



UNDERSTANDING THE ATTRACTIVENESS OF TRANSIT-ORIENTED SHOPPING CENTRE

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Abstract

The integration of shopping centres with rapid transit stations is a growing trend in urban development. This study examines how proximity to rapid transit affects shopping centre attractiveness in Klang Valley, Malaysia. A mixed-methods approach was adopted. Firstly, spatial analysis was conducted using Quantum Geographic Information System (QGIS) to measure distances between rapid transit stations and nearby shopping centres. The analysis identified 54 shopping centres within walking distance of rapid transit stations, with a maximum distance of 636 metres. Secondly, customer satisfaction and preferences were assessed through a structured questionnaire survey, yielding 258 valid responses. Findings indicate that proximity to rapid transit enhances customer satisfaction and influences shopping centre choice. Younger respondents (18–29 years) valued rapid transit mainly for avoiding traffic congestion and parking difficulties, while female respondents placed greater emphasis on transit availability when selecting shopping centres. Cost savings were important across all demographic groups, although carrying purchases remained a key limitation. This study contributes to the literature by offering new insights into how rapid transit proximity shapes shopping centre attractiveness in Malaysian urban context. The findings provide valuable insights for property valuers, shopping centre managers, and leasing professionals, indicating that shopping centres located closer to rapid transit stations benefit from enhanced customer perceptions and overall attractiveness.

Keywords: Real Estate, Shopping Centre Attractiveness, Rapid Transit System, Spatial Analysis

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INTRODUCTION

A growing trend in urban planning is the integration of shopping centres with rapid transit stations, where passengers can exit directly into shopping centres. This design improves convenience, enhances walkability, and contributes to more vibrant urban environments (Rao & Pafka, 2021). Transit proximity also increases foot traffic and strengthens shopping centre attractiveness, particularly in densely populated areas where public transport is widely used (Abutaleb et al., 2020; Dzulhijwandari et al., 2021).

Although these benefits are well documented globally, limited research has examined how transit proximity shapes customer perceptions of shopping centre attractiveness in Malaysia. Rapid transit systems in Malaysian urban regions, particularly the Klang Valley, have expanded significantly in recent years. However, empirical evidence on how these developments influence consumer behaviour and retail performance remains scarce (Blanco & Wikstrom, 2018). This gap is important because transit-oriented accessibility has substantial implications for urban planning, retail management, and property valuation in Malaysia.

This study addresses this gap by examining the relationship between transit proximity and shopping centre attractiveness. The research objectives are: (i) to identify shopping centres located near transit stations, and (ii) to assess customer satisfaction and preferences related to transit accessibility. Spatial analysis is used to calculate distances between shopping centres and transit stations, providing insights into how accessibility influences customer perceptions.

The findings are expected to offer valuable insights for property valuers, shopping centre managers, and leasing professionals. By understanding how proximity to transit stations affects customer perceptions, they can make more informed decisions about property valuation and leasing strategies.

LITERATURE REVIEW

Transit-Oriented Development (TOD)

A growing body of research positions Transit-Oriented Development (TOD) as an urban development strategy that integrates mixed land uses with rapid transit systems and pedestrian-friendly networks (Dzulhijwandari et al., 2021). Malaysia reflects this direction through the expansion of MRT, LRT, and BRT systems (Kwan et al., 2017; PLANMalaysia, 2018). TOD is intended to enhance accessibility, reduce car dependency, and support more sustainable mobility (Abutaleb et al., 2020).

Empirical studies commonly assess TOD environments using walkable distances of 400–800 metres. A previous study by Ramlan et al. (2021) evaluated TOD performance of stations within a radius of 400–800 metres. This distance

aligns with the recommendations of PLANMalaysia (2018), as it represents comfortable walking distances of 5 to 10 minutes. Similar thresholds appear in TOD definitions of mixed-use communities located within 600–800 metres of transit stations (Sohoni et al., 2017). Studies on Transit-Oriented Shopping Mall Developments (TOSMDs) also identify transit-integrated shopping centres within an 800-metre walkable radius (Abutaleb et al., 2020), while Khaderi et al. (2021) highlight pedestrian accessibility within 400–800 metres as shaping activity patterns around transit-oriented retail spaces.

