INTEGRATED CONSUMER DECISION MAKING PROCESS MODEL FOR HOUSE PURCHASING DECISIONS: A CASE STUDY OF FIRST-TIME POTENTIAL HOMEBUYERS IN KLANG VALLEY

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ABSTRACT

Making a large monetary decisions like house purchasing can be a daunting one, especially to first-time buyers where mostly are young starters who just started their working career and hardly earned a good pay. Home purchasing in most country are considered as the highest investment in life and hence create higher risk especially financial risk and risk of going bankruptcy. There are many attempts made in previous studies on how decision aids can be used to assist homebuyers with purchasing decisions. However, there is little evidence to examine first-time homebuyers’ purchasing decision and its intervention in Malaysia although the issues do exist. Therefore, this research intends to fill the gap that currently exists in the literature by exploring the potential of implementing a systematically designed computerized decision aid among first-time homebuyers in Malaysia, particularly in the area of Klang Valley. To accomplish that, three specific objectives are formulated: (i) to identify the needs and preferences of first time homebuyers, (ii) to adapt the researcher’s doctoral work known as Computerized Personal Decision Aid (ComPDA) model into the Consumer Decision Making Process (CDMP) model in developing a computerized decision aid (e.g. recommendation system) for house purchasing, and (iii) to evaluate the proposed model through elite interviews. Design Science Research methodology has been utilized in conducting the whole process of the study which comprising four main phases: (i) awareness of problem, (ii) suggestion and development of solution, (iii) evaluation, and (iv) conclusion. Integrating the ComPDA model with the CDMP model is a matter of embedding technology assistance in consumer decision-making process. The revised model is known as Computerised Decision Aid for House Purchasing (CDA4HP) and has been reviewed by two practitioners in the real estate area through elite interview setting. A CDA4HP model-driven prototype is also developed to facilitate the elite interview sessions. Findings from the elite interviews have been constructive and it offers more room for improvement as far as the CDA4HP model is concerned. All findings demonstrate that the CDA4HP model exhibits useful development for such application development as well as providing theoretical and practical contributions to the area of study.
# TABLE OF CONTENTS

## CHAPTER 1 Introduction ................................................................................. 6
  1.0 Overview ................................................................................................... 6
  1.1 Motivation & Problem Statement ................................................................. 6
  1.2 Research Questions And Objectives ............................................................... 7
  1.3 Research Scope ........................................................................................... 8
  1.4 Research Outcomes ..................................................................................... 8
  1.5 Research Significant ................................................................................... 9
  1.6 Summary .................................................................................................... 9

## CHAPTER 2 Literature Review ...................................................................... 10
  2.0 Introduction ................................................................................................ 10
  2.1 Housing Attributes ..................................................................................... 11
    2.1.1 Locational Attributes .......................................................................... 12
    2.1.2 Neighbourhood Attributes .................................................................. 13
    2.1.3 Structural Attributes .......................................................................... 16
    2.1.4 Implications of Housing Attributes ..................................................... 17
  2.2 House Affordability .................................................................................... 18
    2.2.1 Effect of Housing Incentives and Schemes .......................................... 24
    2.2.2 Implications of House Affordability to This Study ............................... 26
  2.3 Recommendation System in House Purchasing Decisions ....................... 27
    2.3.1 Collaborative recommendation .............................................................. 29
    2.3.2 Content-based recommendation ............................................................ 30
    2.3.3 Knowledge-based recommendation system ........................................... 30
    2.3.4 Current Medium for House Searching ................................................... 33
    2.3.5 Implications of Recommendation Systems to This Study .................. 36
  2.4 Consumer Decision Making Process Model ............................................... 37
    2.4.1 Problem / Need Recognition .................................................................. 38
    2.4.2 Information Searching .......................................................................... 39
    2.4.3 Pre-purchase Evaluation of Alternatives .............................................. 40
    2.4.4 Purchase Decision ................................................................................ 41
    2.4.5 Consumption ........................................................................................ 43
    2.4.6 Post-purchase Evaluation ..................................................................... 43
    2.4.7 Implications of CDMP Model to This Study ......................................... 44
  2.5 The Computerized Personal Decision Aid (ComPDA) Model ..................... 44
    2.5.1 Implications of ComPDA Model to This Study .................................... 45
  2.6 Summary .................................................................................................. 46

