning appointing the Mayer is the responsibility

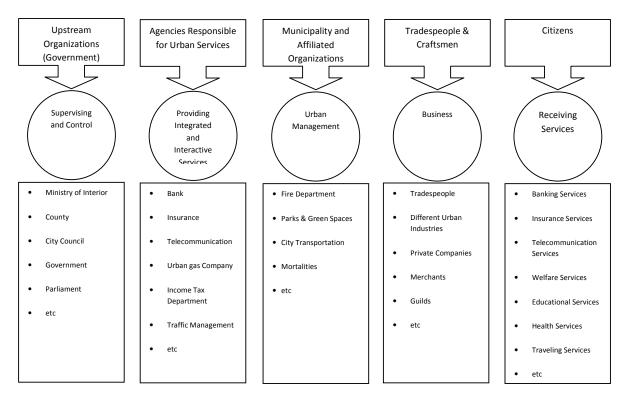
of the municipal councils. Due to its aboriginal nature and the necessity for complying with city's requirements, the municipality's decisions are a function of the citizens' needs. So the residents are the best people aware of their wishes and facilities. Municipality stakeholders are shown in Figure 4.

2.4.1. Municipality Obligations

The most important tasks of the municipalities are as follows (Municipality):

- 1. Establishment of cultural, health care, cooperative and financial assistance to the municipal associations
- 2. Proposing urban reforms, and licensing for construction and modification of all city buildings
- 3. Creating, developing, cleaning, maintaining and improving the water and drainage channels
- 4. Caring and collaboration in health care affairs (to prevent the common diseases and disposal of harmful animals)
- 5. Preparation of the Guild rules and recommending them to the City Council and supervising in the guilds' affairs; issuing business permits for different guilds, closure of non-licensed places and preventing from creation and continuation of unsanitary or nuisance jobs or workshops
- 6. Adopting necessary measures to build affordable houses for the poor, and collaborating with the centers responsible for maintaining public buildings, ancient monuments, mosques, etc
- 7. Proposing to establish or abolish urban levies, changing the type and the rate of levies, estimating and adjustments of the budget and the amendments thereof; proposing and executing development programs (upon approval by the City Council)
- 8. Adopting necessary measures to protect the city from the risk of flood, fire, etc. and constructing public buildings required for the city (such as slaughterhouses, squares, children's garden, gym, salty dead house, cemeteries, etc.)
- 9. Other issues approved by the City Council

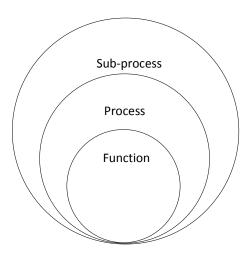
Figure 4: Division of Municipal Stakeholders



3. Research Method

The research took form based on Qualitative Approach which will not necessarily embrace a theory related to the subject; and is not aiming at determining a specific predefined framework for it. Such a research seeks describing the phenomenon and identifying the pattern of relationships governing the data. So the depth and quality of data is very important (Sarmad, Bazargan, & Hejazi, 2006). such researches are exploratory by nature and seek building concepts, frameworks and models, so that often the final result is not already known (Haase & Ellis, 1987). Hence, the data collected in this study is primarily qualitative. Based on the expected goal, this study is of applied type and in terms of data gathering (research plan), it is regarded as a subsidiary of descriptive (non-pilot) research type. At first glance it seems that the research is Conclusion Oriented, for the goal is simply to answer a question; while this answer is predicted to be applicable in decision making. So it can be hopefully Decision Oriented as well (Beutler & Crago, 1991). At first, a tripartite abstract framework was considered, which is shown in Figure 5. Then the data were collected and classified around these three axes. Tehran municipality was considered as the reference for acquiring information.