Overall, these studies establish that walkability and transit catchment areas significantly influence how people move within transit environments. However, they provide limited insights into how such proximity influences consumer behaviour towards shopping centres, which is the gap that this study seeks to address.

Shopping Centre Attractiveness

Shopping centre attractiveness is shaped by a range of features that influence consumers' visitation decisions. Key factors commonly identified in the literature include location, tenant mix, amenities, and the overall shopping environment (Mohd Sapie et al., 2014). Environmental qualities such as accessibility, comfort, and design elements further shape users' perceptions and overall shopping experience. Shopping centres located near or integrated with public transport nodes generally attract higher footfall due to enhanced accessibility (Khalaf et al., 2022).

Despite recognising the importance of accessibility, most studies emphasise the presence of transport connections rather than examining how transit-linked proximity influences consumer behaviour. Past research also highlights uneven access to transit-linked shopping centres and limited understanding of how different user groups perceive and experience this accessibility (Abutaleb et al., 2020). Furthermore, while the link between transit infrastructure and retail activity is acknowledged, the specific factors shaping consumer behaviour around rail-linked shopping centres remain underexplored (Li et al., 2025).

Overall, these studies establish that the general determinants of shopping centre attractiveness are well recognised. However, they offer limited insights into how transit-based accessibility shapes consumer perceptions and behaviour towards shopping centres, which is the gap that this study seeks to address.

RESEARCH METHODOLOGY

This study employs a mixed-methods approach, combining spatial analysis and a questionnaire survey to examine the relationship between transit stations and

shopping centres in Klang Valley. The region was chosen due to its rapid urbanisation and the highest concentration of shopping centres in Malaysia, with 169 shopping centres identified by NAPIC (2024). For the first research objective, data on transit stations were collected from route maps on the MyRapid website, while nearby shopping centres were identified using Google Maps. The coordinates of both transit stations and shopping centres were extracted using Geocode by Awesome Table and analysed using Quantum Geographic Information System (QGIS) to measure distances between them, with 800 metres (approximately a 10-minute walking distance) used as the benchmark in line with previous studies (Ramlan et al., 2021; Khaderi et al., 2021; Abutaleb et al., 2020; Sohoni et al., 2017).

For the second research objective, a questionnaire survey was conducted to collect data on customer satisfaction and preferences regarding transit accessibility to shopping centres. The survey was distributed online through social media and targeted outreach to UiTM students via institutional email. Although convenience sampling was applied, efforts were made to increase demographic diversity by reaching different faculties, age groups, and non-student networks. Responses were recorded via Google Forms and analysed using the Statistical Package for Social Sciences (SPSS) to identify patterns in consumer perceptions on the accessibility of transit stations and shopping centre attractiveness.

ANALYSIS AND DISCUSSION

Spatial Analysis

In relation to the first research objective, Table 1 summarises shopping centres in Klang Valley that are accessible via rapid transit, identified through spatial analysis using QGIS. The table presents the corresponding shopping centre names, transit lines, and transit stations. In total, 54 shopping centres were found to be accessible within a walkable distance of up to 636 metres, which is approximately a 10-minute walk.

Table 1: Identified shopping centres accessible via rapid transit in Klang Valley

Shopping centre	Transit line	Transit station
Pavilion KL	MRT Kajang	Bukit Bintang
Lot 10	Monorail KL	
Fahrenheit88		
Starhill		
Plaza Low Yat		
Sungei Wang Plaza		
The Exchange TRX	MRT Kajang	Tun Razak Exchange (TRX)
Pavilion Damansara Heights	MRT Kajang	Pusat Bandar Damansara
DC Mall		
1 Utama	MRT Kajang	Bandar Utama

