

## **Examining the Effective Dimensions on Khorasan Science and Technology Park in Transforming Mashhad into a City of Knowledge**

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### **Extended Abstract**

#### **1. Introduction**

To follow the process of globalization and the mitigation of its resulting threats in metropolitan city of Mashhad, changing the attitude of the urban planning and management systems into planning based on creative and innovative forces and shifting towards creating a city of knowledge can be effective and efficient tools. As a result, given the lack of required infrastructure to create and encourage innovation and advancement of technology in developing countries as well as the shortcoming in development of cities into “cities of knowledge”, this study seeks to take the effective dimensions into account and study them among beneficiaries to examine the states of said aspects.

#### **2. Review of Literature and Theoretical Framework**

Knowledge-based urban development refers to the development of cities based on creative and innovative forces along with the formal and sometimes informal networks created among them (Martinez, 2006). The main purpose of science and technology parks is to increase wealth in the society by encouraging and promoting the culture of innovation and increasing competitive powers among companies that are located there (Davaayi, 2003). A new concept has

emerged which is called “city of knowledge” in order to achieve knowledge-based development in cities and make use of its advantages. In such a city, constant creating, sharing, assessing, renewing, and updating of knowledge is encouraged and reinforced (Ergazakis, Metaxiotis, & Psarras, 2004). Khaled Youssef Mohamed (2013) concluded that the development of cities of knowledge depends on urban, spatial, and architectural potentials which are different from urban potentials that rely on production. He believes that these potentials include primary infrastructures, knowledge-based institutions such as science parks, technological infrastructures of information and communications, cultural and creative infrastructures, and urban facilities.

#### **3. Method**

The present inquiry is an applied study conducted using the descriptive method along with surveys and questionnaires. Total population of the study included the beneficiaries of the science and technology park. These beneficiaries are active in a subset of science and Technology Park itself or organizations that receive services from science and Technology Park.

#### **4. Results and Discussion**

The reliability of models was evaluated using Cronbach’s alpha. If the coefficient value is

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between 0.6 and 0.8, it is acceptable and if it is above 0.8, it shows high reliability; in other words, it would be better if the value is closer to 1 (Hafeznia, 2008). All variables had high and acceptable reliability. Given the examinations and calculations with respect to evaluating validity and reliability of the models in this study, measurement model fitness was also confirmed. In general, the path of policymaking effectiveness is not significant. According to the path coefficients presented, the highest path coefficients in the organizational dimension were respectively related to the factors of activity in technological service center of the park in line with macro objectives, the extent of relation between the park and other research institutions in the city, and editing, planning, and implementing the executive policies and purpose of the park in line with national macro objectives.

## 5. Conclusion

Analysis of the obtained results showed that the organizational dimension is highly important.

As mentioned in other studies (Chen & Choi, 2004), the organizational factors with high degree of impact and importance included editing, planning, and implementing the executive policies and purposes in line with national macro objectives and explaining the purposes of the park for managers and those involved in the science and technology park. The performance of Khorasan Science and Technology Park can facilitate a significant step towards knowledge-based development of Mashhad by influencing the creation of a constructive competitive environment among those involved in the industry, transforming science into industrial added value, and attracting scholars and experts to Mashhad. Therefore, it is necessary to improve knowledge-based development of Mashhad city by expanding the required conditions for the activities of science and Technology Park in line with advancing its purposes.

**Keywords:** Globalization, Knowledge-based Urban Development, City of Knowledge, Science and Technology Park

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