

Critical Success Factors for Sustainable Smart City Project in India

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Abstract : Development of a Smart City would depend upon the development of its infrastructure in a smart way. Primarily based on the ideology of the fourth industrial revolution a Smart City project should have Smart governance, smart health care, smart building, smart transportation, smart mobility, smart energy, smart technology and smart citizen. Considering the Indian scenario of current state of cities in India, it has become very essential to decide the specific parameters which would govern the development of a Smart City project. It has been observed that there are significant parameters beyond Information and Communication Technology (ICT), which govern the development of a Smart City project. This paper is an attempt to identify the Critical Success Factors (CSF) which are significantly responsible for the development of a Smart City project in Western India. Responses to questionnaire survey were analyzed on basis of Likert scale. They were further critically evaluated with help of Factor Comparison Method (FCM) and Analytical Hierarchy Process (AHP). The project authorities need to incorporate Building Information Modeling (BIM) to make the smart city project more collaborative. To make the project more sustainable, use of flyash in the concrete used, reduced usage of cement and steel, use of alternate fuels like biodiesel is recommended.

Keywords : analytical hierarchical process, building information modeling, critical success factors, factor comparison method

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