Spatial Analysis of the Impacts Economic and Physical Capacities of Triple Areas have on Violations of Construction, Qazvin City

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Extended Abstract

Introduction

Urban construction control is in line with the urban optimal management and its sustainable development, mainly through urban construction regulations. Despite various measures of urban management, such as determining the legal guarantee for compliance with the rules and regulations there are reported significant instances of urban construction violations every year. In fact, construction violations can be defined as not executing urban construction regulations that threaten the quality of life in cities and cause many problems in the city. Today's failure to comply with urban regulations in developing countries has become a problem that threatens quality of life in cities, causing a crisis in urban environments, urban visual aesthetics, energy consumption, and so on. Violations of urban construction can cause many problems such as wasting national capital, failure to respond to the infrastructure, negative impact on the implementation of urban development projects, failure of plans to achieve desired goals, the decline of the visual values and the city's image, the decline of environmental values, the unfair distribution of urban resources. The purpose of this study was to investigate the relationship between economic and physical factors of Qazvin city with construction violations in order to find out some causes that have an effect on the construction violations.

Methodology

According to the research topic, this research has a descriptive-analytic methodology. Therefore, weighted overlay method in Geographic Information System (GIS) software has been used to investigate the effect of spatial patterns of the city on constructions violations. Thus, at first, the research indicators are specified in both economic and physical sectors and prioritized and weighed with Expert Choice software, then, based on the preliminary maps and using GIS , economic and urban capacity maps were prepared and were compared with the number and area of construction violations to determine the type of relationship between each of the factors with various types of construction violations.

Information on construction violations in the city of Qazvin shows that in 2016 there were 2319 cases of construction violations in the municipality, the largest of which is in region 3 also, the highest number of violations related to violation of land use change. The results showed that, in terms of experts, among the economic variables studied, the price of the

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building and among the physical variables, the number of building floors had the highest influence on construction violations. In terms of economic capacity, region 2 has the highest level and region 1 has the lowest level. In the physical capacity section, region 3 was the most appropriate situation, and region 1 showed the most inadequate condition. On the other hand, results showed that economic and physical factors affect construction violations. The economic factors show a direct relationship with the number of violations of the ceiling on the license and the total area of violation of the construction of surplus on the surface and land use change and the inverse relationship with the violation of the number of monolithic without authorization. Physical factors have a direct relationship with the number of violations of constructing surplus on the surface and land use change. There is an inverse relationship with the number and total area of the violation of the construction of surplus on the density. As the economic and physical capacity maps show that there are obvious physical and economic distinctions between the northern and southern parts of Qazvin city, this indicates the lack of justice in the distribution of facilities and services to different parts of the city and its role in urban problems and abnormalities, including construction irregularities.

Results and discussion

The results obtained in the economic factors section show that the higher the economic capacity of a region, the more the number of building structures on the license is greater. Also, the total area of violation of the construction of surplus on the surface and land use change in areas with high economic capacity is higher. In fact, these types of construction violations take place due to the greater use of space and profitability due to the high value of land in these areas. In the areas where the economic variables studied are in poor conditions, the number of violations of the construction is greater without permission. One of the reasons for this is the high cost of issuing licenses and the inability to pay for it by individuals in these areas. In the section of the physical characteristics, the number of violations of surplus build-up and land use change in areas where buildings have larger blocks and more floors, as well as higher quality are more. The research showed that in the economic factors, building prices and land prices were considered as the most important variables.

Conclusion

According to the results of the analysis, it can be concluded that in areas where the price of land and building is greater, violation of the ceiling on the license, the construction of surplus on the surface and the land use change are more which means maximum use of land for greater profitability. Therefore, the control of the urban land trading market is of particular importance in reducing spatial disparities and construction violations. The findings of the research showed that in parts with lower physical fitness (more dwelling and less durable buildings, low area and residential units) the number of surplus violations over the density and the total area of violation of the building surplus on the license are greater. This means more demand for construction and change of land use. Therefore, planning urban management to improve the physical condition of areas in line with the type of demand can be effective in reducing these types of violations.

Keywords: construction violations, spatial analysis, urban construction regulations, Land Use Planning, Urban Laws, Qazvin City.

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Polycentric urban development based on spatial changes of employment and activities in Tehran

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Extended Abstract

Introduction

Urban spatial structure can be considered as a partial or general description of the distribution of phenomena in urban geographical space. Cities can grow in different spatial structures and functions. This is the objective result of interactions between land and topography markets, infrastructure, laws and regulations, taxation, industrial development, distribution of socio-economic enterprises, transportation network, decisions of real estate planners and developers, and investors, businessmen and policymakers. Understanding the urban spatial structure is of paramount importance in formulating planning strategies and policy support to create habitable, vibrant, and densely populated cities that can be measured in terms of functions and activities. This type of spatial structure in one hand is a symbol of physical spaces and, on the other hand, shows the space of human activities in the form of social dynamism and urban vitality. The hypothesis of a monocentric model emphasized the concentration of employment in the commercial centers of the city, which was dedicated to commercial and residential land uses. Places were selected based only on distance from employment centers, but not all employment-related activities were concentrated in the CBD. Some production was located outside the CBD and in the areas with lower densities and less valuable land, which gradually led to the decentralization of employment from the CBD to the residential suburbs of the city. As transportation systems grow and develop in cities, the polycentric phenomenon is inevitable.

Over the past few decades, Tehran has grown from a traditional city with simple economic functions to a new urban phenomenon with the characteristics of a new industrial city. The uneven transformation of Iran's socio-economic system in the last century and the imposition of exogenous development patterns on Iranian society have disrupted its natural course. Meanwhile, Tehran, as the center and main hub of economic development and industrial development of the country, has provided the ground for its rapid and uneven development. The compulsory process of migration and activity around its periphery the last five decades has made the city expand on its new axis and develops new sub-center. Thus, the process of industrial development and urban development in Tehran has emerged in an unbalanced manner.

Methodology

In order to analyze the spatial structure of activities and employees, statistical data of the years 1996-2017 as well as data of the structural-strategic plan of Tehran were used. Kernel density was used for employee density and spatial autocorrelations such as general Moran *I* statistic,

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local indicators of spatial association (LISA) and G_i^* Statistic for both employee and activity dimensions. The modifiable areal unit problem (MAUP) problem was also used to determine spatial units.

