Public Participation Role in Sustainable Urban Management by Quantitative Strategic Planning Matrix (QSPM)

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ABSTRACT: Public participation is counted as one of the main indexes in sustainable urban management. Based on their nature, metropolitan cities has several and complex problems. For this purpose Tehran metropolitan area is selected. Quantitative Strategic Planning Matrix (QSPM) weighted through a made-by-researcher questionnaire. The reliability of the model was verified by Cronbach's alpha coefficient. Evaluation matrix for internal and external factors was equal to 1.944 and 3.413, respectively. The strategies were classified and prioritize by quantitative matrix. Suitable strategies for Tehran city are as follows: developing a strategic plan in field of social control participatory management for Tehran city; changing management approach from a traditional pattern into a modern one in Tehran's urban management system and making urban mangers required to respond to people's demands; facilitating conditions of non-governmental (NGOs') registration and activities affairs, especially those related to the field of urban environment; educating citizens in order to create citizens' demands and improving its legal position; empowering non-governmental (NGOs) and community-based organizations in a social-based manner and establishing citizens' advisory committees (CACs); developing and equipping neighborhood houses and supporting successful and superior plans in management of neighborhoods; creating and improving the electronic city's infrastructures and designing the control system and virtual participation; developing legal mechanisms so as to handle what citizens ask urban management to do; educating and promoting urban management officials' and managers' level of environmental knowledge; patterning of superior examples of participatory urban environmental management; distributing the power through transferring municipality's authorities to regions' and neighborhoods' citizens.

Key words: Strategic, Planning, QSPM, Management, Public Participation

INTRODUCTION

The issue of public participation has received a great attention both in theoretical and practical aspects (Giddens, 2006). In order to reach the sustainability and comprehensive development as well as to make the policies effective, many of communities are trying to improve the sense of dynamic and active participation among their citizens (Garner, 2005). According to De Tocqueville, participation is a necessary aspect of urban societies (Bennett. 2004). He believes that tradition of participation make the urban society to be alive and strengthens the social connections. According to Robert Putnam, participation has an indirect impact on democracy. Participation in the public life is one of the main factors establishing the urban societies (Wallace & Pichler, 2008). Citizens' participation is a process in which individuals train to apply their power in the decision-makings related to the society (Collingsworth, 2003). Public participation, on the other hand, means people' cooperation in following the purposes they have themselves already defined. The act of public participation is based on the principle that if the citizens are active - instead of to be treated as passive customers – and involve themselves in creating and managing their own natural and artificial environments, then the environment will have a better performance than before (Bordio, 2005). Most of scholars note the citizen's effectiveness in urban decision-makings, with the purpose of enabling them to manage the local affairs and make urban services to be optimized, and have considered the role of participation in sustainable urban development, realization of democracy, civil society, and the other relevant as really critical (Sankaran, 2008),(Nahman., 2010),(Harloe., 2001), (Nilsson, 2004).

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MATERIALS & METHODS

The technique of Quantitative Strategic Planning Matrix (QSPM) determines relative attractiveness of strategies. For this purpose, major external opportunities and threats, and internal strengths and weaknesses are written down in the right-side column of the strategic planning matrix. The information is obtained directly from the internal and external factors evaluation matrixes. A weight or coefficient is assigned to the external and internal factors which play an important role in the system's success (Austin, Hapkins, 2004). The coefficients are right like the coefficients of the internal and external factors evaluation matrixes. In the next step, the matrixes of the second phase are compared to each other, and the strategies the system is to adopt and implement are determined. These strategies are written down in the top row of the strategic planning matrix. Then, attractiveness scores are determined. These are numerical values which indicate attractiveness of each strategy within a set of strategies. In order to determine the attractiveness score, those internal and external factors having an important role in the system's success are studied. Then, a question is raised about each of them: does this factor have any important role in the process of choosing or adopting the strategies? If so, then the strategies should be compared to each other with respect to the key factor. In particular, the attractiveness scores should be determined for each of the strategies so that the importance of a strategy relative to the other ones can be determined (with respect to the factor in question). The attractiveness score is as follows: 1- without attractiveness, 2- somewhat attractive, 3- having reasonable attractiveness, 4- very attractive. If the answer to the question above is no, it indicates that the factor does not have any important role (in terms of the strategy's success) in the process of choosing the strategies, and so should not be assigned an attractiveness score. Finally, sum of the attractiveness scores is calculated. The goal of summing the attractiveness scores is to obtain the product of the coefficient (second phase) multiplied by the attractiveness scores (the fourth phase). Sum of the attractiveness scores indicates the relative attractiveness of each of the strategies, which is obtained only through considering the effect of the relevant external and internal factors. The higher the attractiveness scores are, the more attractive the strategy in question will be (of course, with respect to the factors considered). The tremendous difference between the sums of the attractiveness scores in each set of strategies indicates a strategy to be more desirable than the other one. Results are presented in the below Table 1.