Shopping centre	Transit line	Transit station
MyTOWN IKEA Cheras	MRT Kajang	Cochrane
Sunway Velocity Mall	MRT Kajang	Cochrane
	LRT Ampang/Sri Petaling	Maluri
The Curve IPC Shopping Centre IKEA Damansara	MRT Kajang	Mutiara Damansara
Sunway Giza Mall Tropicana Gardens Mall	MRT Kajang	Surian
NU Sentral	MRT Kajang	Muzium Negara
	LRT Kelana Jaya	KL Sentral
	Monorail KL	
Glo Damansara	MRT Kajang	Taman Tun Dr Ismail (TTDI)
EkoCheras Mall Cheras Leisure Mall	MRT Kajang	Taman Mutiara
Plaza Metro Kajang	MRT Kajang	Stadium Kajang
Suria KLCC Avenue K	LRT Kelana Jaya	KLCC
Mid Valley Megamall The Gardens KL Eco City	LRT Kelana Jaya	Abdullah Hukum
Berjaya Times Square	Monorail KL	Imbi
	LRT Ampang/Sri Petaling	Hang Tuah
Lalaport BBCC	Monorail KL	Hang Tuah
	LRT Ampang/Sri Petaling	
Subang Parade Empire Shopping Gallery	LRT Kelana Jaya	Subang Jaya
KL Gateway Mall	LRT Kelana Jaya	Universiti
M3 Mall	LRT Kelana Jaya	Taman Melati
Main Place USJ	LRT Kelana Jaya	USJ21
The 19 USJ City Mall	LRT Kelana Jaya	Wawasan
Evolve Concept Mall	LRT Kelana Jaya	Ara Damansara
Amcorp Mall	LRT Kelana Jaya	Taman Jaya
Datum Jelatek	LRT Kelana Jaya	Jelatek
Wangsa Walk	LRT Kelana Jaya	Sri Rampai
Sunway Pyramid	BRT Sunway	Sunway Lagoon
IOI Mall Puchong	LRT Ampang/Sri Petaling	IOI Puchong Jaya
SS15 Courtyard	LRT Kelana Jaya	SS15
The LINC KL Intermark Mall	MRT Putrajaya	Ampang Park
	LRT Kelana Jaya	
Sunway Putra	LRT Ampang/Sri Petaling	PWTC
Da Men Mall	LRT Kelana Jaya	USJ7
Summit USJ	BRT Sunway	
SOGO KL	LRT Ampang/Sri Petaling	Bandaraya
Quill City Mall	Monorail KL	Medan Tuanku
Metro Mall	MRT Putrajaya	Chan Sow Lin
	LRT Ampang/Sri Petaling	
Endah Parade	LRT Ampang/Sri Petaling	Bukit Jalil

Shopping centre	Transit line	Transit station
SetiaWalk Mall	LRT Ampang/Sri Petaling	Pusat Bandar Puchong
Brem Mall	MRT Putrajaya	Sri Delima

Source: MyRapid Data, Google Maps Data and Author's Observation

Using QGIS for spatial analysis, the maximum walkable distance between shopping centres and transit stations in Klang Valley was approximately 636 metres (between Endah Parade and LRT Bukit Jalil), which falls within the generally accepted 800-metre or 10-minute walk range (Ramalan et al., 2021; Khaderi et al., 2021; Abutaleb et al., 2020; Sohoni et al., 2017). Figure 1 illustrates the straight-line distances between shopping centres and their nearest rapid transit stations in Klang Valley, calculated using the QGIS 'Hub Lines/Distances' function. This spatial analysis supports the first research objective by identifying shopping centres located within walkable proximity to transit stations, with distances ranging up to a maximum of 636 metres. Straight-line distance was adopted as a standardised measure to allow consistent comparison across all shopping centre–station pairs. While this method does not capture actual pedestrian routes, obstacles, or variations in walkability, it is widely applied in transit-oriented and retail accessibility studies as a practical indicator of spatial proximity. As such, the analysis provides a reliable basis for assessing the distribution and accessibility of transit-linked shopping centres.

