

Potential approaches on translating expatriates consumption behaviour of spending categories into spatial implication through Second Homes Programmes

M J Khan¹, S H Misnan¹ and H N Ismail¹

¹ Department of Urban and Regional Planning, Faculty of Built Environment and Surveying, Universiti Teknologi Malaysia (UTM), 81310 Johor, Malaysia

Corresponding author's email: jamsyeer@gmail.com

Abstract. Malaysia My Second Home (MM2H) programme is an international residency scheme that allows the expatriates to live in Malaysia on a long stay visa up to 10 years. In the past 10 years, the programme generated about RM17 billion through receipts and spending amounts by the programme's participants. Due to their rights to own properties in the nation, their consumption behavior could spill out to the immediate business areas and gives value-added to surroundings. Thus, this paper aims to highlight the approaches on examining consumption behaviour of MM2H participants. Firstly, this paper reviewed previous researches and methods on analysing consumption behaviour, which later tabulated into spending categories. Afterwards, this paper clarified on chosen methods to translate these categories into spatial mapping, including data collection techniques. Subsequently, the spending categories are vary of 14 distinctive categories. The expenditure pattern is measured by taking into account the spending amount and spending location for each categories. From that, the categories are weighted according to its contribution, and the implication onto spatial locality context are evaluated through weighted spatial mapping analysis. This paper provides methodology on translating consumption behaviour, in relation of understanding economic impacts at local surrounding context by foreign bodies.

1. Introduction

Malaysia My Second Home (MM2H) is an international migration programme that allows the expatriates/ foreigners to stay up to 10 years in Malaysia. This programme has started back in year 2002 (formerly known as Silver Hair Programme in 1987), introduced by the government of Malaysia through the Ministry of Tourism and Culture (MOTAC). MM2H programme is one of the initiative made by the government to attract the foreigners worldwide to live in Malaysia as part of tourism, as well as a way to contribute to the nation's economy.

In addition, Malaysia is placed in top 5 world's best place to retire [1]. Despite of its focus on retirement purposes, the expatriates could also venture in property investment through this programme, as this programme allows them to purchase homes in the nation. In order for the foreigners to participate in MM2H programme, they are obliged to put deposit or open a fixed deposit account of an amount of \$75,000 (RM300,000) in any local banks in Malaysia, as shown in Figure 1.



Content from this work may be used under the terms of the [Creative Commons Attribution 3.0 licence](https://creativecommons.org/licenses/by/3.0/). Any further distribution of this work must maintain attribution to the author(s) and the title of the work, journal citation and DOI.

With that, after a year of application, they have the opportunities to withdraw from the deposit up to \$40,000 (RM150,000) for the purposes viz. purchase of houses, medical expenses and children education [2, 3].

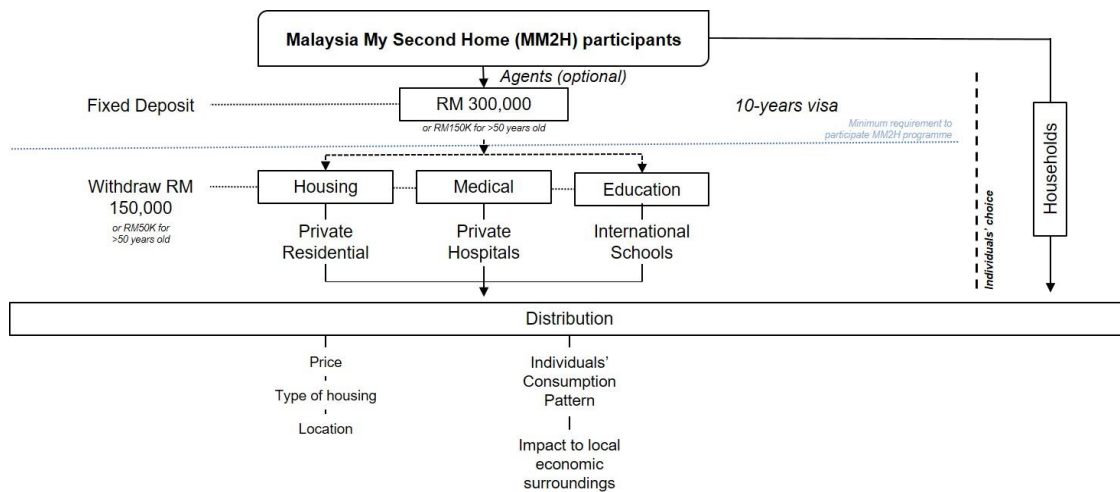


Figure 1. Malaysia My Second Home (MM2H) programme framework.