Results and discussion

Findings show that in the studied periods, the main density of employees has spread periphery the sub-centers. In the 1996 period, the main core of Tehran, which should be the high-density part of urban activity, did not have a large population. During this period, Tehran had a not so strong main economic center. The situation in which urban managers seek to reform the various comprehensive and structural-strategic plans in polycentric structure can play a prominent role in the management. In the statistical period of 2006, the formation of the nucleus of activity is in the 21st and 22nd districts of Tehran; That is, the district where the largest commercial-leisure and industrial centers of Tehran are located. On the other hand, the emerging cores expand into the sub-centers. In the period of 2011 and 2016, the eastern core of Tehran will be strengthened. Active areas in District 18 are emerging and taking shape. A strong center in Tehran's District 5, which was formed in the previous period, is also being strengthened. During this period, contrary to expectations, not only was it not added to the density of the central district, but its stagnation was stabilized. Then, the spatial pattern of employees and activities was analyzed. The results confirm the status of clustering for the employees of these statistical courses. Analysis of activities shows that the performance of Tehran is more service; as most of the unit includes this activity. On the other hand, the share of this activity along with the commercial district in the main core and sub-center and other space units of Tehran is high. Tehran takes on a special shape in terms of the distribution of activities. The southern districts are mostly engaged in activities such as assembly, transportation and industry. Health and Aid also has the largest number of employees in the southern parts of Tehran. Activities in the public sector and salaries, technicians and assistants, specialists, legislators and managers live in the northern areas of Tehran as affluent areas and from the axis of Enghelab Street to the north.

Conclusion

In Iran, oil revenues provide about 85 percent of foreign exchange earnings and play a major role in government budget, industrialization, and urban development. The rapid growth of Tehran and the concentration of the country's facilities and industries have caused other cities in the country to be considered as satellites of the capital of Iran. In fact, the reason for locating industries in Tehran is its consumer market. Tehran has become especially important with the formation of its new factory industries. Most establishments and factories were located in the south of the city, and as a result, the area gradually became an industrial area. Therefore, in the development process of Tehran, the new plan of the city was greatly affected by the economic and physical performance of industries. On the other hand, due to the congestion and inefficiency of scale economies, it entered the broadcast stage. In subsequent urban development, new sub-centers accelerated their growth, and peripheral areas were integrated into urban contexts. Industrial decentralization policies from Tehran slowed down the establishment of industries in Tehran over a period of time, causing the process of industrial decentralization to be transferred to the areas around Tehran in a chain and in connection with Tehran. Therefore, the results of this study can be a guide for urban planners and managers to be able to evaluate the objectives of the structural-strategic plan of Tehran and to propose the main and main sub-centers for researching its polycentric structure.

Keywords: Urban spatial structure, Employees, Activity, Spatial autocorrelation, Tehran.

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Literature Systematic Review Method Implementation in Dimensions, Components and Indicators Identification of the Creative City

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Introduction

The creative city is the product of the third millennium and its developments. Based on this theory, creative people are considered key drivers of urban and regional growth. The creative city emphasizes on components such as technology, talent, diversity, and social - cultural tolerance. To realize such a city, it is necessary to consider four important advantages for the cities of Iran. First, the creative city can play an effective role in country's economic growth and prosperity through the commercialization of art and cultural industries rich market such as handicrafts, music, cinema, ... the artistic and historical centers of Iranian civilization, Iranian and Islamic architectural masterpieces, preservation and attraction of the elites and the intellectual and intellectual assets utilization of talents, as well as the transformation of their ideas and creativity into commercially valuable products. Secondly, it can add to the country cultural richness and diversity through the mechanisms such as preventing the elites escape by creating a suitable and tolerant-based context (maximum attraction and minimal elimination), the elite's attraction of different countries and religions, especially the Islamic countries talents from different sects and religions. Third, it could add a new dimension to the country's economy and accelerate stagnation outbreak fields. Fourthly, creative thinking and creative themes do not require investment and bureaucratic structures as compared to other economic sectors and will never be subject to cruel sanctions. Accordingly, the present research purpose is creative city explanation based on its dimensions, components and indicators in order to understand many aspects.

Methodology

The present study was conducted using the literature systematic review, which includes the stages of definition, search, selection, analysis and synthesis. The review first step is to identify the review field before the actual search. Word selection has been searched based on the main components of theorists and researchers such as Florida (2002 and 2005), Landry (2000) and Sasaki (2008 and 2010) (Tolerance, Talent, Technology, Diversity, Innovation). In the second step, it has been done the search for resources. The search process was conducted in August 2017 for 31 days. In this process, we have been searching for dissertations, books, articles, statistical reports and research projects related to the creative city and its dimensions,

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components and indicators. It is worth noting that these resources were published in the 2017-2000 period. The list of valid resource references has been monitored as part of a detailed search for additional literature based on snowball search and manual search. All references such as title, authors, general lines, abstracts and keywords information have been transmitted to the Endnote software version X7.4 and have been removed duplicate results. The third step was to allocate resources and full text of the downloaded articles. Titles, abstracts and key words of downloaded sources all were independently double-monitored by authors for agreement and consensus. Then, the full text of the qualified sources was carefully studied again for further and more accurate examination. The fourth stage is the analysis. The full text of the retrieved articles was evenly divided among the evaluators, who consistently analyzed the papers independently. The fifth step of the research is to synthesize. The authors synthesized the data into the three categories using selective coding processes (i.e., integration and refinement of concepts and themes).

Results and discussion

The initial search has led to 114 cases based on the research topic, then, 71 items were fully evaluated. Finally, the resource 22 was selected for final analysis. The data have been selected between 2016-2000 time intervals. The literature systematic review findings show that the most relevant cases relate to 2012-2007, including 11 of the research databases (57%). In other words, the percentage of selected studies for 2009, 2010, 2011, 2012, and 2007 are 17%, 13%, 9%, 9% and 9%, respectively. About 68% of the data is quantitative and 32% qualitative. The results clearly indicate that most studies are related to the EU and the United States. In short, approximately 77% of studies have been conducted in EU and US. The creative city has a dimensions seven including spatial, social, economic, cultural, human, structural and institutional, components 28 and indicators 141. The spatial dimension has six components including accessibility, city representation, livability, physical environment, branding and amenities; each of the components has indicators 3, 5, 5, 7, 3 and 5, respectively. Economic dimension has three key components including creative economy, innovation, cultural economy; each component has indicators 6, 5 and 8, respectively. The social dimension has key three components: tolerance and tolerance, social atmosphere and values and norms, which have indicators 8, 8 and 3 respectively. The cultural dimension has main components four: cultural environment, tourism, norms and values, and cultural participation; each of the components has indicators 6, 3, 6 and 3 respectively. Structural dimension has main components seven including corruption perception, freedom of speech, information and communication technology, socio-cultural infrastructure, creativity sponsor infrastructure, entrepreneurship and financial infrastructure; each of the components has indicators 1, 2, 5, 6, 1, 2, and 5 respectively. The human dimension has main components three, including creative core, bohemian, and talent; each of the components has indicators 8, 1 and 7 respectively. The institutional dimension has main components three, including the institutional environment, incentives and regulations, and the general and political framework; each of the components has indicators 6, 3 and 10 respectively.