## CHAPTER 3 Research Methodology ............................................................... 47
  3.0 Overview .................................................................................................. 47
  3.1 Phase 1: Awareness of Problem ................................................................. 47
    3.1.2 Demographic Profiles of Respondents .................................................. 48
    3.1.3 Analysis of Housing Needs and Preferences ......................................... 51
  3.2 Phase 2: Suggestion and Development ....................................................... 55
  3.3 Phase 3: Evaluation ................................................................................. 56
  3.4 Phase 4: Conclusion ............................................................................... 56
  3.5 Summary .................................................................................................. 56

## CHAPTER 4 First-time Homebuyers’ Needs & Preferences: Analysis & Discussion ................................................................. 57
4.0 Overview................................................................. 57
4.1 Survey Instrument.................................................. 57
4.2 Sample and Data Collection...................................... 58
4.3 Analyses and Results.............................................. 59
4.3.1 Demographic Profile of Respondents........................ 59
4.3.2 Factor Analysis.................................................. 62
4.4 Discussion......................................................... 64
4.4.1 Locational Attributes........................................... 64
4.4.2 Structural Attributes.......................................... 65
4.4.3 Neighborhood Attributes..................................... 65
4.4.4 Social Cultural Attributes.................................... 65
4.5 Summary and Implication of Study............................. 66

CHAPTER 5 Computerized Decision Aid for House Purchasing
(CDA4HP) Model.................................................................. 67
5.0 Overview....................................................................... 67
5.1 Adapting ComPDA Model into CDMAP Model.................. 67
5.2 Revising the ComPDA Model for the Adaptation................. 68
5.3 Evaluation of the Revised ComPDA Model......................... 71
5.3.1 Elite Interview.................................................... 72
5.3.2 Instrument and Procedures..................................... 73
5.3.3 Findings............................................................ 74
A. Questionnaire.......................................................... 74
B. Semi-structured Interview............................................ 75
5.4 Summary..................................................................... 81

CHAPTER 6 Conclusion.......................................................... 83
6.0 Overview..................................................................... 83
6.1 Research Question 1................................................... 83
6.2 Research Question 2................................................... 84
6.3 Research Question 3................................................... 85
6.4 Limitations and Recommendations................................. 85
6.4.1 The Conceptual Model (CDA4HP)............................... 85
6.4.2 The CDA4HP model-driven prototype......................... 86
REFERENCES .................................................................... 87
APPENDIX A (survey instrument for preliminary study)........ 94
APPENDIX C (The materials used in Elite Interview)................ 116
APPENDIX D (Sample of official invitation to industry players).... 122
CHAPTER 1

Introduction

1.0 Overview

A decent home is a basic need for every human. Owning a home has always been a great dream to everyone, it will secure one’s life and give protection to an individual and also the family. However, making large monetary decisions like house purchasing can be a daunting one, especially to first-time buyers where mostly are young starters who just started their working career and hardly earned a good pay. For majority, home-purchasing decisions are relatively infrequent, but when the time comes, a good decision is highly anticipated. When making this decision, homebuyers may be influenced by variety of sources (property professionals, family members, friends and colleagues, newspaper advertising, styling of property) and more often than not, emotions play a large role in the decision making process. Above all, this daunting process would lead to major frustration and anxiety.

1.1 Motivation & Problem Statement

Home purchasing in most country are considered as the highest investment in life and hence create higher risk especially financial risk and risk of going bankruptcy (Glindro et.al, 2008). There are many attempts made in previous studies on how decision techniques can be used to assist homebuyers with their purchasing decisions (Sun et al., 2013; Lin & Lin, 2013; Wang, 2013; Zhou, 2013; Chiu, Chuang, & Lin, 2013). However, there is little evidence to examine first-time homebuyers’ purchasing decision in Malaysian context although the issues do exist (Tan, 2012). Therefore, this research intends to fill the gap that currently exists in the literature by exploring the potential of implementing a systematically designed computerized decision aid among first-time homebuyers in Malaysia, particularly in the area of Klang Valley.