Past researches have studied on international migration programmes by looking on the contribution of the programme to the economy of the nation in the bigger scope, hence the Foreign Direct Investment (FDI) and Foreign Real Estate Investment (FREI). However, study on the contribution of this kind of programme into the context of local surrounding economy is still lacking. This could be assessed through the contribution or direct involvement of the individuals to the local surrounding economy through their consumption behaviour. Hence, it brings up the enquiry on the spending pattern and location of these expatriates. It surely gives value-added and offers benefits from the programme to local surrounding businesses, which later would impact on spatial land uses changes. To support, due to their rights to own properties in the nation, with the backing of surrounding facilities around their neighbourhood, their consumption behaviour could spill out onto immediate business areas. The concept framework for this paper is shown as in Figure 2. Thus, this paper aims to discuss and highlight the approaches on examining consumption behaviour of MM2H participants by looking into the spending categories and methods of analysing these behaviour into spatial context.

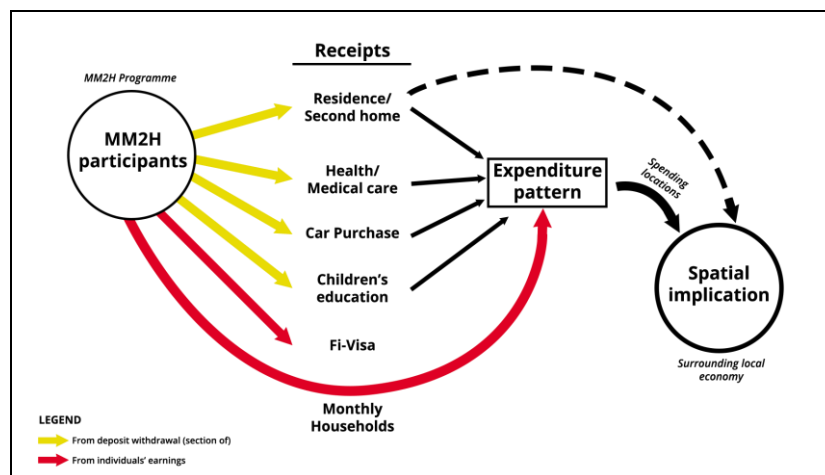


Figure 2. Conceptual framework of expenditure spillover from MM2H programme (participants).

2. Malaysia My Second Home (MM2H) programme review

2.1. *Second homes, property purchases in Malaysia by MM2H participants*

The ministry kept the data of property purchases by MM2H participants for the past 10 years, from the year 2007 till 2018, based on the withdrawal performed by the participants from the deposit. This totalled up to about 5,000 units of properties, represent RM 5.38 billion in value, which covered different types of properties/ homes, e.g. condominium, apartment, bungalow and terrace. From this, it can be inferred that most MM2H participants preferred to purchase condominium types of properties (2,550 units) than other types of properties. In only last year, year 2018, 383 units have been purchased by the MM2H participants that shows that it is still relevant to own houses in the nation, rather than being tenants, where in the same time, could help in solving oversupply of houses and boosting the high-end property segment in Malaysia [4].

Table 1. Property purchases by MM2H participants (by state, year 2007 to 2018) [2].

