

Development, Sift, and Prioritization of Urban Catalyst Projects Planning Indicators; Case Study: Analysis of Indicators in Tehran Metropolis

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ABSTRACT

Each city has a unique feature that can be used as a stimulus for the development of macro and participatory urban planning. This feature can be applied as a tool for the rational and normative management of cities by governments and urban managers. In this approach, this feature can be a project that serves as a catalyst to address poverty, crime, job creation and urban dynamism, as well as to re-examine neighborhood life and civil rights with respect to ethnic differences and cultural conflicts that require political, managerial and leadership, economic, legal, social and environmental reformations. The present study aims to extract, sift, and prioritize the indispensable indicators for urban catalyst projects planning. Applying these types of projects requires careful and in-depth examination at three levels: macro, meso, and micro. Since these projects pave the way for the growth, development and globalization of cities and implemented in inefficient urban fabric with high capacity, and on the other hand, any national development largely depends on the development of urban areas, especially metropolitan areas, in this research, after the development and sift of indicators and prioritization of them using Fuzzy Delphi model, the status of Tehran metropolis was studied and prioritized with three characteristics: 1. enjoyment at desirable level, 2. enjoyment at poor level, and 3. Lack, in order to be used as headlines to implement these projects at micro level to revitalize, re-develop or regenerate worn-out textures, brownfields, industrial abandoned lands, and inefficient urban spaces in Tehran metropolitan area that require new plan. At the end, practical suggestions are made for the implementation of the components of urban catalyst projects planning at the two meso- and macro- levels focusing on Tehran.

Keywords: Urban Catalyst, Planning Indicators, Fuzzy Delphi Model, Tehran Metropolis.

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1. INTRODUCTION

Urban planning is a concept that embraces all social activities and aims to predict, express and regulate the development of urban spaces (Pinson, 2010). Urban development requires a conceptual connection with its environment and it must be relevant with its place in terms of content, and answer all interrelationships and dynamics derived from the architectural, cultural and spatial context of its fabric (Kongsombat, 2010). Therefore, we need a deep understanding of a city and its unique features that act as a stimulus or a catalyst for the development of the city (Bohannon, 2004). This catalyst should offer a modest perspective; however, its impact must be stable and integrate the existing urban fabric, which is referred to as Urban Catalyst in urban literature (Kongsombat, 2010). Urban catalyst is a new development strategy that is used as a tool within urban development strategies (Urban Redevelopment, Urban Revitalization, and Urban Regeneration) (Francin, 2015). It is an instrument accelerating the achievement of goals such as investment, design, policy making, and so on. This catalyst is, in fact, an alternative strategy that helps less use of investment, energy, construction, and processes as well as it utilizes collaborative and participatory approaches to achieve goals defined by urban texture (urban environments). Moreover, the external factors influence its process and outcomes (Kongsombat, 2010). Urban catalyst projects sit well in their own sites and root in them culturally, socially, physically, and spatially (Bohannon, 2004), improve the physical condition of the urban fabric of their immediate surroundings and make a positive change in their physical, economic, and social contexts. Since these projects are limited in their scope, they do not damage the fabric of an urban environment but improve the quality and character of it through redevelopment, revitalization, or regeneration (Attoe & Logan, 1989). Urban catalyst projects are divided into two groups according to their durability: permanent use and temporary use. Temporary cases are events that take place annually, such as business events, art, music and so on (Oswalt, Overmeyer, & Misselwitz, 2013). They can be large-scale or small-scale. Mega-

Projects, such as a shopping mall, dock development, or a rejuvenated historical area, can be used as urban catalyst in a place where there are reversible financial resources and strong public support (Sternberg, 2002), that can well help redevelopment and return power to urban environments (Bohannon, 2004). However, more clearly and correctly, an urban catalyst is defined as a smaller element or a group of elements, such as a building and its surrounding area, or a positive start of economic and social redevelopment activities (Sternberg, 2002). Street vendors or a walkway can provide design elements for urban catalyst projects (Bohannon, 2004, p. 10) as well as an instruction for planning them.

2. RESEARCH BACKGROUND

To the best of the authors' knowledge, no previous study has separately explored the planning part of urban catalyst projects but during the design section. Davis (2009), conducted an analysis of the role of architectural projects defined as 'catalysts' to urban renewal. In this study, the existing urban texture's conditions produced by Patel Taylor's Thames Barrier park were examined: how they interact with each other through the architectural form, details and materials used in it, how new residential projects have appeared around them, how they have grown, and how they have enabled new uses, as well as how they attracted new investment to the area. Kongsombat (2010) studied urban catalyst for sustainable urban development in 3 sites including IMS, Solaria Plaza, and Hotel IL Plaza in Japan. He showed that two of them are catalysts for development for the following reasons: conveying a deep sense of the city's historical layers; including both old and new textures; tendency of both examples to local retail and small- and medium-sized investors; creating a prominent perspective with their influences on the architecture of the region; responding to all the spatial, social, and architectural contexts emerged from it.

Successful urban catalyst projects, like any other succeeded projects, require four sections including planning, design, implementation and monitoring, as presented in details in Table.

Table 1. The Four Sections of a Successful Urban Catalyst Project

Section	Description	Reference
Planning	Political-Managerial-Leadership, Economic, Legal, Social and Environmental components.	(Sarvar & Nematikutenaee, 2019)
Design	Urban Design through analysis of Contextual Factors (Morphological, Perceptual, Social, Visual, Functional, Temporal) Sense of Place (fabric, Setting, Perception and Meaning) and Authenticity.	(Bohannon, 2004)
Implementation	Market Factors, using residents' participation and surveying them to share existent information within the scope of study area and attracting investors, financial and legal issues, and defining investment packages through 4Ps model (public-private-people partnership), getting approvals from relevant authorities and implementation of designed projects.	(Pennsylvania, 2014)

Section	Description	Reference
Monitoring	Reviewing programs and policies and assessing their impacts, as well as assessing the success or failure of urban catalyst projects with the help of evaluators (Does the project fit the texture and environment? Does it have a unique spirit? Does it respond to the needs of the city? Are place, space, and cultural heritage integrated in the project?), at intervals of 5, 10 and 20 years.	(Davis, 2009; Francin, 2015)

This study examines only the planning part of urban catalyst projects based on the component, variables, sub-variables, and required characteristics categorized in Table 2.