Figure 5: Abstract Framework of communication Pattern for Adopting Customer Relationship Model in The Municipality



3.1. Research Steps

The following twelve steps were taken for extracting the model:

- 1. Identifying the elements forming the model
- 2. Explaining the basic processes
- 3. Depicting the level 1
- 4. Subsidiaries of the basic processes
- 5. Depicting the level 2
- 6. Proposing the main functions of the model
- 7. Evaluation of the main functions degree of importance by the experts
- 8. Determining the main (core) functions
- 9. Developing the model indices
- 10. Describing the model sub-processes
- 11. The proposed the model
- 12. Evaluating the acceptance rate of the model

4. Data Analysis

4.1. Basic Process

Information, technology and citizen constitute the three elements of customer relationship model in the municipality environment. Adopting management innovations in using the modern technologies facilitates service provisioning for the citizen. The model basic processes are shown in Figure 6.

Figure 6: Basic Processes of Customer Relationship Model in Municipality Environment



1.1.1. Service

- Managing the tasks, activities and contact information
- Provide guidance of service provisioning
- Accurate forecasts of multiple services
- Measuring the performance of service staff
- Clearing the goals
- Managing the service channel
- Classification of the citizens
- Direct and indirect control over the service process

1.1.2. Service Marketing

- Identifying opportunities
- Integrating service marketing and execution divisions for increasing the strength of interaction with the citizens
- Modeling the behavior of citizens to obtain information needed for better understanding them, predicting the needs and the factors effective in decision making
- Providing description of citizenship and predictive modeling
- Managing and describing the service marketing goals
- Possibility of entering information and guidance into the system by the relevant managers
- Possibility of displaying the list of commands including the modified or adjusted commands and the necessary activities
- Storing, retrieval and updating the service key information
- Presenting key characteristics of the services

1.1.3. Support

- Planning and managing online support requests and requirements; optimizing the resources
- Quality management and key analyses for increasing the efficiency and improvement of processes
- Managing a variety of services such as field, electronics, and professional services
- Queue and the waiting time management for receiving services
- Creating searchable knowledge base and permanent access to the information for citizens self service

1.1.4. Analysis

• Key analysis, success and failure analysis, service predicting analysis and service marketing analysis

- Warning key analyses for predicting future services
- Careful consideration and analysis of the citizens' behavior for planning the future services
- Analysis of the services, communication channels and knowledge base
- Production of service efficiency charts
- Reviewing and analysis of the speed, efficiency and performance of the staff
- Creating searchable performance related library
- Providing information to help solving and analyzing the events

Levels 1 and 2 are shown in Figure 7 & 8.

Figure 7: Customer Relationship Modeling Process in Municipality (Level 1)

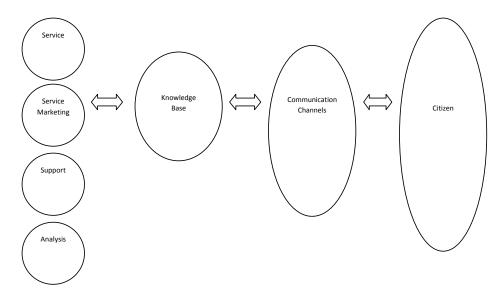
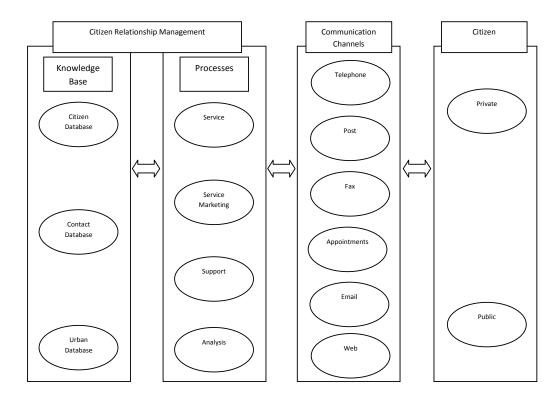


Figure 8: Customer Relationship Modeling Process in Municipality (Level 2)