MacLennan (2002) emphasized that economists have characterized housing as a bundle of attributes. Some of these attributes are derived from the
internal characteristics of the house unit itself such as the rooms available, whilst examples of external are location, accessibility to utilities, services and facilities. In the UK, it was found that very little research had been carried out to understand on consumers needs in regards to housing preferences (Mills, 2000). This has led to a gap between consumers’ expectations and developers’ perceptions, which resulted in customer dissatisfaction (Swartz and Brown, 1989).

In addition, this research also aimed at examining the Consumer Decision Making Process (CDMP) model (Blackwell et al., 2006) and finding potential of embedding researcher’s doctorate work, Computerized Personal Decision Aid (ComPDA) model (Siti Mahfuzah, 2011), in attempt to coordinate the process of house purchasing decision for first-time buyers. This is justified by the fact that most people fail to bring the right information into their conscious awareness at the right time (Bazerman & Chugh, 2006) and their decision process seems affected by incomplete information and bounded rationality.

1.2 Research Questions And Objectives

In order to conduct the study, the following research questions were put forward:

1. What are the needs are preferences of first time homebuyers in purchasing a house?
2. How can the ComPDA model be adapted into the CDMP model?
3. How to evaluate the proposed model?

All these research questions will be answered through the following research objectives:

1. To identify the needs and preferences of first time homebuyers
2. To adapt the ComPDA model into the CDMP model in developing a computerized decision aid (e.g. recommendation system) for house purchasing
3. To evaluate the proposed model through expert reviews.
1.3 Research Scope

Scope of this study considers two main aspects, type of homebuyer and location of research. The homebuyers in this research context are those who have the potential to purchase housing property for the first time. As for the location of research, this study focuses on the residential property in specific area of Klang Valley (Greater KL).

This study also makes a distinction between the needs and preferences of first time homebuyers as part of their decision-making criteria. A need is defined a homebuyer's desire for a property's specific benefit, whether that be functional or emotional. A preference is the desire for products or services that are not necessary, but which homebuyer's wish for.

In order to determine first-time buyers' home-owning needs and preferences, a self-administered survey was conducted. Data was collected using stratified sampling. Main sampling criteria are as follow: (1) the respondent is Malaysian and residing in Klang Valley, (2) the respondent has not ever purchased a house, and (3) the respondent's household incomes are between the range of RM3,000 to RM10,000 per month.

In order to identify the location of research, researchers have consulted the executive officers of Lembaga Perumahan dan Hartanah Selangor, to confirm on locations with arising supply of affordable residential properties around the state. Hence, Dengkil is selected as the research area based on the current residential development and its up-and-coming status. Samples of data for project/townships in the area of Dengkil will be gathered from the local authorities.

1.4 Research Outcomes

The expected outcomes of this study are as follow:

1. The decision criteria (which is translated from the needs and preferences survey) for a computerized decision aid in house purchasing
2. Analysis of first-time homebuyer profiles and behaviors
3. An integrated design model of CDMP and ComPDA for house purchasing decisions
4. The elite reviews of the model
5. A prototype of a computerized decision aid for house purchasing

1.5 Research Significant

Among potential benefits of the research are as follow:
1. Understanding of first-time homebuyer behavior in Malaysia, which provide consequential information to the government and policy makers
2. The above also have impact to housing market in Malaysia
3. Understanding of housing needs and preferences in house purchasing decisions, which add to the literatures of related research area
4. A potentially beneficial guideline to develop a computerized decision aid that can augment the end result of property developer's marketing strategy.

1.6 Summary

This chapter provides deliberations on issues that underlie the foundation of this study, the statement of the research problem, research objectives and scope of research, and also the foreseen benefits from the research outcomes.
CHAPTER 2
Literature Review

2.0 Introduction

The need for housing in Malaysia is forecasted to remarkably increase due to rapid growth in the country’s population, interstate migration, changing economic status of citizens, changes in tastes, and destruction of existing housing stock. In 2020, the population is estimated to reach 32.4 million. While the need for poor and low cost housing will continue, the emphasis of supply will be shifted to delivering vibrant housing that is commensurate with the country’s status (Olanrewaju, et al. 2016).

