

3D Printing Technology in Housing Projects Construction

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Abstract : Realistically, 3-D printing as a technology has not yet reached the required maturity level to handle construction housing projects for citizens on a country scale. However, potentially, it has all of the required elements for addressing this issue. There are two main high-level elements of this technology that need to be capitalized on in order for the technology to reach its full potential, technical and logistical. This paper aims to cover how 3-D printing can be a viable technical solution for housing projects and describe the impact of 3-D printing technical features on the logistical aspects of completing a housing project. Additionally, a perspective about 3-D printing in Saudi Arabia will be presented in order to give the reader an idea of where the kingdom stands in the deployment of this technology. Finally, a glimpse will be given regarding the potential utilization of this technology for space applications.

Keywords : large-scale 3-D printing, additive manufacturing, D- shape, contour crafting

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