## e- Decision Support System: Buy or Rent (e-DSSBR) MyRumahKira

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## **ABSTRACT**

Each individual must have a dream to buy a house but many could not afford to do so due to the relatively low income among Malaysians. There are several influencing factors that affect owning a house in Malaysia like household income, financial commitment, price of house, housing loan, house purchase upfront, housing loan tenure, and monthly loan payment. Buying a house is indeed a critical decision and a major step in one's life. However, without good planning and fundamental knowledge on housing loan makes it difficult for a person to make the right decision. Therefore, it is imperative to establish a mechanism that can assist consumers especially the lowincome group to decide on whether they can afford to own a house and eligible for a housing loan based on Debt Service Ratio (DSR). If a person cannot afford to own a house, alternatives like renting a house or planning on savings are essential in preparing for the future. The main objective of this study is to develop a mobile app that is user-friendly which is known as MyRumahKira to fill in the existing gap. This is achieved by combining the existing various online calculators and applications that are available in the market. To develop this mobile application of MyRumahKira, Mobile Apps Development Life Cycle (MADLC) and the Waterfall Model are employed because they are apt with the objectives of this study. This developed model involves seven phases which are Identification, Design, Development, Prototype, Test-Use, Setting and Maintenance. At the end of this study, the MyRumahKira mobile application that is user-friendly is developed and it can be used anywhere in assisting consumers to calculate their eligibility for housing loan and simultaneously, helps consumers to decide on whether to buy or to rent a house. There are eleven main factors involved in calculating one's eligibility in getting a housing loan which are household income, household spending, monthly commitment, price of house, loan interest, DSR, Mortgage Reducing Term Assurance (MRTA). If a person is still not eligible for a housing loan but has planned to buy a house in future, MyRumahKira prepares a savings plan based on the price of the house that the person wishes to buy, income, savings target, savings tenure and amount of savings based on 30% of the person's income. Consumers are also allowed to update and alter any information in the system based on their suitability and needs. This developed mobile app will be owned fully by the Valuation and Property Services Department (JPPH) Malaysia. It is an instrumental catalyst for data collection of property owning in Malaysia. Empirical data on consumers background and purchasers' profiles, demand trends and longterm asset supply in Malaysia are also can be obtained from this app. This userfriendly and informative app can benefit the stakeholders of JPPH, government agencies, private agencies and individuals who are related to housing and property in Malaysia.