1.2. Determining the Main Functions of Customer Relationship Model in Municipality

10 Main functions of the model were identified as follows:

- Content management
- Support
- Contact management
- Customization
- Service configuration
- Data analysis
- Self service
- Opportunity management
- Communication with other municipalities
- Compensation management

Survey of five experts on the desired functions and the priority order has been given in Table 3. According to the results of the survey, the functions of "Customization" and "Compensation management" are excluded from the priority order because of earning scores below the mean value (10). Eight refined functions have been shown in order of importance below:

- 1. Data analysis
- 2. Support
- 3. Service configuration
- 4. Contact management
- 5. Opportunity management
- 6. Content management
- 7. Self service
- 8. Communication with other municipalities

Table 3: Priorities According to the Experts' Views (Scoring Base: 10)

Function			Expert	S	Total Score	Priority Order	
	1	2	3	4	5		
Self Service		6	2	6	4	23	7
Service Configuration		8	7	3	10	37	3
Data Analysis		10	9	10	8	45	1
Customization		0	2	2	0	9	9
Support		9	7	9	7	41	2
Opportunity Management		7	4	9	8	34	5
Content Management		8	7	6	4	30	6
Contact Management		3	9	7	8	35	4
Compensation Management		0	2	0	1	6	10
Communication with Other Municipalities		3	0	4	4	17	8

1.3. Model Basic Indices

1.3.1. Citizen

- Background records of citizens (public and private)
- Communication channels with citizens
- Organizational hierarchy of service provisioning
- Contacts

1.1.1. Staff

- Activities relating to visits, calls and other the events
- All staff duties
- Working groups structure

1.1.2. Service

- Service delivery procedure
- Directory of services
- Type of service
- Service prediction
- Service opportunities

1.1.3. Actions

- Events
- Records of actions taken for every citizen
- Chronology
- Service advertising

1.1.4. Documents

- Automatic execution of the support requests received from online sources (e-mail, etc.)
- Saving the input and output records and documents
- Establishing communication means for communicating with the citizens

1.1.5. Other

- Coordination using Telephone, Fax and E-mail
- Coordination using communication software such as Office[®] and Outlook[®]

1.2. Model Sub-Processes

Basic processes of customer relationship model in municipality was divided into 4 service categories of "service", "service marketing", "support", and "analysis". In continuation of the work, we will deal with introducing the related sub-processes, observing the priorities expected by the experts concerning the eight key functions.

1.2.1. Service Sub-Processes

- 1. Managing the tasks, activities and information relating to the citizen (opportunity management)
- 2. Managing customer contact channels including telephone, mail, fax, appointment, e-mail and websites (contact management)
- 3. Identification of influential citizens, local and regional (opportunity management)
- 4. Displaying all interactions and activities associated with a contact and description of the staff duties relevant to each activity for the purpose of complete supervision of the events (contact management)
- 5. Sending the description of the staff duties associated with a call to the relevant personnel (contact management)
- 6. Storing unlimited amounts of information about citizens and previous records, activities and contact information (data analysis)
- 7. Planning service delivery through appointment, Web, telephone, etc. (service configuration)
- 8. Measuring the employees' performance in order to gain the most satisfaction of the citizen (data analysis)
- 9. Classifying citizens based on their background record and service request (data analysis)
- 10. Raising the employees' information and communication level through access to the structure and observing the role of all related events (service configuration)
- 11. Creating and sending new instructions and necessary guidelines to all municipal employees (service configuration)

