

# BIM & E-PROCUREMENT SYSTEM

## A REVIEW ARTICLE

Kamyar Fatemifar \*, Mojtaba Azizi

1. MS. Kamyar Fatemifar, Department of Project Management and Construction, Tarbiat Modares University, Nasr Bridge, Jalale Ale Ahmad Hwy, Tehran, Iran, k.fatemifar@modares.ac.ir
2. Dr. Mojtaba Aziz, Department of Project Management and Construction, Tarbiat Modares University, Nasr Bridge, Jalale Ale Ahmad Hwy, Tehran, Iran, m.azizi@modares.ac.ir

### Abstract (Times New Roman 14pt in Bold)

This article is a review Article for BIM and E-procurement Implementation studies, herein five relevant studies are discussed with their Main foci and finding explained, our main goal is to identify research scope in this area and find the potential Gaps &/or limitations for future research. In addition, the side purpose of this study is to understand the most related practices and cases while finding proper methods, questions, challenges & requirements for Implementation of a proper cross-organizational e-procurement system using BIM capabilities in Iran, Similar Practices & Case Studies were found and explained & it is concluded that an empirical research would be the best approach for future studies.

**Key words:** BIM, Project Management, BIM Management, BIM Implementation, Procurement, BIM Procurement, E-Procurement.

### 1. Introduction

In the last few years, as an answer to the increasing need to reduce waste and improve performance, several innovative technologies emerged in the construction sector. New information and communication technologies (ICT) have challenged traditional working methods and stimulated change and modernization, especially in areas of e-business and building information modelling (BIM)[1]

Considering these emerging issues, we propose an innovative approach to e-procurement in construction that uses BIM to support e-procurement processes. The hypothesis behind the proposed framework is that BIM-based solutions may reduce the negative effects of the fragmentation of the construction project lifecycle through the integration and integrity of information across the procurement processes in a project's life-cycle. This will imply new strategic approaches to the procurement cycle and support more accurate decisions. The result is an integrated instrument connected to a rich knowledge base capable of advanced operations and able to strengthen transaction relationships and collaboration throughout the supply chain[1].