

## The Research on Connotation and Measurement of Technology innovation capability of city

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At present, the topic of technology innovation capability of city is very popular. There are many research papers about innovation capability in the world, but what is innovation capability? Different people have different viewpoints, having failed to reach a unified view. One important reason is that there have no core connotations of innovation ability. In the paper, Firstly, we give a new definition of the core content of the technology innovation capability of city, to propose five core elements of architecture of innovative capacity, to establish the indicator system of innovative capacity; Secondly, we establish two types of indicators of the technology innovation capability of city, which are the total amount indicators and structure indicators. Finally, according to a new measurement index system, using the statistical methods such as factor analysis and cluster analysis, we have made comparative study of technology innovation capability of city in 15 cities such as Beijing, Shanghai, Guangzhou, Shenzhen, Hangzhou, Nanjing, Tianjin, Chengdu and so on, exploring the gaps and problems of technology innovation capability of city, finding the new road of technology innovation capability of city, building an innovation-oriented country. The study results show that: On the terms of a single city, Beijing and Shanghai at the forefront of innovation capability, is a leader Group. On the terms of the four regions, the eastern region of technology innovation capability of city is significantly better than the others. On the terms of five dimensions, the institutional framework and the social framework are more important than others.

**Keywords :** Technology innovation capability of city, Cluster analysis, factor analysis, Comparative Study