Conclusion

Many studies have been carried out in creative cities and their locations. Nevertheless, there is a serious vacuum on the creative city detailed and multidimensional study. Studies have focused on the creative city analysis in terms of technology, talent, tolerance and diversity, or creative and cultural economics. This neglects attention to the creative city multifaceted and complex dimensions in urban planning. Accordingly, the present study has identified the creative city various aspects of the Accordingly, the present study has identified the creative city various aspects include of spatial, economic, social, structural, cultural, human and institutional using the systematic review method. The use of these components and indicators in the country cities

can provide a platform for the prosperity and commercialization of their rational, human and cultural heritage assets.

Keywords: Creative City, Dimensions, Components, Literature Systematic Review.

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Evaluating and Monitoring Housing Supply Policies for Urban Livelihoods Groups in terms of Housing Stability Indicators (Case Study: Mehrghane Housing)

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Extended abstract

Introduction

Various policies have been developed in various countries around the world, including developing countries, particularly for low-income housing. Low-income groups for housing in cities from the first phase; That is, choosing a location to the extent and size of their housing, materials, and mixing their home with permits and facilities to build a home is faced with many problems. Therefore, these segments have no choice but to move into the informal housing market. Inappropriate and off-standard housing, in addition to harmful psychological effects, directly and indirectly leads to social consequences, such as delinquency, crime and violation of laws and regulations. Housing policymakers, theorists, and planners have found that affordable housing affordability for low-income households is a key tool in achieving vital goals, including household economic success. Evidence suggests that low-cost housing construction is a launching pad for employment, income growth and financial security. Housing is now a major factor in the socialization of the world with the major commodity in the social organization of space, which plays a crucial role in shaping individual identity, social relationships, and collective goals. Mehr Housing Plan 2007 with the aim of balancing housing supply and demand by eliminating land prices, providing low-income and poor housing, controlling and preventing excessive land and housing prices, boosting housing production and increase the volume of housing production, reduce housing costs (rents, mortgages and purchases) from household spending bases, meet the cumulative and future needs of housing, and bring equity to affordable housing, thereby reducing poverty and providing youth housing. It was raised.

With the rapid growth of the population and the widespread expansion of the city of Gorgan, the need for housing for different strata, especially the low-income strata, has become more pronounced. To overcome this problem, a number of strategies have been implemented, including the Mehr housing policy. How to provide housing for low-income urban groups in Gorgan is a big issue that needs to be addressed by the government and relevant authorities. In this study, we investigate the indicators of sustainable urban housing in Gorgan's Mehr Zeytoon Housing. In the foregoing research, it will attempt to elucidate the dimensions of housing sustainability in Mehr housing policies by identifying the principles for achieving this important in implementing Mehr Housing Policy of the possible vacancies of the currently low-income housing program. Gorgan (Mehr Zeytoon Housing) and make suggestions for sustainable housing planning to improve the quality of life of residents. In this regard, first, indicators and

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criteria related to sustainable urban housing in different economic, socio-cultural, physical-spatial and environmental aspects are extracted from reliable external and internal sources and adapted to country specific conditions. These indicators were then measured and evaluated according to the status quo through statistical tests.

Methodology

This study is an applied and descriptive-analytical research. Sustainability assessment was done using a questionnaire and interviews with Mehr housing residents in Gorgan. The population of the 1164 households is all residents of Gorgan's Mehr Zeytoon Housing. To measure the quality of housing, a sample of 300 households was collected using Cochran method. The sampling method was random. The Sustainability Measurement Questionnaire of Mehr Housing Plan is divided into two parts. The first section deals with independent variables with demographic characteristics of the subjects in question, such as age, gender, and so on. The second part deals with the sustainability dependent variables of the Mehr Housing Plan. This section contains housing standards and sub-criteria that are designed to measure the sustainability of Mehr housing complexes and are addressed as research questions that include four criteria: physical, economic, socio-cultural and environmental. Overall, sustainability has been evaluated on the basis of 36 questions that actually constitute the following criteria related to the research criteria. The questions were evaluated using a five-point Likert range. Data were analyzed by SPSS software using descriptive statistics, correlation test, and one-sample t-test. All questionnaire questions are closed type, since the questionnaire uses a range of five Likert options and scores ranging from one (very low) to five (very high) are answered in the analysis. The results are considered the number three as the theoretical median of the responses and the mean stability obtained across all criteria and sub-criteria is compared with this number.

Results and discussion

Evaluation of the components of Mehr Housing Physical Sustainability Dimensions from the perspective of residents consists of 7 items. This shows a range from the lowest level of sustainability (2.48) to the optimal level, since the criterion for determining the degree of sustainability of Mehr Housing residents in The format of the five alternatives is considered too low or too high using the Likert spectrum and the number represents the lowest level of stability, averages obtained from various physical dimensions (2.82). , Indicates the instability of housing indices from the physical and physical aspects of Mehr Housing. Assessing the range of variations between the obtained averages shows that except for stability in the index. In other areas, such as materials used, population density within the complex, housing area, housing strength, residential and interior architecture and interior design and the number of rooms, there was an undesirable level of stability, in other words. The low level of sustainability has been considered by the residents of Mehran housing in Gorgan. Investigation of the lowest level of stability among the physical components (2.48) refers to the type of materials used in the Mehr housing, since inferior and poor quality materials were used instead of quality materials. There are six questions about the sustainability of Mehr Housing's economic dimension, the components being evaluated in a broader way that summarizes the smaller economic dimensions of households. In all cases, the situation was near optimal. Most of the sustainability level in terms of the economic aspects of Mehr housing (3.79) is related to the cost of housing. Most of the uncertainty stems from the economic factors related to the disproportionate price of a unit with facilities. But this does not mean that the intensity of sustainability is high, but it is the lowest among the economic dimensions. An examination of the differences in the meanings also confirms that the repayment of mortgages, the proportion of Mehr's housing prices to the income of resident households, and the satisfaction of the amount required paying these units, have contributed to the sustainability of the economic dimension. Add seal housing. Concerning the economic index of housing, it is important to set a target for mass production of housing by misdiagnosing the cause of the disadvantage of low-income groups, while aiming to enhance

