

The role of urban informatics in monitoring the physical deterioration the urban environment

Abstract:

The twenty-first century is witnessing rapid growth population in urban areas; this growth needs intelligent urban planning and management. The field of urban informatics is one of the new and important specialties to organize and analyze the urban system at all levels and fields. ICT works with interactive community participation to guide and manage the urban environment to serve, provide the residents with safety and security. The paper presents a new vision in terms of employing the field of urban informatics in mapping and monitoring the urban deterioration of the built environment in general and buildings in particular. The urban informatics system is still taking its first steps to manage and serve the city's facilities (transportation, communication, air pollution, etc.). The built environment and the deterioration through time and other factors are still far from this area. The aim of this paper is to identify the urban information field, the situations and types of urban deterioration and move to capturing urban deterioration indicators (main and secondary), which can be measured in urban informatics. This paper recommends the adoption of such a mechanism in managing and controlling the deterioration that contributes to reduction of material and human losses, saving time and money away from traditional methods, and the possibility of employing them in times of crisis and disasters in the urban environment.