Table 2. Components, Variables, Sub-Variables and Required Characteristics of Urban Catalyst Projects Planning

Component	Variables	Sub-Variables	Required Characteristics	References
Political-Managerial-Leadership		Efficient Government	1. Creating institutional democracy, 2. Active and participatory institutions, 3. Promoting participatory levels, 4. Responsiveness, 5. Attention to collective interests and wisdom, 6. Decreased unemployment rate, inflation and wealth gap, 7. Increased annual economy growth and Gross Domestic Product (GDP), 8. Public welfare and monetary value, 9. To value domestic products and have a minimum import, 10. Raising the credit of banks and institutions at international level, 11. Facilitating foreign trade, 12. Providing conditioned social, cultural and political freedoms, 13. Increasing comradeship with other countries at international level, 14. Free flow of information, 15. Social justice, 16. Leading in the field of advanced science and technology, 17. Promoting the value of the country's passport, 18. Promoting public vitality and life expectancy among people, 19. Controlling the situation of elite immigration, 20. Avoiding dailiness, 21. The degree of decentralization of affairs and the decision-making system.	(Deloitte, 2013; Hauner & Kyobe, 2008; La Portal, Lopez-de-Silanes, Shleifer, Vishny, 1999)
		Urban Diplomacy	22. Facing global challenges, especially in the economic sector, in the age of globalization, 23. Bringing the world countries into closer cooperation, 24. Providing an appropriate environment for engagement, 25. Increasing the influence of small cities along with other cities in the world, 26. Informing, producing and distributing specialized knowledge, 27. Normalization of the local government, 28. Solving the crisis, achieving peace and providing security for citizens in line with citizen participation, 29. Familiarizing with the other countries' development patterns, 30. Attracting foreign investors, 31. Establishment of transnational corporations, 32. Establishment of the headquarters of foreign corporations, 33. Entering the World Trade Organization (WTO) to promote domestic and foreign investment trade and commerce, 34. Tourism marketing, 35. Innovation marketing and sharing, 36. Freedom of expression, 37. Religious, Family beliefs, Kinship Relationships, 38. Overcoming Cultural Ignorance, 39. Identifying commonalities in Cultures, 40- Capability of accepting cultural achievements such as language, understanding, authentication and observance of customs, 41. Holding festivals, 42. Holding joint exhibitions, 43. Urban branding.	(Berry, Kent, & Ken, 1993; Fung, 2005; Quesnel, 2000; Purcell, 2006)
		Decentralization	44. Bringing decision-making closer to people, 45. Creating local democracy, 46. Increasing the efficiency of governments and expanding regional equilibrium in the field of economy, 47. Equalizing the distribution of resources between regions, 48. Macroeconomic stability and strengthening local democratic government to increase economic growth, 49. To connect more local governments to the benefit of geographical regions, 50. To better understand the needs and tastes of regions, 51. To create competition in the territory of the local government that will stimulate their innovation, creativity and accountability to their legal status, 52. The diversity of political and economic actors in urban space, 53. Powerful affairs monitoring and managing rather than the tenure of affairs.	(Furniss, 1974; Rao, Scott, & Munawwar, 2015; Ndreu, 2016; Kersting, Janice, Andrew, Dele, & Hellmut, 2009; Shah, heymans, Shah, & Steffinsen, 2006)

Component	Variables	Sub-Variables	Required Characteristics	References
Political-Managerial-Leadership		Local Governments	54. Establishing a link between the central government and people, 55. Giving legitimate authority to local governments through the will of citizens, 56. Providing public welfare and organizing people's lives, 57. Social, economic, cultural and educational empowerment structures for promoting citizenship rights, 58. Providing the platform for public participation in social, economic, cultural and educational, etc. empowerment for promoting citizenship rights and quality of life, 59. Creating job opportunities for citizens, 60. Civil development and social participation, 61. Expanding public spaces in society, 62. Shrinking local government (municipality), 63. Helping to meet environmental challenges, 64. Aligning people with the municipality to implement programs tailored to the needs of citizens and establish a democratic and participatory institutional structure.	(Furniss, 1974; Rao, Scott, & Munawwar, 2015; Ndreu, 2016; Kersting, Janice, Andrew, Dele, & Hellmut, 2009; Shah, heymans, & Steffinsen, 2006)
		Good Urban Governance	65. Transparency and accountability, 66. Associationism and efficiency in the distribution of the outcomes of investment projects, 67. Efficiency and socialism in urban management, 68. Attention to vulnerable people, 69. Rule of law, 70. Taking Equality into account, 71. Reduction of corruption, 72. Responding to all needs of beneficiary and influential groups, 73. having a decentralized government, 74. responsibility and bankability.	(Kedogo, Simone, & Hamhaber, 2018; Badach, & Małgorzata, 2017)
		Integrated Urban Management	75. Eliminating political, programmatic and functional dispersions, 76. Adapting population growth with access to basic infrastructure such as housing and employment, 77. Integrated management of all social, economic, cultural, physical, biological, and environmental functions and the entire urban environment, 78. Coordinating policies and planning as well as implementing them in an integrated manner, 79. Creating a coherent strategy, 80. Focusing on organizational management, 81. A holist management approach to the city and the coordinated actions of actors, 82. Anticipating the interventions of other sectors, 83. Separation of political leadership from management, 84. Amendments to regulations, 85. Scientific and specialized activities, 86. Organizational financial power, 87. Reinforcement OF Municipal councils.	(Colic, 2015; Lotfi, Pourahmad, Omranzadeh, & Mahdi, 2015; Alberti & Waddell, 2000)
		Government Support of Metropolitan Areas in the Age of Globalization	88. Exit from the isolation caused by metropolises and the expansion of global communications, 89. The political intention to resolve urban disruptions, 90. Support of large-scale investments, 91. Joining the metropolitan area network, 92. Understanding the characteristics of any place in the context of time, and playing an appropriate role in regeneration of potential capacities with natural-historical signs to strengthen links, 93. Maintaining and developing human health and addressing urban health problems, 94. Controlling contagious diseases, 95. Protecting vulnerable groups, 96. Examining the ways to reduce the poverty of citizens, 97. Economic supports and providing adequate financial resources for city administration, 98. Eliminating social challenges, 99. Environmental crisis and air pollution, 100. Establishing shelter supplies and improving citizens' housing management, 101. Facilitating Urban Public Transport, 102. Coordinated Management and Development of Water Resources, 103. Changing Urban Consumption Patterns, 104. physical, economic, social and transport stability.	(Ritzer, 2007; Van & Poelhekke, 2008; Knieling & Jörg, 2014; Shachar & Felsenstein. 2002)
		Facilitation of Entrepreneurship	105. Establishing sustainable urban transitions, 106. Connecting to the political process, 107. Attracting beneficiaries and interaction among owners of various interests, 108. Organizing changing frameworks of local decision making and acting as an entrepreneur in a competitive and growing environment, 109. Having win-win thinking at all levels and among all people in a community for community-based management and using public participation.	(Block & Paredis, 2013; Cohen, March, & Olsen, 1972)