No.	State	2007-2017	2018	Total	Share (%)
1	Kuala Lumpur	2,226	151	2,377	47.50
2	Johor	798	164	962	17.00
3	Selangor	680	22	702	14.50
4	Pulau Pinang	599	22	621	12.70
5	Melaka	117	4	121	2.62
6	Negeri Sembilan	73	10	83	1.45
7	Perak	71	5	76	1.51
8	Sabah	48	0	48	1.10
9	Putrajaya	31	1	32	0.69
10	Kedah	25	1	26	0.55
11	Pahang	24	3	27	0.48
12	Sarawak	2	0	2	0.05
13	Perlis, Kelantan, Terengganu	0	0	0	0
TOTAL NO. OF UNITS		4,693	383	5,076	100

As anticipated, based on table 1, most MM2H participants chose to live and purchase houses in Kuala Lumpur, representing 47.5% of total property purchased, followed by Johor, Selangor and Pulau Pinang. To add, Economic Planning Unit (EPU) has aligned the requirement for the purchase of property (residential unit) in Malaysia by foreign interests in terms of prices, and it varies on different states in the nation [5]. For Kuala Lumpur for instance, the minimum price of property is RM 1 million, whereas in Selangor for Zone 1 and 2 is RM 2 million. Hence, the capability for MM2H participants to purchase properties are based on the location and state where the residence located.

2.2. *Economic contribution by MM2H participants*

With total number of participants from year 2007 to 2018, of 32,419 participants, total overall estimated economic contribution from total receipt is around RM 17 billion. This comes from receipts of fi-visa, fixed deposit, property purchase, car purchase and monthly household, as shown in table 2. What this paper most concerned is on the monthly household receipts by the participants, which takes up to RM 4 billion, merely comes from the individuals spending pattern, living expenditure. It is based on the estimated amount spent by MM2H participants, RM5,000 and RM10,000 for individual and family respectively. This is why it is needed to study the consumption behaviour in detail by every participants involved in this programme.

Last year only, in year 2018, estimated of RM 150 million was generated from the spending of participants through monthly household receipts. The amount of spending per month are vary by every individuals or families, differ by their households location, number of family members, their needs, etc. Therefore, the standard or estimated value spent per month, which are RM5,000 (individual) and

RM10,000 (family) are not absolute in this case. The categories of expenditure may also be different by each participants based on their needs and preference, as explained in section 3.1.

Table 2. Overall estimated economic contribution by MM2H participants [2].

Overall Estimated Economic Contribution						
(With 32,419 participants from year 2007 to September 2018)						
Year	Fi-Visa (RM mil)	Fixed Deposit (RM mil)	Property Purchase (RM mil)	Monthly Household (RM mil)	Car Purchase (RM mil)	Total (RMmillion)
2007-2012	20.66	2,418.00	1,647.79	1,930.33	78.16	6,094.93
2013	7.75	828.60	434.03	579.33	39.17	1,888.88
2014	9.80	714.75	740.72	332.56	7.47	1,805.29
2015	7.18	493.95	746.16	263.77	24.14	1,535.20
2016	8.25	782.10	673.96	343.57	14.92	1,822.80
2017	13.15	1,489.05	625.28	472.17	10.27	2,609.92
2018	16.80	521.65	513.39	149.79	-	1,201.63
TOTAL	83.57	7,248.10	5,381.33	4,071.52	174.12	16,958.94

3. Methodology

3.1. Expenditure/ Consumption pattern categories

To examine the contributions of foreigners, second homers or specifically, MM2H participants to local surrounding economy, it is very important to look into the categories of expenditure that MM2H participants would spend their money at. There is no vast studies that focus yet on second homers' spending pattern, in this case, MM2H participants are somehow very unique in a way that they are actually representing more than one traits/ backgrounds. Besides representing as participants, they are also in the same time are expatriates (elites), tourists (visitors), permanent residents (long-stay residents) and retirees (pensioners) – as one of criteria to participate in the programme.

Thus, the categories of consumptions shown in table 3, totalled of 14 distinctive categories are based on past studies of expenditure and spending pattern by tourists and permanent residents, including the spending pattern by retirees. Essentially, there are more than the stated, however these categories are the products of multiple merging of similar categories, which later are chosen for those related to studies for MM2H programme. This aspects would cover all the traits of the participants instead of only focusing on one –expatriates, that includes expenditure studies [6-10].

Every categories does not amount equally, as one category may be valued or weighted more or less than other category, that much depends on individuals' choices. In assumptions, retirees may enjoy health services in the country, where they spend more on medical care than leisure category for instance. Though, tourists and expatriates may spend more on transportation and leisure to appreciate their long-stay, as well as their children's education expenses, compared to medical care for young adults.