Shopping C	HubName	HubDist	Shopping C	HubName	HubDist
1 Pavillion KL	MRT Bukit Bintang	249.895845393847651	28 KL Eco City	LRT Abdullah Hukum	123.678020290538498
2 Lot 10	Monorail Bukit Bintang	66.075593530010593	29 Berjaya Times Square	Monorail Imbi	99.098735305865986
3 Fahrenheit88	MRT Bukit Bintang	112.061218630961179	30 Lalaport BBCC	Monorail Imbi	229.807827562262521
4 Starhill	MRT Bukit Bintang	227.29971629403693	31 Subang Parade	LRT Subang Jaya	442.422885514284417
5 Plaza Low Yat	Monorail Imbi	162.541318592444838	32 Empire Shopping Gallery	LRT Subang Jaya	616.175427020965117
6 Sungei Wang Plaza	Monorail Bukit Bintang	101.387427467651463	33 KL Gateway Mall	LRT Universiti	206.092582275643736
7 The Exchange TRX	MRT Tun Razak Exchange (TRX)	291.627557674139598	34 M3 Mall	LRT Taman Melati	433.773365011909846
8 Pavillion Damansara Heights	MRT Pusat Bandar Damansara	407.130685667126954	35 Main Place USJ	LRT USJ21	380.246880446980072
9 DC Mall	MRT Pusat Bandar Damansara	283.103029645935067	36 The 19 USJ City Mall	LRT Wawasan	237.059893942954346
10 1 Utama	MRT Bandar Utama	297.767007437837719	37 Evolve Concept Mall	LRT Ara Damansara	137.466311808662709
11 MyTOWN	MRT Cochrane	211.379669129632418	38 Amcorp Mall	LRT Taman Jaya	220.074693534032463
12 IKEA Cheras	MRT Cochrane	314.489882022234838	39 Datum Jelatek	LRT Jelatek	87.650369154406008
13 Sunway Velocity Mall	LRT Maluri	561.249063032707454	40 Wangsa Walk Mall	LRT Sri Rampai	520.712175231795527
14 The Curve	MRT Mutiara Damansara	421.075387979959658	41 Sunway Pyramid	BRT Sunway Lagoon	513.034336044852807
15 IPC Shopping Centre	MRT Mutiara Damansara	314.244964881250837	42 IOI Mall Puchong	LRT IOI Puchong Jaya	304.778678096390934
16 IKEA Damansara	MRT Mutiara Damansara	570.164789798572542	43 SS15 Courtyard	LRT SS15	182.398322240203044
17 Sunway Giza Mall	MRT Surian	219.455192913601906	44 The LINC KL	LRT Ampang Park	234.086521782327026
18 Tropicana Gardens Mall	MRT Surian	84.038859953885634	45 Intermark Mall	LRT Ampang Park	175.255515090546510
19 NU Sentral	LRT KL Sentral	151.086334044482783	46 Sunway Putra	LRT PWTC	132.600504678181551
20 Glo Damansara	MRT Taman Tun Dr Ismail (TTDI)	354.825856923190145	47 Da Men Mall	LRT USJ7	327.621144681193982
21 EkoCheras Mall	MRT Taman Mutiara	338.997990745228208	48 Summit USJ	LRT USJ7	592.598962981443719
22 Cheras Leisure Mall	MRT Taman Mutiara	310.357732520637740	49 SOGO KL	LRT Bandaraya	105.589653005996787
23 Plaza Metro Kajang	MRT Stadium Kajang	472.849307799481380	50 Quill City Mall	Monorail Medan Tuanku	141.473484635360165
24 Suria KLCC	LRT KLCC	259.860358527313508	51 Metro Mall	LRT Chan Sow Lin	197.759779946722489
25 Avenue K	LRT KLCC	70.111764409869508	52 Endah Parade	LRT Bukit Jalil	636.028704029448022
26 Mid Valley Megamall	LRT Abdullah Hukum	486.849378258171271	53 SetiaWalk Mall	MRT Pusat Bandar Puchong	276.123364872184482
27 The Gardens	LRT Abdullah Hukum	312.591953944008310	54 Brem Mall	MRT Sri Delima	373.191389756769354

Figure 1: Straight-line distances between shopping centres and their nearest rapid transit stations in Klang Valley, derived from QGIS spatial analysis
Source: MyRapid Data (2024), Google Maps Data (2024) & QGIS Analysis (2024)

The analysis highlights strong connectivity between shopping centres and transit stations, particularly in Bukit Bintang (Pavilion KL, Fahrenheit88, Starhill) and Mutiara Damansara (The Curve, IPC Shopping Centre), where multiple shopping centres are located within close walking distance. This proximity enhances accessibility and the potential for higher foot traffic, contributing to a transit-oriented shopping environment. While the analysis is based solely on spatial data and does not capture pedestrian infrastructure or safety perceptions that may affect actual walking behaviour, findings suggest that Klang Valley has effectively developed a network of transit-oriented shopping centres, which may support sustainable urban mobility and contribute to a well-connected retail landscape.