Component	Variables	Sub-Variables	Required Characteristics	References
Legal	Urban Development Regulation		1. The existence of rules for the provision of justice, 2. The existence of rules for the supervision and authority, 3. The compliance of the regulations with the city's administrative and regulatory structure, 4. The compliance of the regulations with the natural and geographical situations, 5. The compliance of the regulations with the social, cultural and economic environment of the city, 6. The compliance of the regulations with the citizens' desirable wishes, 7. The existence of rules for the creation of meaning and proportionality in the urban environment, 8. The existence of rules for providing optimal access, 9. The existence of rules for providing the security and welfare of society, 10. The existence of rules for increasing efficiency, 11. The compliance of the regulations with the city's administrative, supervisory structure and authority, 12. Denoting incentive packages to attract public participation in the rehabilitation of inefficient urban areas.	(Salehi & Hajikhani, 1997; Collin, 1997; Stephen, 1999)
	Integrated Urban Management Regulations		13. The existence of clear and transparent regulations to prevent organizations from working in parallel, 14. The existence of rules for spatial and physical urban development to protect public interests.	(McGill, 1998; Lotfi, Pourahmad, Omranzadeh, & Mahdi, 2015)
	Zoning and Land Use Regulations		15. The existence of control regulations for the use of urban lands, 16. Zoning regulations for the growth and development of public health.	(Francin, 2015)
	Investment Regulations		17. The existence of regulations attracting and protecting the interests of the investor and the security of the invested resources, 18. Supportive regulations for creating appropriate conditions to attract domestic and foreign capital, 19. The existence of regulations protecting the interests of the investor in the securities (finance).	(UNEP, 2016; Bernasconi-Osterwalder, & Johnson, 2010)
	Small Business Supporting		20. The existence of control and guidance rules for various business areas, 21. The existence of supportive policies for the development of entrepreneurship, 22. The existence of rules for determining the allowed scope of business activity.	(Dixon, Gates, Arpur, Aeabury, & Talley, 2006; Williams, Keith, Belton, & Graham, 2017)
Economic	From the State-based Economy to a Community-based	Government Economy and Single-Product Economy	1. Strong public participation-based economy, 2. Motivating people do economic activities, 3. A country's independency on a single-product economy, 4. Economic privatization, 5. Expanding competitive environment.	(Lam, 2000; Office of Fair Trading; 2009; Gylfason; 2001)
		Political Economy	6. Guiding the informal economy towards the formal economy, 7. The mechanism for removing economic rent and the balanced distribution system of power and wealth.	(Foster, 2002; Lewis & Miller, 2003)
	Entering the World Trade Organization (WTO)		8. Developing cooperation-based production and trading, 9. Transparency of financial transactions at different levels	(The WTO, 1995)
	Financial Management	Banking System		10. The degree of independence of the banking system and the efficiency of the financial and monetary system, 11. The attraction of people's funds through the stock market, 12. Determining the profit rate in proportion to the inflation rate and managing the inflation rate.
Financial Transparency and Stable Income			13. Financial transparency of responsible organizations, 14. Creating stable income for the municipality	(Mallick, 2007; Mohammadi & Nezhad, 2015)

Component	Variables	Sub-Variabes	Required Characteristics	References
Economic	Microeconomics	Support of Local Businesses	15. Supporting the diversification of local businesses, 16. The existence of a suitable business plan, 17. Motivating people do economic activity, 18. Consistency of the community's consumption patterns with its production patterns, 19. Development of production and trade, 20. Creating jobs, 21. Optimal utilization of resources.	(Dilts, 2004; Carter, Mason, & Tagg, 2008; Finmark, 2006; Edward & Economy, 20105)
		Support of Small Household Businesses	22. Financing for household business investment, 23. Increasing people's purchasing and saving power, 24. Promoting labor and capital productivity, 25. Strengthening the collective work culture, 26. Controlling costs, 27. Supporting the profitability of small household businesses.	
Social	Social Welfare	Social Security	1. The health insurance coverage rate of residents through various insurance. 2. The amount of access to public services, 3. The appropriate pricing of welfare services, 4. The amount of support in specific social and economic conditions, 5. Access to health services, 6. The effectiveness of urban catalyst projects in relation to civil liability, 7. Physical access to the workplace, 8. Offering better public services and welfare.	(Spicker, 2013; Root, 2010; Polacek, McDaid, Fernandez, Matosevic, Penn, Korintus, Verheyde, Wynne, Cullen, Dolphin, Bauer, Czischke, Hegedus, Teller, & Pittini, 2011; Hegedüs, Horváth, Elsinga, Haffner, Norris, Carnegie, & Droste, 2015)
		Social Service	9. Quality and accessibility of public health.	
		Public Education	10. Effective education system, 11. Literacy rate, 12. Status of public education facilities.	
		Employment	13. Existing employment and creation of new jobs by urban catalyst projects.	
		Housing	14. Access to housing, 15. Housing security, 16. Stability and structural durability of housing, 17. Proper housing infrastructure, 18. Water supply, 19. Waste and garbage disposal.	
		Social Capital and Social Trust	20. Increasing social responsibility, 21. Number of voluntary organizations participating in planning and implementing urban catalyst projects, 22. Environmental awareness and Private sector accountability for the public, 23. Ensuring more effective resource equipment, 24. Social Coherence among the organizations involved in the planning and implementation of urban catalyst projects, 25. Social trust among people and beneficiary/influential authorities, 26. Management efficiency, increasing supporting power through relying on strengths of various partners, 27. Addressing urban problems in a more comprehensive way, 28. Ensuring the fair provision of services to the various partners, 29. Achieving coordination in different projects and programs.	(Li, Pickles, & Savage, 2005; Franklin, 2004; Paitoonpong, Shigeyuki, & Nipon, 2008; Spring Institute for Lived Theology; 2005)
		Social Health	Social Safety	30. The level of protection of cultural values, 31. Social solidarity and cohesion between the individual and society, 32. People's trust in each other.
The Amount of Citizens' Satisfaction	Social hope	33. The level of vitality and liveliness, 34. The level of city prosperity indicators.		
		35. The quality of urban spaces, 36. Suitable views and landscapes, 37. The proper air temperature, 38. Sound quality, 39. Cleanliness, 40. Relaxation, 41. The amount of green space, 42. Access to business spaces, 43. Social relations, 44. Security in urban spaces, 45. Ease of access and movement, 46. Diversity of space relative to the needs of different urban groups, 47. Construction of local communities or neighborhoods with the help of neighbors, 48. Creating a healthy community.	(Salim, Peng, Almakary, & Karmoshi, 2017; Martínez, Short, & Ortíz, 2015; Alizadeh & Kianfa, 2013)	
Public Participation		49. The financial contribution of the residents to the project, 50. The co-operation of the project's residents.	(Sherry R,1969)	