Nevertheless, in most studies, stated that housing category holds the biggest contribution in total spending, including mortgage and maintenance, where this category are weighted more than others and undoubtedly vital in every individuals' living experience. After understanding the categories and elements under each particular categories, it is easier to understand their expenditure pattern specifically, and later would be useful to pinpoint their spending/ consumption pattern to be translated onto spatial/ physical in the next stage.

Table 3. Categories of expenditure pattern from previous studies.

Categories	Descriptions	Sources
Goods and services	Household cleaning and supplies, household appliances, computer, pest control	AIST and ACFS (2016), Kim et al. (2011), DeJuan and Seater (1999)
Food/ meals	Purchase at grocery and specialty stores, meals in restaurants, cafes	AIST and ACFS (2016), Lee et al. (2014), Kim et al. (2011), DeJuan and Seater (1999), Ketkar and Cho (1977)
Transportation	Expenditure on purchasing, maintaining (fuel, services) and operation new and old vehicles (monthly mortgage/loan) including vehicle insurance and public transportation fees (if there are)	AIST and ACFS (2016), Lee et al. (2014), Kim et al. (2011), DeJuan and Seater (1999), Ketkar and Cho (1977)
Clothing	Purchase on apparels, clothes, watches, footwear and jewellery, including laundry	AIST and ACFS (2016), Lee et al. (2014), DeJuan and Seater (1999), Ketkar and Cho (1977)
Utilities	All expenditures on electricity, water, gas, internet services, telecommunication services (mobile phone bills)	AIST and ACFS (2016), Lee et al. (2014), DeJuan and Seater (1999), Ketkar and Cho (1977)
Medical care	Health insurance payments, medical services, medical supplies	AIST and ACFS (2016), Lee et al. (2014), DeJuan and Seater (1999), Ketkar and Cho (1977)
Personal care	Personal care appliances and services (haircuts)	AIST and ACFS (2016), Lee et al. (2014), Ketkar and Cho (1977)
Housing/ Shelter	Rent, mortgage, insurance, taxes	AIST and ACFS (2016), Lee et al. (2014), Kim et al. (2011), Ketkar and Cho (1977)
Home maintenance/ equipment	Expenditure on maintaining houses (painting, plumbing), household furnishings, appliances	AIST and ACFS (2016), Lee et al. (2014), Ketkar and Cho (1977)
Education	Expenditure on education at all institutions of learning, children's education (monthly enrolment fees)	AIST and ACFS (2016), Ketkar and Cho (1977)
Recreation/ Entertainment/ Leisure	All expenditure undertaking pleasure trips and purchasing entertainments, sports, watching movies (cinemas), toys, camera and travel trip expenditure	AIST and ACFS (2016), Lee et al. (2014), Kim et al. (2011), Ketkar and Cho (1977)
Reading	Subscription to newspapers, magazines and purchases of books	Lee et al. (2014), Ketkar and Cho (1977)
Contributions	Cash contributions, personal insurance and pensions	Lee et al. (2014)
Alcohol and tobacco	All expenditure on alcoholic beverages, cigarettes, cigars and other tobacco products	AIST and ACFS (2016), Ketkar and Cho (1977)

3.2. Spending location/ movement behaviour

MM2H programme is much based on combination between tourism and planning study, as it is also one of the background for the whole programme structure. The most dominant modern study to model tourist movements in a local destination is by Lew A and McKercher B [11], where it gives the model that describes the spatial movement patterns of tourists within a destination – which become the basis for most empirical studies of tourist movements. Advantages of this model are on its comprehensions of micro and macro level of destination, including cities, towns or regional areas, or even provinces and countries – regardless of their size.

In the article, it discussed the destination and variables impacting intradestination movement, that would shape the path that tourist follows. So, this research takes its attempt to modify its destination

characteristics to fit with this study, in relation of MM2H programme and expenditure pattern, as follows;

Modified destination characteristics:

- Trip origins/ accommodation locations – residence/ second home
- Trip destinations/ attraction location – business area/ spending location
- Transportation accessibility – availability of vast road network

Nonetheless, from the same study, it provides the territorial models and linear path models of tourist behaviour in local destinations where this research can be applied from, which are type T4: Unrestricted Destination-wide movement and type P3b: Radiating Hub respectively, as shown in Figure 3. Type T4 is suitable to be assigned to the participants as it is for those who have high level of information about a destination, where the entire space may be perceived as equally available for visitation, not so different from the perceptions of local residents. Also they obeys type P3b because they could take several trips from their point of accommodation (second home), which gives one or more random explorations to arrive at their chosen destinations (spending locations).

