

## Abstract

The aim of this study is to give light to technological awareness in traditional project process of construction industry of Hyderabad and the BIM implemented firms in Karachi and Hyderabad (Pakistan). The sample size for traditional project process is 25 firms and 9 firms of BIM implemented projects, to check project problems faced and benefits achieved by applying BIM. The methodology is based on “manifest content analysis”, which carries out results by semi structured interviews. The secondary data is collected from NBAD, PCATP, & PEC registered firms. The result for traditional project process shows that most of the residential projects face clash detection, communication, team collaboration, communication, quality management, scheduling and hiring. In contrast to this, the BIM implemented firms leading professionals are 55.6% are observed to be architects, 11 % are contractors, 77.8 % are engineers (MEP) and 44 % are construction engineers -which shows that leading professionals are architects and engineers (MEP & construction). Research shows that BIM is mostly implemented on commercial projects than residential projects which assures that it is widely applied on large projects.

Benefits of BIM implementation were evaluated by descriptive analysis by categorizing benefits into three parts i-e: business, project, delivery phase benefits. It was observed that highly ranked project benefit i-e: scheduling, resolves one of traditional project process problem. likewise, quality management, clash detection and communications are highly ranked project benefits accompanying other additional project benefits.

It was concluded that, benefits that are achieved by applying BIM into projects and the problems which were gathered from traditional project process were approximately resolved.

**Keywords:** *BIM (building information modelling), project management, PMBOK, project qualities, project scheduling and costing.*