Short-term time horizon (1 year):

Public administration center developed and strengthen, a special committee on the environment, communities and regions formed by Council city. Recreation sports centers for residents, women, youth and pensioners formed. Information and public awareness through the media, especially the national media formed. Related areas such as sustainable urban environmental management, landscaping and waste management assigned.

The role of environmental NGOs in participatory management in Tehran formed. Ways of getting complications and urban reform tax structure designed .Mandatory participation in traditional engaged and mayor launched. Rating system legal strategies for the benefit of people's activities, especially in the urban environment performed. Short-term training specific groups in their participation in municipal affairs developed.

Community development approach on urban management programs centered. Serious issues with the urban environment of Tehran Municipality's Environment Committee, with an emphasis on community participation, such as delegating the management of urban green spaces to the private sector or NGOs and performed. Pursuit of healthy city projects in all areas of Tehran developed. A special committee for environment and neighborhoods in Tehran Council city formed. Open space, civic activities, public management and public urban created. The cultural context and providing cultural programs are conducted in partnership with strengthen neighborhoods and interact with local people recreated by Council city. Medium-term time horizon strategies (5 years):
Public participation in the planning and implementation of urban plans provided medium particular groups in their participation in municipal affairs trained. Environmental education for housewives, retirees and young people through e-mail and other media outlets performed.

Motivate people related to sustainable urban environment promoted.The teaching of citizenship and public participation strengthen the legal protection of women's participation in municipal affairs as people's right. Adopt programs and recreation facilities designed more as an opportunity for citizens to interact more or escape from the stresses and anxieties of urban life governmental organizations involved in urban management. Limit ed. Urban Environmental Management Plan for the City Council of Tehran performed. Executive strategies involved in waste management in Tehran Developed .culture on decision-making and decision-making system handover to the People. Boost low levels of participation such as neighborhood and residential complexes conduct needs assessments and feedback from citizens about environmental problems and targeted form of Tehran Regular. Financial support from NGOs and individuals interested in creative and collaborative management in the urban environment developed related to electronic city. Efforts to raise awareness of environmental management and urban management officials in Tehran. Urban neighborhoods handing

Table 1. The strategy OF Quantitative Strategic Planning Matrix (QSPM)

Row	Critical factors for success	Coefficient	WO1 A	WO1 B	WO2 A	WO2 B	WO3 A	WO3 B	WO4 A	WO4 B	WO5 A	WO5 B	WO6 A	WO6 B	WO7 A	WO7 B	WO8 A	WO8 B
Opportunities		-	-	-														
1	Regulations and rules related to the field of maintenance of civil rights	0.08	1	0.08	1	0.08	3	0.24	3	0.24	3	0.24	1	0.08	2	0.16	2	0.16
2	High rate of Citizens' readiness to control the performance of Tehran municipality	0.08	4	0.32	4	0.32	3	0.24	4	0.32	4	0.32	4	0.32	4	0.32	4	0.32
3	High percentage of retirees, housewives women, and youths	0.06	2	0.12	3	0.18	1	0.06	3	0.18	3	0.18	2	0.12	3	0.18	3	0.18
4	Existence of a wide and various range of experts in related fields	0.07	1	0.07	2	0.14	2	0.14	3	0.21	3	0.21	1	0.07	3	0.21	3	0.21
5	Modern approaches to the issue of sustainable urban management	0.07	2	0.14	2	0.14	3	0.21	3	0.21	4	0.28	2	0.14	2	0.14	4	0.28
6	Growing trend in the participation rate of urban management in the other leading countries and the availability of superior examples, as pattern, in other countries	0.06	2	0.12	2	0.12	3	0.18	3	0.18	4	0.24	2	0.12	2	0.12	4	0.24
7	Improving the spirit of participation and democracy as well as reviving the civil rights	0.06	3	0.18	3	0.18	2	0.12	3	0.18	3	0.18	3	0.18	3	0.18	2	0.12
Opportunities **Threats**																		
1	Several and varied economic-social problems in the society	0.07	1	0.07	4	0.28	2	0.14	2	0.14	2	0.14	1	0.07	1	0.07	1	0.07
2	Integration of political - Social issues in the field of urban management	0.06	1	0.06	1	0.06	1	0.06	3	0.18	1	0.06	1	0.06	1	0.06	1	0.06
3	Increasing rate of environmental pollution and environmental problems in Tehran metropolitan area	0.07	1	0.07	3	0.21	3	0.21	4	0.28	4	0.28	2	0.14	2	0.14	3	0.21
4	Some citizens' fear of involvement and the possible judicial consequences	0.06	2	0.12	1	0.06	2	0.12	3	0.18	2	0.12	1	0.06	1	0.06	1	0.06
5	Government-based policy-making and legislation	0.07	2	0.14	1	0.07	2	0.14	3	0.21	2	0.14	1	0.07	3	0.21	1	0.07
6	Political and social groups' pressure on managers and effects on type of decisions and decision-making processes	0.07	1	0.07	1	0.07	1	0.07	3	0.21	1	0.07	1	0.07	2	0.14	2	0.14
7	Reduction of level of happiness in the society and its relationship with the issue of participation.	0.06	1	0.06	2	0.12	1	0.06	2	0.12	2	0.12	2	0.12	2	0.12	1	0.06
8	Reduction of social security and increase in tensions among citizens	0.06	1	0.06	1	0.060	2	0.12	2	0.12	2	0.12	2	0.12	2	0.12	2	0.12