the financial ability of these groups through institutional reforms and Finance was set to reform the structure of income distribution. Evaluation of data from socio-cultural dimension of Mehr Gorgan housing shows that, despite the level of economic stability of Mehr housing, the stability of different components of social dimension is not in a desirable state. The privacy of the households living in Mehr Housing was the lowest (2.47). This is due to a variety of factors, including physical and material problems and design issues, namely: the use of low-cost materials and thin walls (the use of very thin canvas panels) between units as well as non-compliance. The principles of the aristocracy of housing have created problems in both the auditory and visual aspects. Evaluating and comparing other components of the social dimension reflects the fact that sustainability, except in terms of traffic security and social interactions, in other respects, such as the impact of stamped housing on the strengthening of neighborhood relations, privacy, facilities Cultural and religious, neighborhood-specific customs and lifestyle of the apartment are low-level. In this respect, it is important to note that Mehr's housing policy provides sustainable urban housing, in line with the principles and policies set out to reduce it. The finished price (excluding land prices from residential units) has been taken into consideration and the welfare-location and social sustainability indicators and the service is not paying attention. This has increased household spending. The environmental aspects of housing encompass several issues that have been briefly evaluated for its most important components and indicators. Accordingly, six components have been considered to investigate the environmental dimension of Mehr housing. The obtained averages and their comparisons with each other indicate that it has the most volatility, the desired level for any of the environmental dimension components has not been considered, thus, the highest volatility is related to the lack of green space (2.12). After that, the cleanliness of public places is within the complex (2.23). These issues are due to a number of factors, including the lack of optimal planning for the proper housing of Mehr housing and the small amount of effort required to provide these spaces after project implementation. The presence of polluting sources of audio and video, as well as lack of an efficient and mechanized sewage disposal system in the vicinity of Gorgan's agricultural areas are among the factors that increase the level of dissatisfaction in various environmental aspects. However, the problems of Mehr housing in Gorgan can be identified by the Mehr Housing Plans which are mostly on the outskirts of the city and lack of attention to the simultaneous construction of infrastructure and superstructure with the construction of residential units. There were also problems with some uses, such as educational, health, commercial, and insufficient attention to building structures and the lack of living spirit in these units.

Conclusion

Stability analysis of Mehr Housing Indicators shows that the stability indexes of Mehr Housing in Gorgan were in relative position with their units. The results showed that the residents are dissatisfied with the physical, environmental and socio-cultural characteristics of Mehr housing but in the economic aspect, they have expressed satisfaction with the proportion of housing prices with monthly household income. The overall numerical mean obtained from this study was less than desirable (3). Findings related to the physical dimension of Mehr housing showed that the architectural and urban and safety principles were not observed. Unusual use of materials on the exterior and interior of residential units, use of inappropriate materials to cover buildings and paintings instead of high quality materials such as stone, poor quality of materials used inside units, electricity inappropriate and non-standard killing, lack of proper heating and cooling equipment and inappropriate location without program, etc. Therefore, the complex is located on the outskirts of the city and lacks proper access to various uses. In the environmental aspect, such as the aforementioned dimensions of lack of green space, lack of easy access to leisure places, etc., have been other problems of Gorgan's Mehr housing. Based on the findings and the evaluations made in response to the purpose of the study, which was the evaluation and analysis of Mehr housing sustainability indicators with housing quality indicators, it can be

concluded that residential units In the study area, Mehr did not conform to the desirable (economic, socio-cultural, physical and environmental) indicators of housing, most of which were unstable in terms of physical dimensions, very poor quality of materials used in interior and exterior architecture. The exterior, especially the exterior and the dissatisfaction with the privacy of households, have been used because of the type of design and the type of materials used. Therefore, the Mehr housing in the study area has not been able to obtain housing sustainability indices in terms of quality housing.

According to the results of the study, some solutions to the problems of Mehr housing stability are presented: Improved access to public utilities such as taxi and bus services; Participation and attention of more urban entities, especially municipalities, to create urban services, green spaces and passages. Given the vast expanse of wasteland around the site of the Mehr Olive Housing site, it can provide some comfort to residents by converting these lands into green spaces.

Keywords: Housing Planning, Sustainable Development, Low-income Groups, Housing Mehr, Gorgan City.

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Analysis of the Pattern of Urban Smart Management, a New Way to Improve Urban Governance

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Extended abstract

Introduction

One of the most important issues in today's cities is the rapid growth of the population and, consequently, the rapid expansion of cities. The problems are resulted from the lack of an effective program and management, in response to these issues, concepts and new approaches for future developments. The most important approaches are including approaches, electronic city, digital city, creative city, smart city, and so on. Many researches have been in relation to electronic, virtual and digital cities and smart cities in the world and in Iran, but in relation to urban intelligence management component it has been less studied.

According to Castells, after industrial revolution and the second revolution, which is a science and technology revolution, the era of the emergence of a networked and emerging information society is driven by the spread of technology and the increasing use of information and technology in all economic and social spheres and its infiltration. Faced with the lives of citizens, cities and urban spaces with different structures, the urban life mediums have undergone fundamental changes. One of the strategies for achieving smart city in the context of sustainable development is to prioritize urban management intelligence.

According to Forester, ICT management (smart governance) is the core of smart city projects. What are the most important indicators for using intelligent management? How should the executive management model of intelligent be? How should the relationship between city management and citizens be? In this regard, after determining the indices and analyzing the situation of urban management in Iran, elite panel method and MicMac software are used to analyze the problem.

Methodology

In terms of purpose, this research is an applied and developmental research, and in terms of the nature of the data, it is a quantitative. Regarding the nature of the subject, the approach used in this research is descriptive-explanatory method. In fundamental research with exploratory nature, the use of a prediction method is not sufficient; a combination of expert panel methods (Delphi) and cross-sectional matrix analysis (Micmac) have been used for this purpose. In this research, we have also used library and field methods including text reading, scanning, using tables, interviewing, expert panel questionnaire and Micmac software.

