Development of property valuation model for tax purposes using ordinary least square method

ABSTRACT

In Malaysia, based on the Local Authorities Act 1976 (Act 171), all properties are required to be valued every five years to determine new rate for tax purposes. The revaluation or valuation of the property has been carried out manually, which involved exhaustive, time consuming and costly processes as it involves large area and many properties. However, there has been a growing trend in developing a property valuation model which is capable of estimating property values of large quantities in a short time with little manpower needed and low in cost. Such an approach could ease the burden of the local authorities and produce up-to-date property rate. This study demonstrates the development of property valuation model using the Ordinary Least Squares (OLS) method to estimate residential property value for the area under Kota Kinabalu City Hall (DBKK) jurisdiction. The effectiveness of the OLS would be examined by referring to the accuracy of the model and the significant of the model's variables, conducted through a series of model tests and compared the models predicted value with the present value. The findings shows that the OLS capable to produce a good property valuation model and could easily visualize in GIS map thus improve the management of property tax in local authority. Moreover, the local authority could effectively manage the resources, and therefore, be able to provide good services to the society.