Row	Critical factors for success	Coefficient	WO1 A	WO1 B	WO2 A	WO2 B	WO3 A	WO3 B	WO4 A	WO4 B	WO5 A	WO5 B	WO6 A	WO6 B	WO7 A	WO7 B	WO8 A	WO8 B
		–	–	–														
Strengths																		
1	Establishment of the "1888" social control system	0.05	2	0.1	1	0.05	3	0.15	3	0.15	2	0.1	3	0.15	3	0.15	1	0.05
2	Establishment of the specialized department of environment in the structure of Tehran municipality	0.05	1	0.05	1	0.05	2	0.1	3	0.15	2	0.1	2	0.1	2	0.1	2	0.1
3	Variety of the media and paying attention to the issue of public participation in urban management	0.05	1	0.05	2	0.1	3	0.15	3	0.15	3	0.15	3	0.15	2	0.1	2	0.1
4	Existence of social and cultural deputy department in Tehran municipality	0.05	1	0.05	3	0.15	3	0.15	4	0.2	2	0.1	2	0.1	4	0.2	2	0.1
5	Establishment and activity of Tehran City Council	0.05	2	0.1	3	0.15	3	0.15	4	0.2	2	0.1	2	0.1	4	0.2	2	0.1
6	Activity of the center for urban study and planning in Tehran	0.05	2	0.1	2	0.1	3	0.15	4	0.2	3	0.15	2	0.1	3	0.15	4	0.2
7	The strategic plan for administration of the urban affairs using neighborhood-based approach	0.04	3	0.12	3	0.12	4	0.16	4	0.16	2	0.08	2	0.08	4	0.16	3	0.12
8	Increase in Tehran citizens' tendency towards the issue of participation by 60 percent	0.05	4	0.2	4	0.2	4	0.2	4	0.2	3	0.15	3	0.15	4	0.2	3	0.15
9	Establishment of the "healthy city" project	0.04	1	0.04	2	0.08	1	0.04	2	0.08	2	0.08	1	0.04	1	0.04	2	0.08
Weaknesses		–	–	–														
1	Use of citizens' participation as a tool, not as a development	0.04	4	0.16	4	0.16	4	0.16	4	0.16	3	0.12	3	0.12	4	0.16	2	0.08
2	Shortage of human skills among some of urban managers	0.03	1	0.03	1	0.03	2	0.06	3	0.09	1	0.03	1	0.03	2	0.06	1	0.03
3	Multiplicity of agencies related to and involved in Tehran's urban management	0.04	1	0.04	1	0.04	1	0.04	3	0.12	1	0.04	1	0.04	2	0.08	1	0.04
4	Lack of serious attention to environmental issues in Tehran's urban management	0.05	1	0.05	1	0.05	3	0.15	3	0.15	3	0.15	1	0.05	2	0.1	3	0.15
5	Lack of dynamism and activity in the relevant NGOs especially those of environmental type	0.05	2	0.10	3	0.15	3	0.15	4	0.2	3	0.15	2	0.1	4	0.2	3	0.15