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Results and discussion

Based on the direct effect matrix, the index of availability of software and hardware infrastructure in organizations has had the greatest impact on other factors. In addition to this factor, the creation of a database, the continued use of innovation in relevant organizations and institutions, the exchange of data and information between citizens - institutions and between institutions, participation of people in how to prepare, approve and implement urban plans, cooperation with technology leaders, the existence of force.

Based on this, it became clear that the existence of software and hardware infrastructure in the success of urban intelligent management is one of the key principles for achieving good urban governance. Also, the status of relations in the graph of influence indicates that the variables of designing and implementing spatial information databases, the availability of software and hardware infrastructure, and the continuity of innovation in organizations and institutions are the source of the most severe effects and increased their role in the system. The share of women's representatives in the councils, the level of political participation of citizens, and the degree of satisfaction with the transparency of the bureaucracy were also strongly influenced by other variables in the system. Therefore, it can be said that intelligent governance (governance) is defined as an approach "for Iranian cities to solve public problems through IT-based solutions based on multilateral partnership and through municipal institutions, especially the municipality."

Conclusion

According to the findings of the research, none of the indicators have strategic and strategic status. Therefore, there is no indicator that has a strong impact and severe impact on other indicators. But in the regions of two (effective), three (independent) and four (influential) indicators are scattered. It can be said that this dispersion will be stable. Given the political, economic, social conditions, the ruling cities of our country in the near future we will not see massive changes in the field of urban management. In the end, the type of city management relationship should be identified with citizens. The type of relationship is determined by the level of technology, social strategy, current management, and access to funding, given the various aspects of city management's relationship with citizen-type citizenship to conservative management. At this level, the relationship between roughly changing and fewer changes in organizations is needed in terms of structure. Citizens will help the city's management to be more responsive and effective. In fact, at this stage, the main responsibility of the city administration is the responsibility of urban management organizations. But citizens can influence their orientation and outcomes by applying their opinions.

Keyword: Urban Management, Intelligence, Urban Planning, Future Studies, Elites Panel.

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Spatial Analysis and Location of Urban Tourism Facility Using Fuzzy Logic (Case study: tourism residences in Isfahan city)

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Extended Abstract

Introduction

The tourism industry, with its unique characteristics, is considered a dynamic industry with a bright future. Investment in this industry is on the rise in all countries with tourist attractions. Nowadays, attracting tourists has become a growing competition among different entities in the tourism industry. In the tourism industry, travel comfort for tourists largely depends on the location of the hotels. Tourists have always regarded the position of hotels as one of the top features in satisfying tourist destinations. Many studies show that the location of hotels can significantly influence the decision making and choice of tourists regarding hotels. Over the past three decades, researchers have been paying more attention to the issue of locating hotels, and this is of great importance because it will satisfy tourists in the long run. Locating hotels requires identifying, evaluating, and ultimately selecting the most appropriate conditions. The number of tourists visiting and staying in a hotel, on the one hand, and the income of the hotels, on the other, depend directly on their location. The optimal location of hotels not only has the infrastructure and services of utilities but also around tourist attractions, such as historical sites, parks, recreational areas, and other tourist sites typically attractive to tourists, located. Isfahan is the third largest metropolitan area of Iran, in terms of optimal location and distribution of hotels and accommodation centers. It is faced with limitations and inadequacies such as inadequate number of hotels and accommodation centers, with the number of tourists arriving to this city. However, in recent years, the city of Isfahan has become the most important brand of the city with its high volume of historical attractions. Due to the location of Isfahan city with population centers, the opportunity of tourist opportunity (northern and southern half of the country) as well as the high volume of tourist entrance to the city, and the variety, and the large number of tourist attractions, the need for tourists' overnight stay is an inevitable necessity. Isfahan tourism resorts, in addition to a shortage of space, do not conform to the pattern of distribution of tourist attractions in the city, and the continuation of this pattern of distribution of tourist resorts, increases public costs, traffic, and air pollution. The time and the efficiency of the tourist centers are reduced, which both disturbs the stay of the guests and the lives of the citizens living in the city. In this study, the optimal spaces are identified by using the capabilities of spatial analysis systems and fuzzy logic in order to determine the location of tourist accommodation centers in Isfahan.

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Methodology

The research method of this study is descriptive-analytic. Theoretical foundations are based on documentary, library and field studies, and refer to relevant organizations. In this study, geographic information system, IDRISI software and fuzzy logic were used to locate suitable hotels construction sites in Isfahan.

Results and discussion

Analysis of spatial distribution of hotels in Isfahan: The distribution of hotels in the city of Isfahan is clustered.

Weight Line Combination Method: In the present study, the distance from the criteria used in ArcGIS software was transformed into Raster format. Then they converted to the ASCII format to enter the IDRISI software for standardization with fuzzy logic, and perform linear weighting.

Standardization of Layers, Using Fuzzy Logic: In this research, after the layers entered the IDRIS environment, a unit value for the layers was selected for standardization with fuzzy logic. The normal scale for fuzzy logic is between zeros to one or zero to 255, in this research, the zero-to-255 criterion is used, numbers closer to 255 show greater utility. After standardization of each of the criteria, the IDRISI software merged with the MCE menu and the WLC option, constraints maps and benchmark maps. The result of this combination is the final map, in which the proper locations for the construction of new hotels in Isfahan were identified.

Conclusion

The city of Isfahan has 57 hotels and 30 hostels, the statistics show that hotels in Isfahan are not enough for tourists, including tourists. In recent years, authorities in Isfahan have been struggling to resolve the problem by adopting laws and creating facilities. But, according to experts, these actions are not enough; because about 250,000 tourists arrived last year in Isfahan. In this study, suitable locations for the construction of new hotels were identified in Isfahan. Appropriate locations for the construction of new hotels around the Zayanderud River, adjacent to the recreational centers are including Golha gardens, garden Tajrobeh, garden Javan, Najvan and Sofe recreational complex, garden Parandegan, Garden Nour, Najvan Banovan garden, mountains Atashgah and Monar Jonban, and in parts of Isfahan's 3rd district, and in the vicinity of tourist attractions, the Masjed Jameh and bazar, and along with other required criteria. The result of the final combined map shows that more than 3,000 hectares of land in Isfahan have a favorable and very favorable area for the construction of tourist resorts. In the end, the areas with the ability to develop tourism resorts were prioritized by area: Priority 1: South East Isfahan Area with 830 hectares, Second Priority: Historic Area of Isfahan 700 hectare, Third Priority: Recreational Area, Najvan Tourism in Isfahan West, 350 hectares, and Priority 4 Area of Monar-jonban, and Atashgah, with an area of 150 hectares. The results of this study help urban tourism researchers to identify the desirable areas of tourism resorts in order to reduce the weaknesses and problems of these areas. The type of method of this research helps researchers, in spatial analysis and location of tourist resorts, to identify in the first step the patterns of dispersion of these phenomena that are shaped by forms and processes, and in step Subsequent models, according to the ideas and ideas that govern urban planning, are to be distributed, reformed, or consolidated.