Questionnaire Survey Analysis

For the second research objective, findings were obtained via data collection conducted through a questionnaire survey. The questionnaire survey is divided into two parts. Part A, titled “Respondent’s Profile”, gathers demographic information about the respondents. Part B, titled “Rapid Transit and Shopping Centre Attractiveness”, delves deeper into the connection between rapid transit and shopping centre attractiveness, employing a 5-point Likert scale, respondents indicate their level of agreement with statements. Statements in Part B (a) evaluate customer satisfaction with aspects such as convenience, walking distance from transit stations to shopping centres, frequency of rapid transit, and comfort during the commute. Part B (b) examines how access to rapid transit influences shopping centre selection, addressing factors such as traffic avoidance, parking concerns, and cost savings. Finally, Part B (c) focuses on the sustainability aspects of using rapid transit to shopping centres.

Respondents

A total of 258 valid responses were obtained from respondents who completed the questionnaire. Analysis of respondent demographics revealed that 31.4% were male (N = 81), while the majority, 68.6%, were female (N = 177). The highest percentage of respondents fell within the 18–24 years category, comprising 49.2% (N = 127), followed by 25–29 years at 41.5% (N = 107). The remaining age groups, from 30 to above 50 years old, exhibited lower proportions. In terms of ethnicity, the majority identified as Malay, representing 82.9% (N = 214), followed by Chinese at 8.9% (N = 23), Indian at 5.8% (N = 15), and others at 2.3% (N = 6). Geographically, a significant portion of respondents, 63.6% (N = 164), resided in Klang Valley, while 36.4% (N = 94) resided outside Klang Valley. Moreover, an overwhelming majority, 89.9% (N = 232), responded having experienced using rapid transit, whereas only 10.1% (N = 26) indicated otherwise.

Descriptive Analysis

This study applies descriptive analysis to examine the questionnaire survey responses. Descriptive statistics are used to summarise respondents' demographic characteristics, travel behaviour, and perceptions of rapid transit accessibility and shopping centre attractiveness. The findings are presented in terms of frequency, percentage, mean, and standard deviation to provide an overview of response patterns and variability. The mean indicates the average level of agreement or importance assigned to each variable, reflecting the central tendency of responses, while the standard deviation illustrates the degree of dispersion, with lower values suggesting greater consensus among respondents and higher values indicating more varied perceptions. Table 2 summarises the descriptive statistics for the 258 valid responses, forming the basis for analysing how rapid transit proximity influences customer satisfaction and shopping centre choice.

Table 2: Descriptive statistics of questionnaire survey responses on rapid transit satisfaction, shopping centre preference, and sustainability (N = 258)

Item / Scale	1		2		3		4		5		M	SD
	f	%	f	%	f	%	f	%	f	%		
Ba. Rapid Transit Satisfaction												
*1. Satisfied with the convenience of accessing shopping centres via rapid transit.	1	0.4	5	1.9	43	16.7	120	46.5	89	34.5	4.13	0.781
*2. Satisfied with the walking distance from the nearest transit station to shopping centres.	2	0.8	16	6.2	42	16.3	114	44.2	84	32.6	4.02	0.899
*3. Satisfied with the frequency of rapid transit availability.	3	1.2	11	4.3	48	18.6	110	42.6	86	33.3	4.03	0.893
*4. Satisfied with the comfort when commuting by rapid transit.	1	0.4	33	12.8	64	24.8	118	45.7	42	16.3	3.65	0.914
^5. Walking distance of 636 metres between shopping centre and transit station is manageable.	8	3.1	18	7.0	51	19.8	105	40.7	76	29.5	3.86	1.018

Item / Scale	1		2		3		4		5		M	SD
	f	%	f	%	f	%	f	%	f	%		
Bb. Shopping Centre Preference												
*1. Consider the availability of rapid transit when selecting a shopping centre to visit.	10	3.9	25	9.7	37	14.3	71	27.5	115	44.6	3.99	1.154
*2. Prefer using rapid transit to commute to shopping centres to avoid traffic congestion.	6	2.3	24	9.3	33	12.8	64	24.8	131	50.8	4.12	1.098
*3. Prefer using rapid transit to alleviate issues with finding parking at shopping centres.	8	3.1	20	7.8	25	9.7	77	29.8	128	49.6	4.15	1.079
*4. Save on costs by commuting via rapid transit to shopping centres compared to other transportation modes.	3	1.2	7	2.7	28	10.9	97	37.6	123	47.7	4.28	0.851
*5. Easy to transport shopping purchases back home using rapid transit.	30	11.6	92	35.7	64	24.8	52	20.2	20	7.8	2.77	1.133
Bc. Sustainability												
*1. Using rapid transit to commute to shopping centres is more environmentally friendly compared to other transportation modes.	0	0.0	7	2.7	19	7.4	99	38.4	133	51.6	4.39	0.741