Component	Variables	Sub-Variables	Required Characteristics	References
Social	Identity and Sense of Belonging to Place		51. Meeting the needs of residents, 52. An individual's emotional connection with area/ sense of place, 53. Promoting identity through increasing the sense of belonging and sense of place in citizens, 54. Identifying the place and walkways, 55. The feeling of being part of a community, 56. Inhabitants' clear mental image of the city, 57. An individual's emotional connection with the city.	(Corcoran, 2005; Qazimi, 2014)
		Human-Centered Urban Design	1. Management of rainwater and runoff, 2. Waste management, 3. Maximizing public welfare, 4. Creating inter-generational and intra-generational justice, 5. Increasing environmental responsibility, 6. Economic development and social progress, 7. Respect for the environment, 8. Public-centered programs, 9. Rational use of resources, 10. Lower inputs of energy and materials, 11. Lower outputs of waste and pollution, 12. Viability, 13. Efficient local administration, 14. Competitiveness, 15. Credibility system for promoting sustainable living and urban development, 16. Using renewable energy sources, 17. Green design, 18. Biodiversity of species.	(UNDP, 1994; Soubbotina & Sheram, 2000; kim & Kaplan, 2004; Lundqvist, 2007; Zhang & Dong, 2008; Shu-Yang, Bill, & Raymond, 2004)
Environmental	Sustainable City	Ecological Design	19. Attention to environmental health, 20. Mixed land use, 21. Variety of buildings, 22. Use of arid and abandoned land for urban agriculture and green spaces, 23. Reducing urban thermal islands, 24. Energy efficiency.	
		Pedestrianism	25. Attention to public transportation, 26. Reducing car dependency, 27. Security, 28. Social interactions, 29. Increasing sense of belonging in the neighborhood, 30. Waste management, 31. Attention to health, 32. Attendance and pause in Urban Spaces.	

(Sarvar & Nematikutenae, 2019)

The present study aims to extract, sift, and prioritize the indispensable indicators for urban catalyst projects planning with the help of Fuzzy Delphi model and to examine them on the case study.

3. METHODOLOGY

The Delphi method was first presented by Dalkey and Helmer in 1963. This technique is a survey method based on expert opinions and has three main characteristics: anonymous response, controlled replication and feedback, and ultimately, a statistical group response. This technique is used to make decisions and is more widely applied for gathering information from experts, and relates to a specific and one-dimensional issue of the future that leads to long-term strategic decisions (Rafik, Aliev, Aliyeva, & Alieva, 2004). This method is very similar to Brainstorming, with the difference that experts never gather in a group at a meeting and around a desk, that is, they don't directly communicate with each other. In the Brainstorming technique, people cannot discuss some of their ideas, because of shame, embarrassment, and respect.

In many real situations, experts' judgment cannot be expressed and interpreted quantitatively; in other words, there are inadequate definitive data and numbers for modeling real world systems due to ambiguity and uncertainty in decision-makers' judgment. In order to overcome this problem, the "fuzzy set theory" presented by Lotfzade in 1965 is applied as an appropriate tool to deal with ambiguity and uncertainty in the decision-making process (Bouzon, Govindan, Rodriguez, & Campos, 2016). Therefore, in this study, the Fuzzy Delphi method was used to confirm and sift the identified indicators. This is a combination of the Delphi method and the fuzzy set theory presented by Ishikawa et al. (1993). The data and factors are collected qualitatively in the Delphi technique; thus, their reliability and validity cannot be calculated using conventional quantitative methods. So, qualitative methods are used in this study (Habibi, Sarafrazi, & Izadyar, 2015) (Fig. 1).

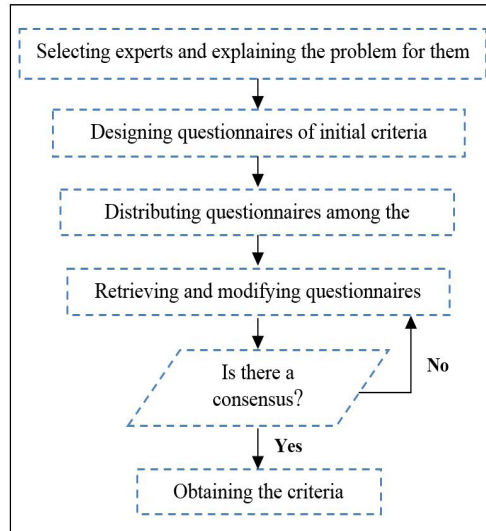


Fig. 1. General Fuzzy Delphi Algorithm
(Hsueh, 2013)

The steps of the Fuzzy Delphi method include:

1. Identification of research indicators using comprehensive review of research theoretical foundations.
2. Collecting decision makers' opinions: In this step, after identifying the criteria, the decision makers group, consisting of those who are expert in the research topic, is formed. Then, the adjusted questionnaires are sent them. In these questionnaires, experts are asked to mark linguistic terms written in front of each criterion. Then these linguistic terms are converted to triangular fuzzy numbers.

3. Confirmation and Sifting of indicators: This is done by comparing the acquired value of each indicator with the threshold value. The threshold value is computed in several ways, which is basically 0.7. To do this, first, the triangular fuzzy values of the experts' opinions are computed. Then, their fuzzy average is calculated to obtain the average of n respondents' opinions. The fuzzy value of each indicator is calculated using the following equations (Table 3).

4. Consensus and End of Fuzzy Delphi Method: Consensus means that respondents have reached a unique decision about the factors and this is the step after which no specific event takes place.