Keywords: Locating, Urban tourism, Hotel, Spatial Analysis, Fuzzy Logic.

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The zoning of defenseless spaces and prone areas of crime in the city of Ardabil

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Extended abstract

Introduction

Some places provide greater opportunity for crime occurrence, because of their particular physical and spatial structure, as well as the social and economic characteristics of its inhabitants. Conversely, some locations impede crime opportunities, which forces criminals to look for the least risky and most appropriate opportunity and location conditions to commit their criminal activity. Among the areas with the most opportunity and potential for criminalization, one can mention indefensible urban spaces that are susceptible to crime due to their specific characteristics. Such spaces are one of the major challenges of urban societies which have drawn the attention of many experts in the process of their analysis and interpretation. Global experience shows that we are not only in right path towards better spacing, but are also destroying built spaces. For this reason, there are many anonymous and unfamiliar urban spaces that can have many negative consequences, which in turn can increase violence and fear on one hand and cause insecurity on the other. The occurrence of crime and the formation of crime centers in certain areas of the city can cause citizens irreparable financial, physical and psychological harm. Therefore, it is essential to identify these spaces seems necessary in order to optimally manage them and prevent crime from occurring and creating unsafe spaces.

Methodology

The present study seeks to identify indefensible urban spaces using an applied descriptive-analytical method and by utilizing different techniques such as ANP and VIKOR. The data and information required for the present study were collected by both field and library methods. The library method collects the required information by referring to citation databases, reference libraries and databases of various organizations. In the field method, in order to identify indefensible urban areas, field observation (filling in checklists) and recording the geographical location of the site were performed using field observation method. The statistical population of the present study included Ardebil neighborhoods whose status was investigated in terms of defensibility in 2018. The main components examined in the present study were: • Use of appropriate equipment to monitor space, extent of police and people access to space, extent of space surveillance by residents and pedestrians and vitality, utility and physical-social quality of space. In the data analysis phase, VIKOR grading method was used for zoning neighborhoods

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in terms of defensible urban spaces, ANP method was used for weighting the research criteria for final overlay of the criterion layers, and fuzzy methods and functions available in the GIS software environment were used to standardize criterion maps.

Results and discussion

According to the outputs of the VIKOR model, it can be said that in the northwest and parts of the western and eastern neighborhoods of Ardabil city, the calculated VIKOR index shows higher values than other neighborhoods. Whereas in the VIKOR model high values indicate undesirable status and low values indicate the desirability of the area in terms of the considered indices, these areas are also considered as areas with very low susceptibility to delinquent behavior. Addition to the aforementioned neighborhoods, other neighborhoods have the least defensible space and are susceptible to crime and are favorable in terms of defensibility. The results obtained from the analysis of urban texture form showed that the majority of indefensible urban spaces or the areas less defensible than other spaces were localized in organic tissues (especially organic tissues related to suburbanization in recent decades) and semi-regular tissues. Neighborhoods like Jin Kandi (Iran Abad), Yahya Abad, Kazem Abad, Mirashraf, Salman Abad, Rasoul Akram, Karim Abad, Nezam Abad, Vahdat, Panah Abad, Kheir Abad, Oruj Abad, Araz Ali, and Golmoghan, Molla yousef and Molla Bashi villages with less defensibility, have an organic and semi-regular tissue. Therefore, it can be noted that inattention to urban planning standards and disregarding them in constructions can lead to the formation of neighborhoods that, due to their characteristics, will become a scene of criminal behavior and put citizens' safety in danger. Therefore, urban managers are always expected to pay particular attention to the requirements of urban planning and environmental design principles in order to reduce or prevent the formation of defenseless urban spaces in order to avoid potential risks in future planning years.

Conclusion

The results of the present study indicate that ignoring a particular neighborhood within the urban area and disregarding an appropriate planning for these neighborhoods to guide their physical development, although can save costs in the short run, But in the long run will inflict a lot of damage on the city and the citizens. An example is evident in the north, northwest and west areas of Ardebil, as well as the villages integrated into the city. So instead of fencing around the city and rejecting new people, we should renew our thinking and take a holistic step in planning and directing their physical development and empowering and educating the residents living in these neighborhoods. It is in these conditions that we can achieve the goal of urban planning that is to provide a healthy living environment along with peace of mind. It is hoped that urban planning managers of Ardebil, using the results of the present study, will take an effective step towards the desirability of urban spaces in Ardabil and increase their capability in terms of safety equipment utilization, desirable accessibility and monitoring and physical-social quality of urban spaces.

Keywords: zoning, indefensible urban spaces, Ardabil city.

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Geographical Analysis of Psychological Barriers to Not Using of Public Transport in Ahvaz Metropolis

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Extended Abstract

Introduction

Urban psychology seems to be a new subject, but findings shows that George Simmel published an essay, titled "the Metropolis and Mental Life" 100 years ago. He lectured it in Berlin in 1903, raising this question whether there is a relationship between their individual living environment and their mental state. Ten years later, the answer to this question led to the formation of a science called urban psychology. The history of this science can be summarized in a few sentences; Simmel put it this way 100 years ago, reminding us that urban design requires attention to human beings and their psychological needs and should not be limited to aesthetics alone. Therefore, no use of public transport apart from infrastructure issues such as fleet depletion, fleet shortages, economic issues, socio-cultural barriers, environmental issues and the management weaknesses of psychological barriers are also effective in preventing public transport use because psychological barriers are also one of the barriers to the development of public transport. Understanding citizens' psychological factors via public transport can have important implications for urban transport policies as well as its promotion and management. The urban public transport system in all Iranian cities has also a number of psychological problems hindering not using. This issue varies in different cities due to the cultural, social and environmental diversity of Iranian cities and citizens' psychological characteristics.