Type T4 Unrestricted Destinationwide Movement

Type P3 Complex Patterns

Type P3b Radiating Hub

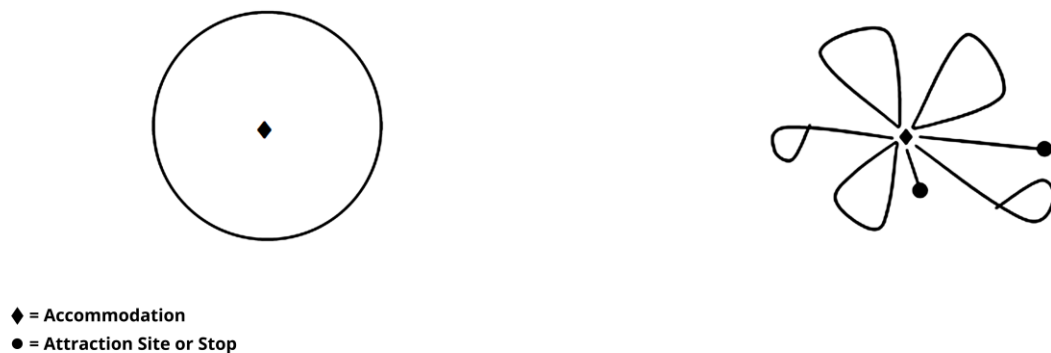


Figure 3. Territorial and linear path models of tourist behaviour in local destinations [11].

3.3. Study area

After defining secondary data from the ministry and other sources, it cannot be queried that most participants choose Kuala Lumpur (KL) as their second homes rather than other areas/ states. Besides being that capital city of Malaysia, Kuala Lumpur provides all kind of facilities and services corresponding with the needs and preferences of expatriates, not only limited for MM2H participants. It does not only gives limitation of movement to the participants as KL has the most diverse transportation modes in and surrounding the city area (both private and public transportations). From year 2007 till 2018, MM2H programme recorded about 2,400 units of properties, merely housing were purchased by the participants in Kuala Lumpur alone, representing 47.5% of total properties purchased in Malaysia. Despite it shows that properties owned by participants are the majority in KL, but it also delivers that the interest in property investment are located here. Thus, Kuala Lumpur is the most suitable area to be studied in term of its expenditure pattern by MM2H participants, which also easily to be evaluated with the diverge groups of expatriates.

3.4. Data collection

The sample respondents in this study are MM2H participants, as they fulfil the criteria of being expatriates and group who owns second homes in Malaysia. Plus, they can be easily approached because they are governed under the ministry and easily to be detected at particular location for some

matters. There are a lot of ways to collect most information from the respondents, saidly, in-depth interviews and questionnaires distribution.

Though, due to the reason that this study will collect its data quantitatively, where it involves vast amount of respondents, rather than focusing on small group of sample, which later could be used and aid much to generalise its population in the final outcome. Therefore, most expenditure study will use either exit interview or daily expenditure records techniques to gain informations from the respondents, especially in terms of their spending pattern [12][13].

Beforehand, many would argue on why this study does not carry on using trip diary method or also known as daily expenditure records, as being used in several tourism spending study, where it gives the same outcome –the expenditure pattern of tourists, whereas, it is very helpful for short term trip instead of long-term. In this case to assess MM2H participants, who are definitely, long-term stay expatriates, trip diary is difficult to assess this matter, because the researchers need to wait for a longer time, preferably a month to get the answer/ information from the respondents which are irrelevant in this context. It may be the best option to examine tourists/ visitors' behaviour at a particular destination for short-term (day trip), but not very compatible to use to assess long term residents, that also represented by MM2H participants.