Table 3. Linguistic Terms and Fuzzy Triangular Numbers and Fuzzy Delphi Calculation Method

Linguistic Terms	Fuzzy Triangular Numbers		
	a	b	c
Very low	0	0	0.25
Low	0	0.25	0.5
Medium	0.25	0.5	0.75
High	0.5	0.75	1
Very high	0.75	1	1
Fuzzy Number Calculation	Min (xij)	Multiply (xij) ^{1/n}	Max (xij)
Defuzzified Value (the Accepted Range >0.7)	Crisp= (a+b+c)/3		

(Habibi, Sarafrazi, & Izadyar, 2015)

4. CASE STUDY

In this research, components, variables, sub-variables and indispensable indicators of urban catalyst projects planning are extracted, sifted and prioritized with the help of the fuzzy Delphi method. Then, the mentioned cases are examined and evaluated at two macro and meso levels in Iran focusing on Tehran Metropolis.

To prevent the replication and creation of additional tables, information about Tehran, which were collected through library study and field study (interview with related parties and field observations), are listed in a table same as Table 2 by the following attributes: 1. enjoyment at desirable level (Bold font), 2. enjoyment at poor level (Simple font), and 3. Lack (Italic font).

5. RESULTS AND DISCUSSION

According to the explanations given about the required characteristics of urban catalyst projects planning and Fuzzy Delphi method, a questionnaire, consisting of indicators mentioned in Table 2 (characteristics with the underlined number), was designed and sent the

experts to be filled out.

Purposeful sampling was used to select the Delphi team. The inclusion criteria for selecting experts are including theoretical mastery, scientific experience, willingness and ability to participate in research and being available. By the law of repetition, the number of experts was 20 (Table 4).

Table 4. Personal Information of the Experts Participating in the Study

Numbers	Age	University Degree	Job Position
2	27-42	Master	Municipal Expert
3	32-60	Master, Ph.D.	Mayor or Deputy Mayor
9	29-57	Ph.D.	University professors
2	46-60	Master	Managers of government agencies related to the city
4	38-69	Master, Ph.D.	Private sector managers of urban and architectural companies

To prevent repetition, the underlined numbers in Table 2, in the form of a questionnaire, are sent to the fuzzy Delphi expert team to sift and prioritize them. The reasons for choosing these characteristics, in addition to their significance, were not being repetitive as well as their ability to become an indicator.

Experts were asked to mark the linguistic terms written in front of each components, variables, sub-variables

and indicators. Consensus was based on output value of 0.7, which means the remaining items received just the linguistic terms of good and very good. All Fuzzy Delphi calculations were performed in Excel software. The results are presented in Table 4. Moreover, the status quo of Tehran derived from Table 2 is presented in tables 5 and 6 (the number of questionnaires was 20) (Tables 5 & 6).

Table 5. Triangular Fuzzy Numbers of Experts' Votes on Components

Fuzzy Triangular Numbers	Political-Managerial-Leadership			Legal			Economic			Social			Environmental		
	c	b	a	c	b	a	c	b	a	c	b	a	c	b	a
Expert1	1	1	0.75	1	0.75	0.5	1	1	0.75	1	1	0.75	1	1	0.75
Expert2	1	0.75	0.5	1	1	0.75	1	0.75	0.5	1	1	0.75	1	1	0.75
Expert3	1	1	0.75	1	1	0.75	1	1	0.75	1	1	0.75	0.75	0.5	0.25
Expert4	1	1	0.75	1	1	0.75	1	1	0.75	1	0.75	0.5	1	1	0.75
Expert5	1	1	0.75	1	1	0.75	1	1	0.75	1	1	0.75	1	0.75	0.5
Expert6	1	1	0.75	1	0.75	0.5	1	1	0.75	1	1	0.75	1	0.75	0.5
Expert7	1	1	0.75	1	1	0.75	1	1	0.75	0.75	0.5	0.25	1	1	0.75
Expert8	1	1	0.75	1	1	0.75	1	1	0.75	1	1	0.75	1	1	0.75
Expert9	1	1	0.75	0.75	0.5	0.25	1	0.75	0.5	1	1	0.75	1	1	0.75
Expert10	1	1	0.75	1	1	0.75	1	1	0.75	1	0.75	0.5	1	1	0.75
Expert11	1	1	0.75	1	1	0.75	1	1	0.75	1	1	0.75	1	0.75	0.5
Expert12	1	1	0.75	1	0.75	0.5	1	1	0.75	1	1	0.75	1	1	0.75
Expert13	1	1	0.75	1	1	0.75	1	1	0.75	0.75	0.5	0.25	1	1	0.75
Expert14	1	0.75	0.5	1	1	0.75	1	1	0.75	1	1	0.75	1	1	0.75
Expert15	1	1	0.75	1	1	0.75	1	1	0.75	1	1	0.75	1	0.75	0.5
Expert16	1	1	0.75	1	1	0.75	1	0.75	0.5	1	1	0.75	1	1	0.75
Expert17	1	1	0.75	1	1	0.75	1	1	0.75	1	1	0.75	1	1	0.75
Expert18	1	1	0.75	1	1	0.75	1	1	0.75	1	0.75	0.5	1	1	0.75
Expert19	1	1	0.75	1	1	0.75	1	1	0.75	1	1	0.75	1	1	0.75
Expert20	1	1	0.75	1	1	0.75	1	1	0.75	1	1	0.75	0.75	0.5	0.25
Fuzzy Delphi Calculation	1	0.97	0.5	1	0.93	0.25	1	0.96	0.5	1	0.89	0.25	1	0.88	0.25
Defuzzified Value		0.824			0.725			0.819			0.715			0.710	

According to the calculations, the output values (sum of a, b, c divided by 3) were calculated and extracted as following table (Table 6).

Table 6. Component Ranking

Component	Output Value	Rank
Political, Managerial, Leadership	0.824	1
Economic	0.819	2
Legal	0.725	3
Social	0.715	4
Environmental	0.710	5

The above steps were also calculated for the variables, sub-variables and indicators. The results are shown in Table 7.