Methodology

The present study is applied-theoretical in terms of objectives and descriptive-analytical and survey in terms of research methods. The research data were collected from documentary, library, survey, and interviewing with people and urban planning experts. The research population consisted of citizens of eight districts of Ahvaz Metropolis. The questionnaires were distributed among 130 participants selected via stratified sampling technique according to the weight ratio of each district. In order to rank the psychological barriers in each of the different transport modes, the Expert Questionnaire was distributed among 15 psychologists in Ahvaz. The hypothesis testing method was based on the quantitative methods used for the first hypothesis via the paired T-test. Then, each of these barriers were ranked in different public transport modes of Ahvaz using ARAS decision making method to weight them. Moreover, the kriging interpolation method was employed for zoning these barriers in Ahvaz with ArcGIS software. After interpolating all the obstacles using the Reclassify tool, as a subset of Spatial

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Analyst Tools in the ArcToolbox the maps were prepared in a five-point spectrum (very low, low, medium, high and very high) and finally overlaid using the Weighted Sum function.

Results and discussion

In this paper, the psychological barriers to not using four public transport modes were measured and prioritized. This prioritization is significant because the relevant organizations are not capable of removing these barriers in one place and they need to be addressed in a cross-sectional method at different points of time, so they need to be prioritized. These barriers were then zoned across the city. The final zoning results showed that the psychological barriers to not using public transport in Zone 1 are very high because more than 85% of the area is in this range. Zone 2 has the least psychological barriers to not using public transportation because most of the area is in the low and very low range. Zone 3 also has the most psychological barriers to public transport use following Zone 1, as more than 90% of that is in the very high range and less than 5% is in the very low range. In addition, about 15% of Zone 4 is in the mid-range and other zones are in the high range. The analysis in Zone 5 also indicated that the medium, high, and low ranges can divide it into relatively equal parts. Overlapping psychological barriers to not using public transport in Zone 6 shows that the medium range is its lowest area, the difference is also seen in zone 7, because the high and medium range have the highest and the lowest area respectively. Make it up. Finally, Zone 8 is only in the medium range, with only three small zones comprising 10% of the total area, but 90% of it is in the high range.

Conclusion

This study proved that in not using public transport apart from infrastructure issues such as fleet burnout, fleet shortage, economic issues, socio-cultural barriers, environmental issues and management weaknesses, psychological barriers are also effective on not using public transport. Thus, psychological barriers are also one group of barriers to the public transport development, and these (psychological) barriers are the missing link of urban planning and management. These barriers also vary from place to place with respect to the natural environment, the human environment, and the psychological processes. This research is privileged compared with other studies in terms of accurate, scientific and comprehensive identification, ranking, zoning and their application in measuring psychological barriers to not using four public transport modes in the city. So far, little research has been conducted in this area. This study is one of the first steps taken in Iran and the first in Ahvaz. Establishing a department consisting of the Psychology and Urban Planning Team in municipalities to collect and measure the psychological barriers to not using public transport, establish a database to collect citizens' psychological information when using public transport, and train variable public transport in policymakers' training programs are the research recommended guidelines.

Keywords: geographical analysis, psychological Barriers, public transport, ARAS, Ahvaz Metropolis.

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Efficiency Evaluation of SAR-derived Indices in Urban Impervious Surfaces Extraction using Full Polarimetric Image

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Extended abstract

Introduction

Impervious surfaces are the surfaces on which water cannot infiltrate. Detection of urban impervious surfaces is of great importance because the extension of these surfaces is an indicator of built-up area expansion and population growth. In recent years, remote sensing images have been widely used for land cover /land use studies. The efficiency of optical images has been widely explored in impervious surface delineation in urban areas. However, detection of impervious surface is not a simple task. Impervious surfaces vary in size, shape and material. Similar spectral responses among impervious surfaces and other types of land cover make the separation of impervious surfaces and other classes challenging.

Synthetic Aperture Radar (SAR) images are getting more and more attention in urban areas mapping. However, most of the studies concentrated on fusion of optical and SAR images or single polarized data. Full polarimetric SAR images offer more capabilities in separation of different land cover classes because, in full polarimetric mode, all characteristics of object's backscattering will be perceived. SAR indices are computed based on data of two or more polarimetric bands. Therefore, they contain more information of land cover classes. Although the calculation and interpretation of SAR indices is simple, they are not fully understood in impervious surface detection in an urban environment. For impervious surface extraction, different classifiers have been used such as maximum likelihood, support vector machine and neural network. Among them, non-parametric classifiers often reach higher classification accuracies. Therefore, in this study support vector machine (SVM) algorithm has been applied.

Since the efficiency of full polarimetric SAR has not been evaluated for urban impervious surfaces, this study focused on the extraction of these surfaces in the complex urban area by the L-band full polarimetric SAR image. Most of the previous studies focused on optical images as well as the fusion of optical and SAR images. In cloudy and rainy weather, optical images are not available. In such a situation, the use of optical image and fusion of optical and SAR images are not possible. Therefore, we have studied the independent use of SAR images and extracted SAR indices.

Methodology

Tehran has been chosen as the study area since it has a complex structure. Tehran is the capital of Iran and is accounted as the economic and commercial center of Iran. Different impervious surfaces are found in this city. Impervious surfaces include residential areas, commercial areas, highways and parking lots. These surfaces are very diverse in terms of size and materials. As an

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example, narrow streets, irregular streets as well as wide and regular wide highways all exist in this city. Impervious surfaces may be perceived as dark and bright impervious surfaces in SAR images. Residential area and the area covered by new cement have high backscattering values and appear bright in SAR image. Streets and old cement have lower backscattering values and appear darker in this image. In addition to the impervious surface, vegetation, water body and bare land are also found in Tehran.

One Advanced Land Observing Satellite / Phased Array type L-band Synthetic Aperture Radar (ALOS/PALSAR) scene acquired on 23 April 2009 which encompassed Tehran has been selected. This scene has four polarimetric bands; HH, HV, VH and VV. The image has been processed and DN values have been converted to sigma nought in decibel. In order to reduce the topographic effect, radiometric terrain correction has been applied. Enhance Lee filter has been applied to minimize the speckle effect.

