Abstract

The South African construction industry has not seen a spike in the implementation and use of Building Information Modelling (BIM) compared to other countries which include amongst others the USA, the UK and Hong Kong. This raises concerns regarding South Africa’s competitive advantage and role in the global construction industry.

This research assessed and investigated factors that impacts on the use of BIM in the South African construction industry, using a mixed design approach of both quantitative and qualitative design methods, by which primary data was conducted through questionnaires distributed via the SACPCMP to cover the whole country and secondary data by means of semi-structured interviews with registered construction professionals around the Gauteng Province.

Whilst the responses received did not meet the required sample size, the results indicate that BIM is currently mostly used in the planning and design stages of construction projects in South Africa. Costs and the availability of skills are the two main factors identified that have a high impact on BIM use in South Africa. For South Africa to move towards full BIM implementation, it is necessary that the skills unavailability is addressed including government support as well as client influence on projects. Standards and regulations need to be put in place as currently there is no regulation or legislation for BIM use within the South African construction industry.