Measuring and Evaluating Factors Affecting the Realization of the Electronic City and the Spatial Analysis Digital Gap in the Medium Cities (Case Study: Yasouj)

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**Extended Abstract**

1. **Introduction**

The city of Yasouj is one of the middle cities in the country which due to the lack of appropriate urban infrastructure has suffered problems such as traffic, noise, air pollution, lack of transparency, administrative bureaucracy, lack of parking, narrow streets, the location of passenger terminals inside and outside of the city, and so on. Moreover, it seems that ICT facilities and services in the city of Yasouj are not equally distributed among the districts, as some districts, in this case, seem to be more appropriate than others. Therefore, the present study seeks to evaluate and measure the level of electronic infrastructure in Yasouj, the impact and improvement of the quality of citizens' life, and the improvement of the performance of Yasouj municipality in the use of information communication technology infrastructure in Yasouj.

2. **Review of Literature**

Now, the implementation of e-city's infrastructures and its realization at the cities’ level is one of the essential and significant aspects of sustainable urban development in contemporary urbanization. So, the consequences such as information and communication technology can play a more effective role in managing problems such as traffic, air pollution, and the increasing urban sustainable development. Also, decreasing the digital division between regional and urban areas, is one of the main goals of e-city, as the existence of a digital divide, is one of the important factors creating inequality in the present age.

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3. Method
Regarding the nature of the study, the descriptive-analytic method has been applied. The required data were obtained through a survey which were distributed among the citizens and experts. The data and information were analyzed through AMOS and SPSS as well as using GRA model. The statistical population of the research is the total population of Yasuj (114100 people) (Iranian Center of Statistics, 2011) among which the sample size of 320 people was estimated using Cochran's formula. The basis of the theoretical model is derived from the three variables of ICT at work, ICT at home, and the electronic municipality. These variables affect the satisfaction of ICT services and will lead to the adoption of ICT manifestations in the city of Yasuj.

4. Results and Discussion
The results of the analysis show that the mean of effective indicators in implementing the electronic city in Yasuj is less than 3. This amount indicates the poor status of ICT services and facilities in the electronic city of Yasuj. In this regard, using structural equation modeling the effectiveness of ICT indicators and the infrastructures of the e-city was investigated based on the six dimensions of approaching ICT services at the e-city at work and residential, having e-literacy, having the acceptance of ICT manifestations, optimizing the satisfaction of ICT services, the infrastructure of the e-city and the e-municipality. Besides, the measurement model shows that the factor loadings of all the obvious variables of the study were at an acceptable level. Therefore, the validity of the variables of the research has been verified. The variables related to the six variables have well been measured by the questionnaire items. Also, the questionnaire items have well been established and evaluated based on the dimensions of research. The structural analysis of the final model shows that the three variables of ICT at the residency, ICT in the workplace, and ICT technologies of e-city exacerbate the satisfaction of the ICT status very well. In other words, there is a significant relationship between the three variables with the satisfaction variable of communication and information technologies of e-city.

5. Conclusion
Finally, after analyzing the obtained data and information, it can be concluded that among the four areas of Yasuj, district 2 (with a coefficient of 0.962) has a better status than other areas in terms of ICT indicators due to the extreme concentration of the administrative centers, the economic centers, the banks, the financial and the credit institutions, the offices and the other internet services, including Internet cafes, etc. District 4 of the city has the highest digital division among other areas due to the residence of people with the low income and economic status, the distance to the city, and so on (with a coefficient of 0.410). Generally, district 2 with a coefficient of 0.962, district 1 with a coefficient of 0.490, district 3 with a coefficient of 0.460, and the fourth district with a coefficient of 0.410 have the highest and lowest access and possession to the ICT indicators of the e-city. The investigation of the fitting status of the final model shows the factors affecting the
realization of the e-city with the proposed criteria. The fitted model has been valid and accurate and has been able to explain the factors affecting the realization of the city. Eventually, the structural analysis of the final model shows that the three main indicators including ICT in residence, ICT at work, and ICT technologies in e-city have a directly positive impact on increasing the satisfaction of citizens from ICT indicators with 0.23, 0.46, and 0.29 betas, respectively. In other words, there is a significant relationship between these three variables and the satisfaction variable of communication and information technologies of the e-city.

**Keywords:** Electronic City, Yasuj City, ICT, Structural equations

**References (in Persian)**


References (In English)


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