No.	Strategy	Weight	S1 A	S1 B	S2 A	S2 B	S3 A	S3 B	S4 A	S4 B	S5 A	S5 B	S6 A	S6 B	S7 A	S7 B	S8 A	S8 B
6	Lack of a strategic plan in the field of social control and public participation	0.05	3	0.15	3	0.15	4	0.2	4	0.2	3	0.15	3	0.15	4	0.2	3	0.15
7	Lack of proper awareness of juridical, legal, and specialized aspects of related affairs among citizens	0.05	2	0.10	1	0.05	3	0.15	4	0.2	1	0.05	1	0.05	3	0.15	2	0.1
8	Shortage and weakness of the required infrastructures for electronic and virtual social control	0.04	1	0.04	1	0.04	1	0.04	3	0.12	4	0.16	1	0.04	1	0.04	1	0.04
9	Lack of motivation towards the issue of social control and public participation among some of citizens	0.03	1	0.03	3	0.09	2	0.06	3	0.09	2	0.06	2	0.06	2	0.06	2	0.06
10	Lack of belief in creation of changes and promotion of the level of public participation and control over decision-makings among some senior managers	0.03	2	0.06	2	0.06	3	0.06	3	0.09	1	0.03	2	0.06	2	0.06	1	0.03
11	Too much administrative attitude in the body of the municipality and little attention to the issue of education and research	0.02	2	0.04	2	0.04	1	0.02	4	0.08	1	0.02	2	0.04	3	0.06	2	0.04
12	Lack of legal mechanisms for handling people's demands	0.03	2	0.06	2	0.06	4	0.12	4	0.12	2	0.06	2	0.06	3	0.09	2	0.06
13	Lack of existence and establishment of legal mechanisms for citizens' for-profit participation	0.05	2	0.1	4	0.2	1	0.05	4	0.2	2	0.1	2	0.1	2	0.1	2	0.1
14	Applying limitation on and not granting appropriate delegation to assistance-councils and neighborhoods' management	0.03	2	0.06	2	0.06	2	0.06	3	0.09	1	0.03	1	0.03	2	0.06	1	0.03
15	Lack of regular and purposeful assessment of the citizens' needs	0.03	2	0.06	1	0.06	2	0.06	3	0.18	2	0.06	4	0.12	2	0.06	1	0.03
Total	**2**	–	–	3.57	–	4.25	–	4.74	–	6.54	–	4.92	–	3.76	–	5.04	–	4.39

A: Attractiveness score

B: Sum of attractiveness scores

security managed support to government entities. Tax exemptions and tax reductions or rebates for contributing citizens.

RESULTS & DISCUSSION

Considering the results obtained from the quantitative strategic planning matrix, with emphasis on public participation, the priorities in management strategies of Tehran city are as follows:

WO12: Developing a strategic plan in field of social control and participatory management for Tehran city;
WO1: Changing the management approach from a traditional pattern into a modern one in urban management system of Tehran and making urban mangers required to respond to people's demands in acceptance of the principle of control;
WO5: Facilitating conditions of NGOs' registration and activities affairs, especially those related to the field of urban environment;
WO4: Educating citizens in order to create citizens' demands and improving its legal position;
WO6: empowering non-governmental (NGOs) and community-based organizations (COBs) in a social-based manner and establishing citizens' advisory committees (CACs);
WO15: Developing and equipping Neighborhood Houses and supporting successful and superior plans in management of neighborhoods in all districts of Tehran;
WO13: Creating and improving the electronic city's infrastructures and designing the control system and virtual participation;
WO11: Developing legal mechanisms so as to handle what citizens ask urban management to do;

CONCLUSION

Managing an organization in an optimized manner, keeping it dynamic and promoting its innovation requires true analysis of environment, choosing the best purposes and strategies, and promoting the organizations' capabilities as well as effectively moving to meet the established purposes. Based on the result obtained from the QSPM matrix, the main and prioritized conservative strategies were chosen and introduced to be applied in sustainable urban management of Tehran city. Figs show the weight-distribution of strategies. As seen in the figures, there is no remarkable difference between the strategies, and the results do not suggest any recommended strategies to be omitted.

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