- 12. Planning and clarifying the objectives of each of the subordinate units, on the various municipal services (service configuration)
- 13. Predicting the citizens' satisfaction or dissatisfaction level concerning the services provided and using the results thereof (service configuration)
- 14. Sending automatic electronic mail to various units, in order to reminding and informing them on their tasks (service configuration)
- 15. Quick receiving of the municipality website visitors' info and direct transferring them to the database (service configuration)
- 16. Providing a searchable source of information about all the municipal services and the method of presenting them in the internet for the purpose of quick and easy access of the citizens to remove the necessity for face to face communication (appointment) to save time and costs both for the municipality and the citizen (self service)
- 17. Creating an interactive approach towards the useful experiences within the municipality website in order to reducing the appointments and planning an advertising campaign around it (self service)
- 18. Management of contracts and contractor affairs (service configuration)
- 19. Acquiring information on the service delivery from other municipalities with the customization approach towards the useful experiences in the urban areas (communication with other municipalities)
- 20. Direct and indirect control over the service delivery cycle (opportunity management)
- 21. Granting the employees access to the updated information of the citizens, instructions, tasks and decisions (content management)
- 22. Collecting all the incoming and outgoing records of service cycles (content management)

1.2.2. Service Marketing Sub-Processes

- 1. Possibility of displaying the instructions and guidelines, whether modified or updated and necessary activities (support)
- 2. Creating a data entry by new promotional units (support)
- 3. Storing, retrieving and updating key information on various municipal departments (support)
- 4. Ability to inquire on all information stored in the database by the promotional units (support)
- 5. Categorizing the citizens from different aspects (gender, age, education social status, etc.) in order to service predicting (data analysis)
- 6. Management and description of marketing aspects of service (service configuration)
- 7. Possibility of displaying marketing activities in other municipalities (communication with other municipalities)
- 8. Analysis and management of service marketing, recording the events and functions, success rate and review concerning the services provided and considering the results (data analysis)
- 9. Analysis of service marketing to predict future performance (opportunity management)
- 10. Using the service marketing results, for evaluating the service quality and adopting the necessary measure for changing service delivery performance (data analysis)
- 11. Analysis of operational measurements for tracking efficiency of costs (data analysis)
- 12. Taking reports on service marketing records (data analysis)
- 13. Continuous communication with the citizens and providing them with newest urban services (service configuration)
- 14. Controlling and monitoring service marketing costs (data analysis)
- 15. Modeling the citizens behavior to acquire information needed for better understanding the citizens, future service prediction, and satisfaction indicators (data analysis)
- 16. Identifying the exact needs and services required by citizen (support)

- 17. Customized interaction with citizens to sustain long-term relationships (contact management)
- 18. Contact with citizens through their preferred channel of communication (contact management)

1.2.3. Support Sub-Processes

- 1. Quality management and key analysis of activities to increase efficiency and improving service prediction (data analysis)
- 2. Management of waiting time to reduce the required time for receiving services by the citizens to increase his/her satisfaction (contact management)
- 3. Management of various service delivery performance including field services, electronic, hotline and consultation services, etc. (service configuration)
- 4. Automation of referring service delivery requests submitted by citizens to the related departments (support)
- 5. Taking comprehensive reports on citizens' problems and sending them to the related departments (support)
- 6. Prioritizing service requests by citizens based on time scheduling to speed up service delivery and reducing waiting time for the citizens (support)
- 7. Automated reference of the service requests to the relevant departments and returning feedback to the citizens within the least amount of time possible using his/her communication channel of choice (support)
- 8. Eliminating the waiting time for both the citizens and staff (support)
- 9. Sending various solutions to the citizens in times of critical need to quick receiving of service (self service)
- 10. Creating a searchable knowledge base and permanent access to the updated information by the citizens (content management)
- 11. Gathering and storing information about services provided, requested services, date of provisioning, etc. in the knowledge base (content management)