Item / Scale	1		2		3		4		5		M	SD
	f	%	f	%	f	%	f	%	f	%		
*2. Using rapid transit to commute to shopping centres reduces traffic congestion.	2	0.8	3	1.2	16	6.2	80	31.0	157	60.9	4.50	0.734
*3. Using rapid transit to commute to shopping centres improves air quality.	3	1.2	4	1.6	26	10.1	91	35.3	134	51.9	4.35	0.815
*4. Using rapid transit to commute to shopping centres reduces carbon footprint.	0	0.0	4	1.6	27	10.5	91	35.3	136	52.7	4.39	0.737
*5. Walking a reasonable distance from a transit station to a shopping centre reduces environmental impact.	2	0.8	5	1.9	34	13.2	95	36.8	122	47.3	4.28	0.823

Source: Questionnaire Survey Data and SPSS Analysis

*Scale values range from 1 ("strongly disagree") to 5 ("strongly agree")

^Scale values range from 1 ("not manageable at all") to 5 ("very manageable")

M mean, SD standard deviation, f frequency

Respondents generally reported positive perceptions of rapid transit for accessing shopping centres. Convenience of access (mean = 4.13), walking distance from transit stations (mean = 4.02), and frequency of rapid transit availability (mean = 4.03) received relatively high scores, indicating general satisfaction. Comfort during commutes scored slightly lower (mean = 3.65), with greater variability (SD = 0.914), suggesting more diverse experiences. The majority of respondents (70.2%) considered the maximum walking distance of 636 metres manageable, consistent with prior studies that identify 400–800 metres as a walkable range for transit-oriented retail (Ramlan et al., 2021; Khaderi et al., 2021; Abutaleb et al., 2020; Sohoni et al., 2017). Key motivators for using rapid transit included avoiding traffic congestion, alleviating parking difficulties, and cost savings, whereas ease of carrying purchases was the least influential factor (mean = 2.77), consistent with other studies highlighting practical constraints as a limitation of transit use for shopping trips (Blanco &

Wikstrom, 2018). These findings reinforce that transit-based accessibility shapes consumer behaviour, but other practical factors may mediate its influence.

Cross-Tabulation Analysis

This study utilizes cross-tabulation analysis to explore the relationship between gender, age, and responses to Parts B (a) and (b) of the questionnaire, Part B (c) on ‘Sustainability’ are discarded due to consistent positive responses across all groups. Gender analysis includes both male and female respondents. Age analysis excludes the 45–49 age group due to a single respondent, aiming to prevent bias. Only the most prevalent age groups are examined to avoid bias from low response rates. This approach provides insights into demographic influences on rapid transit satisfaction and shopping centre preferences. Figure 2 illustrates the demographic variations in rapid transit satisfaction and shopping centre preferences across gender and age groups.

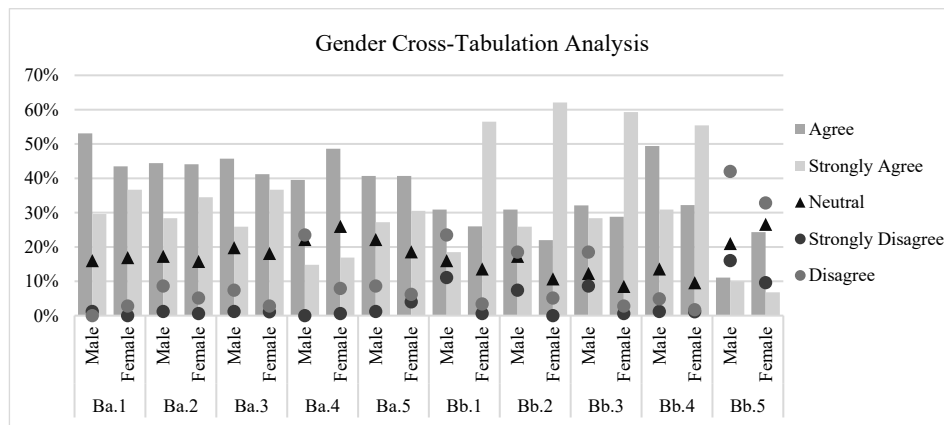


Figure 2: Cross-tabulation analysis of gender and age differences in rapid transit satisfaction and shopping centre preferences
Source: Questionnaire Survey Data (2024) & SPSS Analysis (2024)

