

Renewable Energy Applications In Heritage Spaces With Digital Solutions

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Abstract:

In our live issues, we are always looking for new things. This is indicated, for example, in our dealings with technological devices. But when it is related to smart applications, our aspirations towards innovation are renewed; as our Arab culture still refuses to venture into this field. As a result, the forms of urban spaces in our Arab world have remained limited to the traditional forms, while the world has opened up to other forms characterized by cheap costs, good quality, rapid delivery and rationalization of energy consumption.

This research represents a brief overview of the current progress in using smart applications in urban spaces, which is considered as a new and rapidly developing area. This area is based on the broader concepts of the term "response", which identifies smart applications, shows how they affect the comfort of users, rationalize the energy consumption and renew the energy in urban space, through an applied analysis of these smart applications in this areas of (Kaaba - Medina). This is to reach the development of the system and strategy of the region in a way that leads to the possibility of controlling the rates of energy consumption and reduction by using environmentally innovative architectural processors, which does not affect the heritage of Saudi Arabia, but confirms its historical features and contributes to achieve &develop the mental image that has been drawn in the conscience of visitors.

One of the most important findings of the research is the extent to which the use of smart applications and sustainable interactive designs of urban spaces affect the energy consumption to provide convenience for users. The most important obstacles that affect the uncommon use of smart applications at the local level are also identified, in addition to some recommendations designed to use this sophisticated type of smart applications in the local environment while maintaining the Saudi heritage of the Kingdom Vision of 2030.

Key Words:

Contemporary Architecture – Sustainability- Heritage Identity.