

# **Development of New Payment Method for Industrialised Building System (IBS) Project in Malaysian Construction Industry Using Analytic Hierarchy Process (AHP)**

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## **Abstract**

Construction industry has the multiplier effect cross the section in the country such as manufacturing, services and financial sector. The adoption of Industrialised Building System (IBS) has been introduced since 2008 with the main objective to reduce the dependency of foreign worker. The advantages of IBS in the construction industry are high quality, shorter construction period, less wastage at construction site and reduce the overall cost. However, the current procurement process for IBS project payment method is not suitable with IBS project progress which different from the traditional project payment method. Thus, this study will propose the new payment method for IBS project using the Analytic Hierarchy Process (AHP) through the ranking of the development of new payment method's criteria. There are four key criteria with sixteen sub-criteria in the development of new payment method which are Initial Cost, Material, Drawing and Design Matters and Contract Document. This study is expected to help the IBS player to sustain in the construction sector especially for Small and Medium Enterprise (SME).

## **Keywords**

Payment, procurement, IBS, AHP and construction.

## **Biographies**

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**Abdul Talib Bon** is a professor of Production and Operations Management in the Faculty of Technology Management and Business at the Universiti Tun Hussein Onn Malaysia since 1999. He has a PhD in Computer Science, which he obtained from the Universite de La Rochelle, France in the year 2008. His doctoral thesis was on topic Process Quality Improvement on Beltline Moulding Manufacturing. He studied Business Administration in the Universiti Kebangsaan Malaysia for which he was awarded the MBA in the year 1998. He's bachelor degree and diploma in Mechanical Engineering which his obtained from the Universiti Teknologi Malaysia. He received his postgraduate certificate in Mechatronics and Robotics from Carlisle, United Kingdom in 1997. He had published more 150 International Proceedings and International Journals and 8 books. He is a member of MSORSM, IIF, IEOM, IIE, INFORMS, TAM and MIM.

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