Table 7. Components, Variables, Sub-Variables and Indicators of Urban Catalyst Projects Planning by Priority

Component	Variables	Sub-Variables	Indicators
Political-Managerial-Leadership	Efficient Government		1. The degree of decentralization of affairs and the decision-making system, 2. Attention to collective interests and wisdom, 3. Active and participatory institutions.
	Good Urban Governance		1. Transparency and accountability, 2. Responsibility and bankability, 3. Associationism and efficiency in the distribution of the outcomes of investment projects, 4. Attention to vulnerable people.
	Decentralization		1. The diversity of political actors and economics in urban space, 2. Powerful affairs monitoring and managing rather than tenure of affairs.
	Urban Diplomacy		1. Attracting foreign investors, 2. Innovation marketing and sharing, 3. Holding joint exhibitions.
	Government Support of Metropolitan Areas in the Age of Globalization		1. The political intention to resolve urban disruptions, 2. Support for large-scale investments, 3. Facilitating Urban Public Transport, 4. Examining the ways to reduce the poverty of citizens, 5. Understanding the characteristics of any place in the context of time, and playing an appropriate role in regeneration of potential capacities with natural-historical signs to strengthen links, 6. Economic supports and providing adequate financial resources for city administration
	Local Governments		1. Aligning people with the municipality to implement programs tailored to the needs of citizens and establish a democratic and participatory institutional structure, 2. Social, economic, cultural and educational empowerment structures for promoting citizenship rights.
	Integrated Urban Management		1. Eliminating political, programmatic and functional dispersions, 2. Coordinating policies and planning as well as implementing them in an integrated manner, 3. A holist management approach to the city and the coordinated actions of actors
Economic	Entering the World Trade Organization (WTO)		1. Developing cooperation-based production and trading, 2. Transparency of financial transactions at different levels.
	Financial Management	Banking System	1. The attraction of people's funds through the stock market, 2. The degree of independence of the banking system and the efficiency of the financial and monetary system;
		Financial Transparency and Stable Income	1. Creating stable income for the municipality, 2. Financial transparency of responsible organizations;
	From the State-Based Economy to a Community-Based Economy	Government Economy and Single Product Economy	1. Economic privatization, 2. Expanding competitive environment.
		Political Economy	1. The mechanism for removing economic rent and the balanced distribution system of power and wealth, 2. Guiding the informal economy towards the formal economy.
Microeconomics	Support of Local Businesses	1. Motivating people do economic activities, 2. Supporting the diversification of local businesses.	
	Support of Small Household Businesses	1. Promoting labor and capital productivity, 2. Strengthening the collective work culture, 3. Supporting the profitability of small household businesses	

Component	Variables	Sub-Variables	Indicators	
Legal	Investment Regulations		1. The existence of regulations attracting and protecting the interests of the investor and the security of the invested resources.	
	Small Business Supporting Rules		1. The existence of supportive policies for the development of entrepreneurship, 2. The existence of control and guidance rules for various business areas.	
	Integrated Urban Management Regulations		1. The existence of clear and transparent regulations to prevent organizations from working in parallel.	
	Urban Development Regulations		1. The existence of rules for the supervision and authority, 2. The existence of rules for the provision of justice, 3. The compliance of the regulations with the citizens' desirable wishes, 4. The compliance of the regulations with the social, cultural and economic environment of the city, 5. The compliance of the regulations with the city's administrative and regulatory structure, 6. The existence of rules for the creation of meaning and proportionality in the urban environment, 7. The existence of rules for providing optimal access.	
	Zoning and Land Use Regulations		1. The existence of control legislations for the use of urban lands.	
Social	Social Health	Social Capital and Social Trust	1. Social Coherence among the organizations involved in the planning and implementation of urban catalyst projects, 2. Number of voluntary organizations participating in planning and implementing urban catalyst projects, 3. Social trust among people and beneficiary/influential authorities,	
		Social Safety	1. The level of protection of cultural values, 2. People's trust in each other,	
		Social Hope	1. The level of city prosperity indicators, 2. The level of vitality and liveliness,	
		The Amount of Citizens' Satisfaction		1. Security in urban spaces, 2. Ease of access and movement, 3. Access to business spaces, 4. The quality of urban spaces, 5. Diversity of space in proportion to the needs of different urban groups.
	Social Welfare	Social Service	1. The appropriate pricing for welfare services, 2. The effectiveness of urban catalyst projects in relation to civil liability, 3. The amount of support in specific social and economic conditions.	
		Public Health	1. Quality and accessibility of public health	
		Public Education	1. Status of public education facilities, 2. Effective education system.	
Environmental	Sustainable City	Identity and Sense of Belonging to Place	1. Identifying the place and walkways, 2. Meeting the needs of residents, 3. An individual's emotional connection with area / sense of place.	
		Pedestrianism	1. Attention to public transportation, 2. Reducing car dependency, 3. Attendance and pause in Urban Spaces.	
		Human-Centered Urban Design	1. Lower inputs of energy and materials, 2. Lower outputs of waste and pollution, 3. Waste management, 4. Management of rainwater and runoff, 5. Biodiversity of species	
		Ecological Design	1. Mixed land use, 2. Attention to environmental health, 3. Variety of buildings.	

In the next step, the indicators of each component were ranked disregarding variables and sub-variables. The ranking of indicators related to each component is as follows:

I. Political, Managerial and Leadership Component

1. The political intention to resolve urban disruptions,
2. The degree of decentralization of affairs and the decision-making system,
3. Transparency and accountability,
4. Eliminating political, programmatic and functional dispersions,
5. Attracting foreign investors,
6. Coordinating policies and planning as well as implementing them in an integrated manner,
- 7.

8. A holist management approach to the city and Actors' coordinated actions,
9. Responsibility and bankability,
10. Powerful affairs monitoring and managing rather than tenure of affairs,
11. Innovation marketing and sharing,
12. The diversity of political actors and economics in urban space,
13. Support of large-scale investments,
14. Attention to collective interests and wisdom,
15. Active and participatory institutions,
16. Facilitating Urban Public Transport,
17. Examining the ways to reduce the poverty of citizens,
18. Aligning people with the municipality to implement programs tailored to the needs of citizens and establish a democratic and participatory institutional structure,

18. Associationism and efficiency in the distribution of the outcomes of investment projects, 19. Attention to vulnerable people, 20. Social, economic, cultural and educational empowerment structures for promoting citizenship rights, 21. Holding joint exhibitions, 22. Understanding the characteristics of any place in the context of time, and playing an appropriate role in the regeneration of potential capacities with natural-historical signs to strengthen links, 23. Economic support and providing adequate financial resources for city administration.

II. Economic Component

1. Economic privatization, 2. Expanding competitive environment, 3. Developing cooperation-based production and trading, 4. The mechanism for removing economic rent and the balanced distribution system of power and wealth, 5. Creating stable income for the municipality, 6. Motivating people do economic activities, 7. Supporting the diversification of local businesses, 8. Financial transparency of responsible organizations, 9. Promoting labor and capital productivity, 10. Strengthening the collective work culture, 11. Guiding the informal economy towards the formal economy, 12. The attraction of people's funds through the stock market, 13. The degree of independence of the banking system and the efficiency of the financial and monetary system, 14. Supporting the profitability of small household businesses, 15. Transparency of financial transactions at different levels.