1.2.4. Analysis Sub-Processes

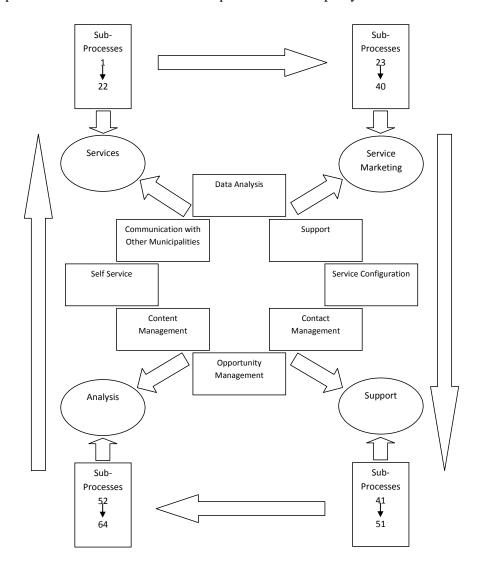
- 1. Constant monitoring and analysis of various events in dealing with employees, the citizens, and using the results thereof in predicting the future events and improving the performances of municipal departments (opportunity management)
- 2. Sending online warnings and hints to the units with poor performance (contact management)
- 3. Key analysis, analyzing the success and failure, compared to other municipalities' performance (data analysis)
- 4. Extracting the service costs during the desired time interval (support)
- 5. Warning analysis for predicting the future performance (data analysis)
- 6. Calculating the citizen's satisfaction index through using various questionnaires (data analysis)
- 7. Identifying the citizen's dissatisfaction costs and evaluating the results there of (opportunity management)
- 8. Producing various types of charts, statistics and reports on the method of presenting different services and evaluating them using various approaches (data analysis)
- 9. Analyzing the service, communication channels, knowledge base and service benefits (data analysis)
- 10. Producing the efficiency graph of the municipal departments (data analysis)
- 11. Analysis of speed, citizen dissatisfaction and efficiency various municipal departments (data analysis)
- 12. Analysis of opportunities, resources and expectations (data analysis)

13. Automated calculation of the costs (support)

1.3. Model Proposal

Adopted model of the customer relationship with the municipal services and duties' environment, composed of four processes, 64 sub-processes and 8 functions is shown in Figure 9.

Figure 9: Adopted Model of Customer Relationship with the Municipality Services and Duties' Environment



1.4. Measuring the Acceptability Rate of the Model

Evaluating the proposed model in terms of factors such as intelligibility, accurately defined concepts, integrity and other standards is not easy. Essentially, "validation" is a separate issue; for the same reason we just presented an overview of acceptability rate and Feasibility of the proposed model. The following items were presented for opinion poll:

- Compliance with existing municipality status
- Compatibility with municipality organizational structure
- Feasibility of the model
- Consistency between the four processes (service, service marketing, support, analysis)
- Capability to cover the unexpected events (unforeseen services)
- Relationship between service entities
- Interaction of the systems

Accordingly, the survey forms were prepared and distributed among six experts, including three architecture specialists from the organization staff and three experts from the municipality areas. Due to the qualitative nature of the research and impossibility of quantitative results, the experts' relative interest rates are shown in Table 4.

 Table 4:
 Acceptability Measurement Results (Score Unit: %)

Title	Acceptability					
Title	Good	Normal	Poor	No comment		
Compliance with The Existing Municipal Status	49	25.6	20.3	5.1		
Consistency with The Municipal Organization Structure	53.4	13.6	33	0		
Feasibility of the Model	60	32.4	7.6	0		
Consistency Between the Four Processes	49.4	21.4	17.6	11.6		
Ability to Cover Unexpected Events	58.3	29.7	12	0		
Relationship Between Service Entities	44.4	15.5	40.1	0		
System Interaction	21.3	33.3	18	27.4		

2. Conclusion and Recommendation

2.1. Conclusion

- 1. The Adopted model of customer relationship with the municipal services and duties' environment is a new topic which is the result of 2 years of fruitless attempt in finding a similar sample in Iran.
- 2. Findings could be the basis for municipalities to achieve a desired pattern of relationship management with the citizen. Other rural organizations can also benefit from the results of this study by using the customized copy of the commonalities between the municipality and their own organization.
- 3. Compatibility with the municipality organizational structure is the main problem of model adaptation with the municipal services and duties environment.
- 4. Relationship between the service entities is affected by the aboriginal municipality environment.
- 5. Systems' interaction has a direct relationship with the municipal formation within the structured context of management information system.
- 6. Feasibility of the model was welcomed by the experts most of all.