Unlike with past method, exit interview or diary recall method had also been proceed in many previous expenditure studies, in giving the opportunity for the respondents to recall their expenditure in particular destinations for the past months on their average spending [12]. With this, researchers can obtain the information on the spot from the respondents, without the needs to wait for the confirmation at the end of the day or month. Although there are backlashes on exit interview technique being used to estimate daily expenditure, such as recall bias or error, the objectives of this research is find the average spending of a month, rather than daily, where it somehow at the end, does not rely on specific daily expenditure as previous studies on daily records. Moreover, questionnaires will be distributed to the respondents at MM2H participants' hotspot where it is easy to reach and get responds from the respondents. In this matter, researchers choose to distribute questionnaires at MM2H Centre, MOTAC, because MM2H Centre provides them the participants services to renew their visa or review their application/ participation for the programme. So, this centre could be the most suitable area that gathers most of the respondents under one roof.

The questionnaire contains the enquiry on how much the participants spend for monthly households (average expenditure) and where do they spend for past months in average (regular spending locations). This is to gain the expenditure per month by every participants, which later will lead to the spending pattern and consumption behaviour in overall. The content of the questionnaire may include as in table 4. The spending locations are limited to three (3) spots, as to find out the most locations (mode) where they spend (to shop, get services, etc.) for each particular expenditure categories.

Table 4. Enquiry on expenditure pattern by MM2H participants.

Expenditure categories	Expenditure amount/ Spending per month (RM)	Spending locations
Transportation	x	1. 2. 3.
Housing	y	1. 2. 3.
<i>Other categories</i>	z	1. 2. 3.
Total spending	a	

3.5. Method of analysis

Many studies examine tourists' expenditure in terms of its impact towards the bigger economic system, in regional level, giving outcome to econometric study. This relates to the tourist flow and multiplier model, which would produce impact on production, value added and households's expenditure [14][15], as one way to study the spending pattern. Else, this also takes in the local economic benefit from tourists' expenditure in city level, where it is done to examine spending on transportation and shopping activities in Melaka city [12]. Some even takes expenditure study in another level – at local event, where it is done to monitor event information from visitors, residents and businesses towards amount of spending on different expenditure items in that very event or surrounding it [13]. Plus, Bong B K M and Musa G [16] have studied the spending dynamics of retirees from MM2H programme, from the perspective of their demographic profiles.

Consequently, this research promote to go one step further, suggesting taking this expenditure/ spending pattern into spatial physical impact. This could be referred to the study by Kim H M, Han S S and O'Connor K B [17] that used location distribution analysis to study the foreign housing investment and foreigners placement. This research proposes to analyse expenditure pattern an analysis that relates the amount of expenditure, in relation with its spending locations – weighted spatial analysis, which will be done in ArcGIS. The weightages will much depend on the intensity of the expenditure categories which then are correlated to the spending locations by distribution analysis and network analysis to perform full operation for mapping development.

This analysis involves different independent data but related, such as participants' residence (second homes), spending locations (business, services, leisure), routes (road networks) and surrounding land uses. All these data will be layered to one collective section. Figure 4 and 5 show the steps involved in proposed analysis and expected outcome in this study correspondingly.