Ratio index, average index, difference index, normalized difference index and NLI index have been computed by the different combination of two polarimetric bands. It is proved that SAR indices are effective in separating different land cover classes. For classification purpose, support vector machine algorithm has been applied. SVM is a non-parametric classifier that has been applied extensively in SAR applications. It has no previous assumption of the statistical distribution of data. Training samples have been chosen on high spatial and historical google earth image. Approximately 500 pixels have been selected for each land cover class. The classification was followed by five scenarios; in the first scenario, only four polarimetric bands were used. In the second scenario, bands HH-HV and driven indices were classified. In the third scenario, bands HV-VV and their SAR indices were considered. Co-polarized bands (HH and VV) and SAR indices calculated based on these two bands were interred in the fourth scenario. Four polarimetric bands and all extracted indices were inserted in the fifth scenario. For accuracy assessment, circa 300 pixels were selected independently for each class as validation samples on high spatial and historical google earth image. By comparing classification results with validation samples confusion matrices were constructed. Based on the confusion matrix, overall accuracy, Kappa coefficient, producer and user accuracies were computed.

Results and discussion

The overall classification accuracy of the first scenario was 92.67% and the kappa coefficient was 0.9. This shows full polarimetric SAR images are capable of delineating impervious surfaces in the complex urban area. Band combination of HH-HV and driven indices yield overall accuracy and kappa coefficient, 84.23% and 0.78, respectively. The third scenario reached to 90.30% for classification accuracy and 0.86 for the kappa coefficient. The highest classification accuracy from two polarimetric bands is achieved by this scenario. These results could be justified by the presence of vertical polarization in both bands. Diverse vertical structures in the urban texture could be better distinguished by vertical polarization. The combination of co-polarized bands and their indices has 79.16% classification accuracy and 0.7 kappa coefficient. The lowest accuracy belongs to this scenario. The absence of cross-polarized bands may cause such relatively poor results. Depolarization is dominant in a well-developed urban area and co-polarized bands are not capable to capture depolarization. The last scenario reached the highest classification accuracy; 95.59% for overall accuracy and 0.96 for the kappa coefficient. The comparison between the first and last scenario shows the importance of SAR indices.

Conclusion

Three main conclusions can be driven from the findings of this study. First, full polarimetric bands are capable of urban impervious surface extraction. This is of great importance, especially in the absence of optical images. Second, dual polarimetric SAR images and their driven indices can extract impervious surface efficiently. Since most of SAR sensors work in dual mode, dual polarimetric SAR images have high availability. This study shows by the help of SAR indices, dual polarimetric can be used alternatively. And the last conclusion implies the importance of

vertical polarization. In case, vertical polarization exists in both polarimetric bands, high classification accuracy will be achieved.

Keywords: Urban impervious surface, full polarimetric SAR, SAR indices, Support vector machine, ALOS/PALSAR.

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Exploring the formation of cyberparks as a smart urban public open space (Case study: the initiative cyberpark projects)

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Extended abstract

Introduction

The rapid growth of information and communication technology, mobile connectivity and social media has led to the emergence of new needs, patterns and relationships. They are driving forces in smartification and extremely influencing the way that people experience time and space. Despite the challenges of information and communication technologies, they also provide users with many opportunities through the provision of various digital services and improve business and enhance interactions between people, spaces and infrastructure.

Cyber parks are a kind of smart public open spaces that focusing on Technological systems, human and environmental issues. In this context, real-world space is combined with intelligent infrastructure through the co-creation. Consecrating both virtual systems and real systems in nature, Cyberpark can establish a balance between digital and human life. Co-creation is strategic solutions to engage stakeholders through social interactions and synergies in different aspects of human life. CyberPark explains how digital media can become an attraction to bring people outdoors getting them engaged in forms of learning and attracting them to lead an active healthy life style in POS. This Cyber-physical system allows users to exchange information, share knowledge, experiences, and transfer technology and innovation as drivers of future growth.

Methodology

The aim of this research is to compare and analyze the pioneering cyberpark projects in order to extract their goals, models and processes. Given the new and sophisticated concept of cyberpark and the emergence of cyberpark projects in the world, this research attempts to use the features of qualitative content analysis and systematically research in order to document the cyberpark pioneering projects, their goals and methods of cyberpark implementation. In the research method, three key examples of the pioneering cyberpark project and their elements have systematically reviewed by comparatively analyzing from different approaches.

Results and discussion

The pattern and function of public open spaces, stakeholders and ICTs along with the implementation methods and goals of cyberpark development have been explored in the case studies.

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The first pioneer Cyberpark is C3Places project. This project has been implemented in three locations in the form of living labs, the first one focuses on teenagers in Lisbon, the second one works on old citizens in Vilnius and the third one emphasizes on green stakeholders within open public in Ghent. The main aim of these labs is to explore the attributes of Cyberparks, analyze the related information and observe social media.

The components of the sub-project in Lisbon are open public spaces (park, green spaces, garden, square and sidewalk), stakeholders (teenagers, 13-17) and information and communication technology-ICT (mobile and web applications, living labs in open public spaces and dynamic system models). In this way, the elements of the sub-project in Vilnius are including open public spaces (living labs, the urban zones), stakeholders (inhabitants, owners of cultural-commercial buildings and municipality) and information and communication technology (mobile and web applications, social media). Finally, the modules of the sub-project in Ghent are open public spaces (Mega space, the complex of park and square), stakeholders (green users) and information and communication technology (mobile and web applications).

The second pioneer Cyberpark is the project by the name of digital interactions in university campus. This project was executed in 2019 in three areas of Europe continent with different cultures (Cork University in Ireland, University of Thessaly in Greece, and University of Warsaw in Poland). The major goal of this project is to investigate interactions among students within the universities in order to evaluate the social behavior models regarding the usage of information technology and communication. The main components of this project are open public spaces (cultural-educational open public spaces), stakeholders (students, visitors and clerks) and information and communication technology (lab tops, personal desktop computers, tablets and smart mobile phones).

The third pioneer Cyberpark is User-generated content (UGC) project. The chief objective of this project is to focus on content of social digital media (data and information generated, collected and shared in the forms of different files such as audio, video, visual and written by stakeholders specifically users) within open public spaces in Barcelona, Spain in order to identify new social manners and behaviors. The main components of this project are open public spaces (city center, riverside, seashore and cultural exhibition square in Barcelona), stakeholders (local users, visitors and tourists) and information and communication (twitter social network and way app).

Conclusion

The most important achievement of cyberpark as a social networking context is to encourage people to participate and interact in various community affairs in order to create quality, vibrant and intelligent urban environments and thus promote sense of place, social interaction and vitality in public open spaces. The findings of this research indicate that pioneering Cyberpark projects focus on both technological and human issues. They try to improve the quality of environment and enhance the level of modern human's life so as to achieve the goals of sustainable development.

Keywords: Cyberpark projects, public open spaces, stakeholders, information and communication technologies, smart.

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