Competencies and the Penetration Status of Building Information Modelling Among Built Environment Professionals in Nigeria

Emmanuel Olorunfemi, Luqman Oyewobi (Nigeria), Oludolapo Olanrewaju (New Zealand) and Roseline Olorunfemi (Nigeria)

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SUMMARY

Literatures have proven a substantial increase in the awareness of Building Information Modelling (BIM) among built environment professionals in developing countries like Nigeria. However, the shortage of BIM competent professionals remains a significant challenge to the full utilization of this innovative construction process. These competencies deficiencies are in no small measure the catalyst for reduced productivity and the obsoleteness of recent construction graduates upon their emergence in the innovative construction world. This necessitate the need to assess the competencies of built environment professionals in the use of Building information modelling (BIM) with a view of suggesting strategies for improvement. The study mainly adopted an electronic questionnaire survey approach, which was targeted at built environment professionals in Abuja, Nigeria. Percentages, mean item score, relative importance index, and gap analysis were employed for the analysis of data. The study found out that built environment professionals in Abuja have a competency gap of 39.20% with an average possession of Administrative and Managerial BIM competencies and a high deficiency in Technical, Operational and Implementation competencies which are most required. Vocational training is currently most adopted for bridging these gaps. More so, the most effective strategies to improve the competency level of built environment professionals in the use of BIM are established to be: Attending BIM seminars, workshops, Trade shows, and Event; Enrolling for BIM software training and Incorporation of BIM into the Academic curriculum of higher institutions. This research will be needful in providing construction stakeholders as well as built environment educators with essential knowledge of the core competencies required as they develop and implement various BIM content in their domain.

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