Cross-tabulation analysis revealed demographic differences in satisfaction and transit preferences. Female respondents generally reported higher satisfaction with rapid transit frequency, comfort, and the influence of transit availability on shopping centre selection compared to males. Younger age groups (18–29 years) placed greater emphasis on convenience, frequency, and accessibility than older respondents, consistent with literature suggesting that younger, urban populations are more likely to use public transit (Rosni et al., 2025). Across all groups, cost savings were consistently valued, whereas transporting purchases remained a deterrent for transit use. These patterns align with prior research indicating that proximity and convenience are strong

determinants of shopping centre choice, particularly in transit-accessible settings, while factors such as carrying capacity influence modality preference (Blanco & Wikstrom, 2018).

Collectively, the survey results provide empirical evidence for how transit accessibility affects consumer behaviour towards shopping centres, directly addressing the research gap identified in the literature review. Compared with previous studies, this research contributes new insights on Malaysian urban contexts, highlighting specific accessibility factors (walking distance, congestion avoidance, parking relief, and cost) that shape shopper decision-making in Klang Valley.

DISCUSSION

The findings of this study highlight the practical significance of transit accessibility in shaping shopping centre attractiveness. From an industry perspective, property developers and urban planners can appreciate that locating retail developments within walkable distances of rapid transit stations enhances customer inflow and satisfaction, particularly among younger and female demographics. This aligns with the operational insights often observed during market and feasibility studies, where proximity to transit is a key determinant in forecasting footfall and retail performance (Khalaf et al., 2022). For instance, when planning new shopping centres or retrofitting existing ones, understanding customer preferences for ease of access, avoidance of traffic congestion, and cost savings can guide site selection, tenant mix strategies, and connectivity improvements. Furthermore, this study underscores the need for planning policies that incentivise TOD in Malaysia, promoting integration between retail spaces and evolving rapid transit networks. These insights are particularly relevant in dense urban areas like Klang Valley, where enhancing pedestrian-friendly connections to MRT or LRT stations can support sustainable urban mobility while maximising commercial returns. Overall, this study provides guidance for industry practitioners, suggesting that investment decisions, property management strategies, and urban planning policies should systematically incorporate transit accessibility as a core criterion to optimise both customer experience and retail performance.

CONCLUSION

This study examined the influence of rapid transit integration on shopping centre attractiveness in Klang Valley, Malaysia. Spatial analysis identified 54 shopping centres within walking distance of transit stations, with the furthest at 636 metres. Complementing this, questionnaire survey findings showed that proximity to transit stations enhances customer satisfaction and shapes shopping centre preferences. Younger customers (18–29 years old) use rapid transit to avoid

traffic and parking difficulties, while female customers place stronger emphasis on transit availability when choosing which shopping centre to visit, and cost savings are valued across all demographics, although carrying purchases remains a key drawback.

Overall, this study demonstrates that transit accessibility plays a meaningful role in shaping customer perceptions of shopping centre attractiveness. The findings offer valuable guidance for property valuers, shopping centre managers, and leasing professionals, suggesting that closer proximity to rapid transit stations could improve customer perceptions, thereby enhancing shopping centre attractiveness and its perceived value. Beyond retail operations, these insights are relevant for urban planners and policymakers, as they highlight the importance of integrating commercial developments with transit networks to strengthen walkability, support sustainable mobility, and enhance urban competitiveness. As Malaysia's transit system continues to expand, coordinating retail development around transit stations will be increasingly important for shaping the city's layout and fostering vibrant commercial areas. Future research should explore valuation methods tailored to TOD to ensure more accurate market value assessments, reflecting the growing importance of transit integration in urban development.

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