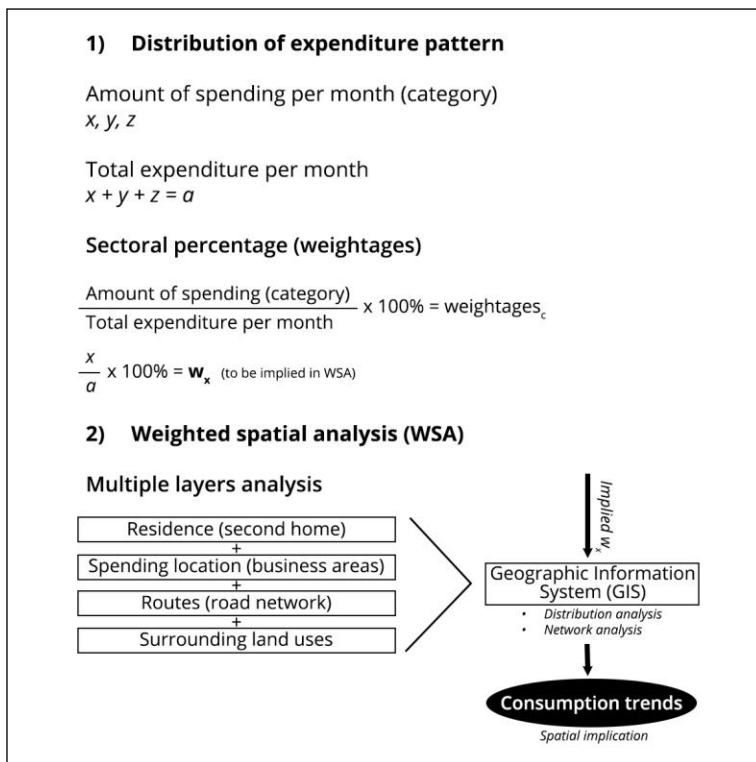


Figure 4. Proposed method of analysis.

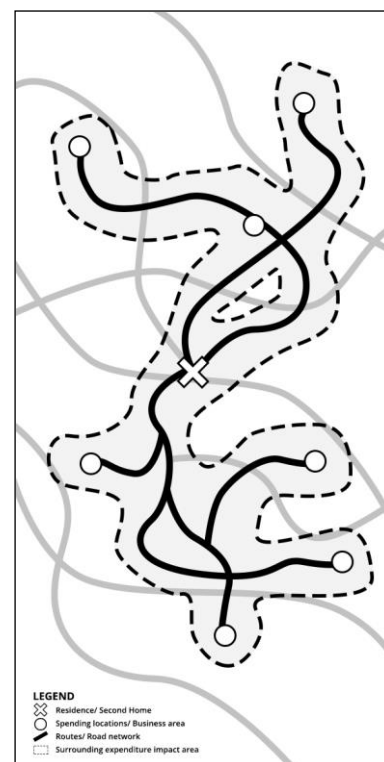


Figure 5. Expected outcome of analysis.

This study assume the most relevant spending location/ hotspot by MM2H participants, where they shop and get services are mostly located in neighbouring/ immediate business area. On the other hand, the routes this research put forward are the nearest existing road network by compling of Origin-Destination (O-D) system which takes the fastest and most efficient routes available (Origin: residence/ second home; Destination: spending location/ business area).

4. Conclusion/ Future research

This paper gives the overview for MM2H programme, in the perspectives of property purchases by MM2H participants and overall economic contribution. In order to realize the contribution to economy at micro level, this study provides broad methodology and approaches to translate consumption behaviour into spatial implication on physical matter, especially from spending pattern onto local surrounding economy at locality-specific, beyond broader level (state/ country-specific). This follows from the spending pattern of the participants, by taking the opportunities and benefits of the participants' monthly household receipts in the nation worth about RM 4 billion. Not only that, surroundings could gain positive impacts from the property purchases, which totalled up to about 5,000 units, where most are located in Kuala Lumpur.

Thus, with that, spending pattern could be assessed by looking into 14 distinctive expenditure categories, with the aid of movement behaviour of the participants, learned from the tourist behaviour in local destination study. Well ahead, data collection could be progressed with exit interview technique, by distributing questionnaires to the respondents in Kuala Lumpur as the study area. Those results later will be interpreted into mapping solution, giving extensive view of overall implication of spending pattern by MM2H participants towards spatial locality, through weighted spatial analysis method, which will be done in GIS.

Therefore, this study stretches the understanding on economic impacts of tourism development, which eventually supports the theoretical foundation of this study. Future research will come out with real life data interpretation from the participants to look at how far are this programme through the participants could effect and begin to give benefits and value-added to the city footprint.

Acknowledgements

The authors would like to express their appreciation and gratitude for sponsorship support to Universiti Teknologi Malaysia through ZAMALAH scholarship.