III. Legal Component

1. The existence of rules for the supervision and authority, 2. The existence of rules for the provision of justice, 3. The compliance of the regulations with the citizens' desirable wishes, 4. The existence of regulations attracting and protecting the interests of the investor and the security of the invested resources, 5. The compliance of the regulations with the social, cultural and economic environment of the city, 6. The compliance of the regulations with the city's administrative and regulatory structure, 7. The existence of rules for the creation of meaning and proportionality in the urban environment, 8. The

existence of rules for providing optimal access, 9. The existence of control legislations for the use of urban lands, 10. The existence of clear and transparent regulations to prevent organizations from working in parallel, 11. The existence of supportive policies for the development of entrepreneurship 12. The existence of control and guidance rules for various business areas

IV. Social Component

1. Security in urban spaces, 2. The level of vitality and liveliness, 3. The level of city prosperity indicators, 4. Level of urban prosperity index, 5. Ease of access and movement, 6. The appropriate pricing for welfare services, 7. Access to business spaces, 8. Diversity of space in proportion to the needs of different urban groups, 9. People's trust in each other, 10. Number of voluntary organizations participating in planning and implementing urban catalyst projects, 11. The effectiveness of urban catalyst projects in relation to civil liability, 12. The amount of support in specific social and economic conditions, 13. Identifying the place and walkways, 14. Meeting the needs of residents, 15. An individual's emotional connection with area/ sense of place, 16. Status of public education facilities, 17. Social trust among people and beneficiary/influential authorities, 18. The level of protection of cultural values, 19. Social Coherence among the organizations involved in the planning and implementation of urban catalyst projects, 20. The quality of urban spaces, 21. Quality and accessibility of public health, 22. Effective education system..

V. Environmental Component

1. Attention to public transportation, 2. Lower inputs of energy and materials, 3. Attendance and pause in Urban Spaces, 4. Waste management, 5. Mixed land use, 6. Reducing car dependency, 7. Attention to environmental health, 8. Lower outputs of waste and pollution, 9. Management of rainwater and runoff, 10. Biodiversity of species, 11. Variety of buildings.

According to the studies of these indicators in Iran at two macro and meso levels focusing on Tehran metropolis in the previous sections, the results are listed by three attributes: 1. enjoyment at desirable level, 2. enjoyment at poor level, and 3. Lack in Table 8.

Table 8. The Study of Prioritized Indicators of Urban Catalyst Projects Planning in Iran at Two Micro and Meso Levels, Focusing on Tehran Metropolis

Status	Component	Indicators
Enjoyment at Desirable Level	Political-Managerial-Leadership	1. Innovation Marketing and sharing, 2. The diversity of political actors and economics in urban space, 3. Attention to collective interests and wisdom, 4. Active and participatory institutions, 5. Examining the ways to reduce the poverty of citizens, 6. Aligning people with the municipality to implement programs tailored to the needs of citizens and establish a democratic and participatory institutional structure, 7. Social, economic, cultural and educational empowerment structures for promoting citizenship rights, 8. Holding joint exhibitions, 9. Understanding the characteristics of any place in the context of time, and playing an appropriate role in the regeneration of potential capacities with natural-historical signs to strengthen links, 10. Economic support and providing adequate financial resources for city administration.

Status	Component	Indicators
Enjoyment at Desirable Level	Economic	-
	Legal	11. The existence of rules for the supervision and authority, 12. The existence of rules for the provision of justice, 13. The compliance of the regulations with the social, cultural and economic environment of the city, 14. The compliance of the regulations with the city's administrative and regulatory structure, 15. The existence of control legislations for the use of urban lands, 16. The existence of control and guidance rules for various business areas.
	Social	17. The appropriate pricing for welfare services, 18. The effectiveness of urban catalyst projects in relation to civil liability, 19. Status of public education facilities, 20. Social Coherence among the organizations involved in the planning and implementation of urban catalyst projects, 21. Quality and accessibility of public health.
Enjoyment at Poor Level	Environmental	22. Attendance and pause in Urban Spaces, 23. Mixed land use, 24. Attention to environmental health, 25. Variety of buildings.
	Political-Managerial-Leadership	1. The political intention to resolve urban disruptions, 2. The degree of decentralization of affairs and the decision-making system, 3. Transparency and accountability, 4. Attracting foreign investors, 5. Responsibility and bankability, 6. Powerful affairs monitoring and managing rather than tenure of affairs, 7. Supporting large-scale investments, 8. Facilitating Urban Public Transport, 9. Associationism and efficiency in the distribution of the outcomes of investment projects, 10. Study of ways to reduce urban poverty, 11. Attention to vulnerable people.
	Economic	12. Economic privatization, 13. Expanding competitive environment, 14. Developing cooperation-based production and trading, 15. The mechanism for removing economic rent and the balanced distribution system of power and wealth, 16. Creating stable income for the municipality, 17. Motivating people do economic activities, 18. Supporting the diversification of local businesses, 19. Financial transparency of responsible organizations, 20. Promoting labor and capital productivity, 21. Strengthening the collective work culture, 22. Guiding the informal economy towards the formal economy, 23. The attraction of people's funds through the stock market, 24. The degree of independence of the banking system and the efficiency of the financial and monetary system, 25. Supporting the profitability of small household businesses, 26. Transparency of financial transactions at different levels.
	Legal	27. The compliance of the regulations with the citizens' desirable wishes, 28. The existence of rules attracting and protecting the interests of the investor and the security of the invested resources, 29. The existence of rules for the creation of meaning and proportionality in the urban environment, 30. The existence of rules for the provision of optimal access, 31. The existence of supportive policies for the development of entrepreneurship.
Lack	Social	32. Security in urban spaces, 33. The level of vitality and liveliness, 34. The level of city prosperity indicators, 35. Ease of access and movement, 36. Access to business spaces, 37. Diversity of space in proportion to the needs of different urban groups, 38. People's trust in each other, 39. Number of voluntary organizations participating in planning and implementing urban catalyst projects, 40. The amount of support in specific social and economic conditions, 41. Identifying the place and walkways, 42. Meeting the needs of residents, 43. An individual's emotional connection with area / sense of place, 44. Social trust among people and beneficiary/influential authorities, 45. The level of protection of cultural values, 46. The quality of urban spaces, 47. Effective education system.
	Environmental	48. Attention to public transportation, 49. Lower inputs of energy and materials, 50. Waste management, 51. Reducing car dependency, 52. Lower outputs of waste and pollution, 53. Biodiversity of species.
	Political-Managerial-Leadership	1. Eliminating political, programmatic and functional dispersions, 2. Coordinating policies and planning as well as implementing them in an integrated manner, 3. A holistic management approach to the city and actors' coordinated actions.
	Economic	-
	Legal	4. The existence of clear and transparent regulations to prevent the organizations from working in parallel.
	Social	-
	Environmental	5. Management of rainwater and runoff.