The residential housing market has traditionally been recognized as among the major cornerstones underpinning broad economies, and within this market is the important group of first-time buyers (Reed & Mills, 2007). Tan (2008) posited that motivation is the foremost reason in the explanation of home purchasing. This position is inferred from Vroom (1964) who postulated that the behaviors of individuals depends on the kind of outcome that has been expected, thus, individuals are motivated when they come across favorable combinations of what they deem important to them and what they expect as reward for their efforts (Vroom, 1964 as cited in Tan, 2008).

Due to the complex nature of real estate properties, there are several distinctive sets of characteristics that influence its value irrespective of where it is situated (Sirmans et al., 2005). Several studies (Tse & Love, 2000; Adegoke, 2014) have all found that the value of a property is influenced by several independent attributes and due to the heterogeneous nature of properties and that different stakeholders conceive the impact of all of these attributes on the values of properties differently. Wang and Li (2006) acknowledged the different conceptions by different stakeholders which includes the buyers when they mentioned that “buying a house is a multi-elements exercise, involving tenure options, housing types, neighborhood,
location and many more”, ending on the note that housing preferences will be determined by some of the aforementioned attributes (Hurtubia et al., 2010).

2.1 Housing Attributes

Housing attributes have been shown in many literatures to vary from intrinsic housing attributes such as interior living spaces (Cupchik et al., 2003), extrinsic attributes such as exterior design and exterior space (Bhatti & Church, 2004) to neighborhood and locational indicators such as environmental qualities (Yusuf & Resosudarmo, 2009; Tan, 2011). Chin and Chau (2003) further classified property attributes into three, namely, locational, structural, as well as neighbourhood factors. This classification is in tangent with other scholarly views such as Pozo (2009), Ajide & Alabi (2010), and Babawale et al. (2012).

There are very few researches on real estate industry in Malaysia (Eze & Lim, 2013). Three reasons are cited for this: partly due to data limitations, real estate being a subjective area because of the volatility of the industry, and prior research heavily emphasized property prices and not giving due attention to other influences on consumers’ decision making such as interest rates, inflation, mortgage rates, real income, etc.

Despite this, the residential sector of the property market has matured, with more educated and sophisticated home buyers tending to become selective and demanding, requiring prime location, attractive designs and features and quality finishes. Reciprocating to the preferences of home buyers, developers have responded by becoming more creative and by providing contemporary designs and features that are equipped with attractive landscapes and facilities (Mohd Thas Thaker & Sakaran, 2016).

This review will explore those housing attributes that are preferred by homebuyers from locational attributes to neighborhood attributes to structural attributes. This will be followed by sections on affordability of homebuyers, explanation of recommender systems, and lastly with an explanation of the customer decision making model.
2.1.1 Locational Attributes

Location in the context of housing is defined as the specific placement of a house, which affects housing choices and varied its choices from urban to suburban to rural. He further posited that a home is part of a neighbourhood, thus, should be viewed in the community setting and should reflect the character of that area because homes are expected to fit their surroundings. The impact of location in choosing a residential home has been found to not just be significant of its own self but greatly influences house prices (Aluko, 2011).

Grissom and Diaz (1991) classified location into three levels: the first being the immediate surroundings as well as the internal space planning of the actual site; the second being the relationship of the actual site to its immediate surroundings, and lastly, the entire urban structure along with the interrelationships of the community's land use pattern. However, in other sources such as Des Rosiers et al. (2000) however, location is divided into proximity attributes and census (which is also known as neighbourhood) attributes. Proximity attributes are associated with the distances to objects, such as highway entrance, high schools, universities or colleges and regional shopping centers while census attributes are associated with proportions of adults with a university degree, proportion of tenants, proportion of dwellings in buildings of five stories and more, proportion of dwellings in buildings of stories and more, etc.

These classifications illustrate that there are several locational attributes of housing that they are characterized with such as distance to the workplace, schools, retailing outlets and public transportation stations – all of which have been found to be significant considerations for house buying. To emphasize this, Kauko (2007) showed that a strategic location is of great significance to determine the success or failure of the housing development project. According to Clark et al. (2006), distance to school is significantly relevant for households with children when deciding the location for a house. Likewise, distance to retailing outlets could be one of main considerations for house buyers as retailing is one of the most important routines