References

- [1] International Living 2019 *The Best Places to Retire* [Internet] (Ireland: International Living) Available from: <https://internationalliving.com/the-best-places-to-retire/> Accessed 28-11-2019
- [2] MM2H 2019 MM2H Programme Statistics [Internet] (Malaysia: Malaysia My Second Home) Available from: <http://www.mm2h.gov.my/index.php/en/home/programme/statistics> Accessed 28-11-2019
- [3] Win S G 2015 *Purpose and Satisfaction of Foreign Participants in Malaysia My Second Home Programme* (Malaysia: Universiti Teknologi Malaysia) Available at: <http://eprints.utm.my/id/eprint/53979/25/SiowGyenWinMFGHT2015.pdf> Accessed 28-11-2019
- [4] Kay L K 2017 *Ministry mulls measures to strengthen MM2H programme* [Internet] (Malaysia: EdgeProp.my) Available from: <https://www.edgeprop.my/content/1104265/ministry-mulls-measures-strengthen-mm2h-programme> Accessed 28-11-2019
- [5] Economic Planning Unit of Prime Minister Department 2014 *Guide to Acquisition of Real Estate in Malaysia by Foreigners* [Internet] (Malaysia: Rehda Institute) Available from: http://rehdainstitute.com/wp-content/uploads/2016/03/epu_guidelines.pdf Accessed 28-11-2019
- [6] Australian Institute of Superannuation Trustees 2016 *Expenditure patterns in retirement* [Internet] (Melbourne: Australian Institute of Superannuation Trustees) Available from:

- https://www.aist.asn.au/getattachment/Media-and-News/News/2016/Expenditure-patterns-in-retirement/aist_expendpatternsretirement_aug16_web.pdf.aspx Accessed 28-11-2019
- [7] Kim W G, Kim T, Gazzoli G, Park Y, Kim S H and Park S S 2011 Factors affecting the travel expenditure of visitors to Macau, China *Tour. Econ.* **17** 857–83 DOI: <https://doi.org/10.5367/te.2011.0060>
- [8] DeJuan J P and Seater J J 1999 The permanent income hypothesis: Evidence from the consumer expenditure survey *J. Monet. Econ.* **43** 351–76 DOI: [https://doi.org/10.1016/S0304-3932\(98\)00063-4](https://doi.org/10.1016/S0304-3932(98)00063-4)
- [9] Lee S, Sohn S-H, Rhee E, Lee Y G and Zan H 2014 Consumption patterns and economic status of older households in the United States *Monthly Labor Review* **Sept 2014** DOI: <https://doi.org/10.21916/mlr.2014.32>.
- [10] Ketkar S L and Cho W 1982 Demographic Factors and the Pattern of Household Expenditures in the United States *Atl. Econ. J.* **10** 16–27 DOI: <https://doi.org/10.1007/BF02300157>
- [11] Lew A and McKercher B 2006 Modeling tourist movements: A local destination analysis *Ann. Tour. Res.* **33** 403–23 <https://doi.org/10.1016/j.annals.2005.12.002>
- [12] Amir S, Osman M M, Bachok S and Ibrahim M 2016 Local Economic Benefit in Shopping and Transportation: A study on Tourists' Expenditure in Melaka, Malaysia *Procedia - Soc. Behav. Sci.* **222** 374–81 DOI: <https://doi.org/10.1016/j.sbspro.2016.05.186>
- [13] Breen H, Bull A and Walo M 2001 A comparison of survey methods to estimate visitor expenditure at a local event *Tour. Manag.* **22** 473-79 DOI: [https://doi.org/10.1016/S0261-5177\(01\)00005-X](https://doi.org/10.1016/S0261-5177(01)00005-X)
- [14] Ferrari G, Jiménez J M, Secondi L 2018 Tourists' Expenditure in Tuscany and Its Impact on the Regional Economic System *J. Clean. Prod.* **171** 1437-1446 DOI: <https://doi.org/10.1016/j.jclepro.2017.10.121>
- [15] Marrocu E and Paci R 2013 Different tourists to different destinations. Evidence from spatial interaction models *Tour. Manag.* **39** 71–83 DOI: <https://doi.org/10.1016/j.tourman.2012.10.009>
- [16] Wong B K M and Musa G 2017 Malaysia My Second Home (MM2H): Retirees' demographic profile and spending dynamics *Tour. Manag* **60** 42–6 DOI: <https://doi.org/10.1016/j.tourman.2016.11.012>
- [17] Kim H M, Han S S and O'Connor K B 2015 Foreign housing investment in Seoul: Origin of investors and location of investment *Cities* **42** 212–23 DOI: <https://doi.org/10.1016/j.cities.2014.07.006>