What is classified as “enjoyment at desirable level” attribute at macro and meso levels, may be classified as the second or third attributes, i.e. enjoyment at poor level or lack, at the micro level. Thus, to implement these projects at the micro level, it is necessary to re-evaluate them within the context of target areas. For this purpose, the authors suggest strategic planning of urban catalyst projects at micro level with the help of Meta-SWOT analysis, in which the internal resources and external possibilities can be defined regarding to the obtained indicators. The reason for suggesting this strategic planning tool is the nature of urban catalyst projects that are seeking for a unique feature in an area and Meta-SWOT is a reliable tool to fulfill it. Target areas in Tehran metropolitan area, such as worn-out textures, brownfield, abandoned industrial lands, and inefficient urban spaces are no exception to this rule. Hence, it is suggested to investigate the unique features of the areas be investigated with the help of the strategic planning tool (Meta-SWOT), after a deep examination of the obtained indicators at the micro level, to ultimately achieve the appropriate strategies and tactics for rehabilitating, redeveloping or regeneration of them.

Note: Refer to Agarwal, et al. (2012) for more information about Meta-SWOT.

6. CONCLUSION

Urban catalyst is a primary element in the urban development process that enhances urban redevelopment and accelerates the urbanization process, stimulates future developments and provides opportunities for future changes. Urban catalyst projects include permanent and temporary uses and are available on large (for countries with reversible revenues and strong public support) and small (in the form of software programming, empowerment, preservation of historical values, etc. for less-developed countries) scales. Moreover, they require the foundations at three macro, meso, and micro levels and have four sections: Planning, Design, Implementation, and Monitoring. Financing such type of projects is provided through the 4Ps model (public, private, people partnerships).

The present study aimed to extract, sift, and prioritize the indispensable indicators for urban catalyst projects planning. In this research, with the help of the Fuzzy Delphi method, some of the essential characteristics are selected and then sifted and prioritized. The reasons for choosing these characteristics, beside their significance, were including not being repetitive as well as their ability to become an indicator. Consequently, the obtained indicators were evaluated and prioritized at both macro and meso levels in Iran, focusing on Tehran metropolitan area, by three attributes 1- enjoyment at desirable level, 2- enjoyment at poor level, and 3- Lack, in order to be used as headlines to implement these projects at micro level to revitalize, re-develop or regenerate of worn-out textures, brownfield, abandoned industrial lands, and inefficient urban spaces in Tehran

metropolitan that require new plan.

Considering the status of the planning indicators in Iran, focusing on Tehran, the following tactics for each component can be offered to address the problems:

1. Political, Managerial and Leadership

- Attempting to form an efficient government which is facilitating, providing, coordinating and empowering, and at the same time creating a cultural context to increase understanding, knowledge and awareness of people for requesting such a government.
- Strengthening political will to eliminate urban disturbances.
- Forming NGOs to promote Civil Development and Social Participation in Urban Regeneration in order to expand public spaces, solve environmental challenges and create a link between the central government and people.
- Emphasizing the aspects of urban development rather than urban growth.
- Relying on the program-centeredness.
- Management Integrity both in Management and Decision-making.
- Transparency, accountability and informing as well as attention to the learning of citizens.
- Creating balances in the private sector, population and services
- Involving semi-private actors in projects such as NGOs, investment companies, local communities by establishing participatory and supportive cooperation between urban government, citizens, and the private sector.
- Teaching people and authorities to have win-win thinking, i.e. giving value to public and community interests beside individual interest.

2. Economic

- Economic privatization to solve the problems caused by the state economy, such as economic rent.
- Relying on economics in terms of supply and demand and acting based on the market mechanism
- Eliminating state projects to prevent the sameness of supervisor and employer
- Eliminating single-product economy to avoid the disappearance of business areas, the elimination of bipolarity of cities, and intense migrations to the center, and informal settlements.
- No reliance of projects on oil, national and state revenues but relying on attracting capital and creating the space for public, private and people partnerships or the 4Ps model for investment.
- Strengthening strong management and urban diplomacy to address corruption, monopoly and create assignment, transparency, and control to eliminate the State Economy and create a Private Economy.
- Creating Social Justice with Civil Participation, Government Accountability, and New Tax System.
- Free flow of information and education
- Getting help from all individuals involved in policy-making, decision-making and implementation
- Defining small scale projects.

3. Legal

- Codifying comprehensive Urban Law to establish a coherent and comprehensive legal framework to eliminate contradictory and inconsistent rules and regulations
- Reforming zoning and using mixed land uses and awarding incentive packages to housing developers who create affordable housing and public places that meet the city's needs.
- Codifying rules for temporary use and adjusting tax revenues for such type of uses.
- Codifying rules for attracting investors, both domestic and external, i.e. the rules reassure and protect the interests of the investor to encourage them to invest.

4. Social

- Using legally protected claimant media
- Creating a specialized media for city managers, i.e. a media that relies on expertise and it is a specific media rather than public one and relies more on urban issues and expertise.
- Creating an integrated cyber system to educate managers and professionals and to provide them in-service education to share and exchange basic information
- Using Info Graphic and Motion Graphic to prioritize problems with a beat to fillip or influence urban managers in order to use their experts and forces to solve urban problems.
- Providing content to the media by urban management to make people claimant.
- Increasing the social responsibility of citizens and authorities by holding training classes, introducing the nature of urban catalyst projects in public institutions and promoting citizens' awareness and literacy as well as their level of participation.

- Preventing the prolongation of implementation of projects to increase the level of citizens' satisfaction and their participation.
- Promoting social cohesion among residents and owners and assigning a part of the public domain to the residents of the same area.
- Branding to promote the identity and cultural values of neighborhoods with the help of elements and heritage.
- Planning night activities and providing night-time security for utilizing urban spaces.
- Promoting gathering places
- Aligning all activities with the social activities in the area.
- Public access to urban services

5. Environmental

- Promoting pedestrianism in the area to reduce car dependency and promoting the quality of the environment and the pedestrian movement between urban catalyst projects to boost face-to-face encounters and social interactions, as well as economic benefits for projects.
- Pre-thought and human-centered design
- Using the diversity of people, behaviors, land uses and activities, and diversity of environmental conditions.
- Making projects legible in the minds of people.
- Marking up with the help of natural and historical elements.
- Preserving the collective memory, identity of place and sense of place.

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