1.1. Further Research Recommendations

- 1. Considering the effect of each of the proposed model four main processes and determining the possible importance of each process in the overall structure
- 2. Assessment of the adopted model of customer relationship with the municipal services and duties' environment
- 3. Providing a software pattern for representing the relationship between the model 4 processes and the related 64 sub-processes
- 4. Self-serving and its influence on the citizen municipality relationships
- 5. Determining a framework for selecting the most suitable service compatible communication channel with the citizen
- 6. Determining the efficiencies of the proposed model 8 functions

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References

- [1] Bemanian, M. R. (2008). Electronic Urban Planning: Concepts and Challenges. *International Conference on Electronic Municipality*. Tehran: Iranian Academic Center For Education, Culture & Research.
- [2] Beutler, L., & Crago, M. (1991). Psychotherapy Research: An International Review of Programmatic Studies. (A. Seif, Trans.) Washington, DC, United States of America: APA Publishing.
- [3] Cartwright, R. (2003). Customer Relationships. In R. Cartwright, *Customer Relationships* (A. Parsayan, Trans.). Oxford, United Kingdom: Capstone Publishing.
- [4] Cunningham, J. M. (2002). Customer Relationship Management. Oxford, United Kingdom: Wiley.
- [5] Davenport, T. (1993). *Process Innovation: Reengineering Work Through Information Technology*. Boston, MA, United States of America: Harvard Business Press.
- [6] Divisions, A. (n.d.). *Law of Administrative Divisions*. Retrieved 05 05, 2009, from Iran's Parliament: http://rc.majlis.ir/fa/law/show/90769
- [7] Elahi, S., & Heidari, B. (2005). Customer Relationship Management. Tehran, IRAN: The Commerce Printing & Publishing Company.
- [8] Haase, R., & Ellis, M. (1987). Multivariate analysis of variance. *Journal of Counseling Psychology*, 34 (4).
- [9] Johanson, J., & Storm, F. (2002). Customer Relationship Management: Case Studies of Five Swedish Companies. Retrieved September 9, 2003, from http://epubl.luth.se/1404-5508/2002/016/index-en.html
- [10] Kazemiyan. (n.d.). Retrieved 05 05, 2009, from Reference Site In Urban Management: http://urbanmanagement.ir
- [11] McBride, B. (2001). Customer Relationship Management. *Business Intelligence*. Meta Group.
- [12] *Municipality*. (n.d.). Retrieved 10 1, 2009, from Tehran Municipality: http://www.tehranmunicipality.ir
- [13] Nykamp, M. (2002). Customer Strategy Integration: Building Business Value Through Customer Loyalty. Retrieved from http://www.crm2day.com/library/epupfpuypxavgspt;.php
- [14] Ocker, R. J., & Mudambi, S. (2003). Assessing the Readiness of Firms for CRM: A Literature Review and Research Model. *36th Annual Hawaii International Conference on System Sciences*, VI, p. 181a. Hawaii .
- [15] Payne, A. (2000). *Customer Relationship Management*. Retrieved July 17, 2000, from http://www.crm-forum.com/library/aca/aca-010/brandframe.html
- [16] Sarmad, Z., Bazargan, A., & Hejazi, E. (2006). *Research Methods in Behavioral Sciences*. Tehran, IRAN: Agah Publishing House.
- [17] Seybold, P. B., & Marshak, R. T. (2001). The Customer Revolution. United States of America: Crown Business.
- [18] Swift, R. S. (2000). Accelerating Customer Relationships: Using CRM and Relationship Technologies. New Jersy, United States of America: Prentice Hall.
- [19] Thompson, B. (2004). What Is CRM? Retrieved September 9, 2003, from http://crmguru.custhelp.com
- [20] Treacy, M., & Wiersema, F. (1997). The Discipline of Market Leaders: Choose Your Customers, Narrow Your Focus, Dominate Your Market. New York, NY, United States of America: Basic Books.