

# ADAPTABILITY OF SHOPHOUSES CONFIGURATIONS IN MALAYSIA: A FRAMEWORK FOR ENHANCING SOCIAL COHESION THROUGH END-USER PERCEPTION

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## ABSTRACT

Shophouses are a quintessential part of Malaysia's architectural heritage, serving as historical landmarks and vibrant hubs for social and economic activities. Over time, these structures have been adapted to meet contemporary needs while retaining their cultural significance. However, rapid urbanisation and modernisation become a challenge in preserving the social fabric of communities centered around shophouses. This study examines how end-user perceptions of shophouse adaptability influence social cohesion in urban environments and employs a mixed-methods approach that includes site observations, surveys, and focus group discussions where the research evaluates the functionality, adaptability, and social impact of shophouse readaptation. The findings emphasise the critical role of inclusive design, cultural preservation, and community engagement in fostering social cohesion. The paper concludes by proposing a framework for architects, urban planners, and policymakers to balance modernisation with heritage conservation, ensuring shophouses continue to thrive as dynamic spaces for interaction and economic vitality.

**Keywords:** Shophouses, Social Cohesion, End-User Perception, Urban Adaptation, Heritage Conservation

## 1.0 INTRODUCTION

Shophouses in Malaysia are a unique architectural typology that blends residential and commercial functions, reflecting the country's multicultural heritage (Rashid & Heath, 2022). Over time, these structures have undergone significant adaptations to meet the demands of modern urban life (Chen & Mohamed, 2023). However, Phang et al. (2023) revealed that while these physical and functional transformations are well-documented, their unintended consequences on social cohesion particularly the erosion of community ties, displacement of long-term residents, and fragmentation of shared cultural practices, remain critically understudied. Yusoff and Koh (2024) further highlight this gap by critiquing current assessment frameworks for failing to capture longitudinal social impacts, proposing a new metric system to evaluate cohesion in adapted shophouse communities. This oversight is problematic because it prioritises economic and aesthetic outcomes over the lived experiences of communities, risking the loss of the very social capital that defines shophouse neighbourhoods. This paper investigates how end-users, residents, business owners, architects, urban planners and visitors perceive the adaptability of shophouses and how these perceptions influence community dynamics. The study aims to provide a framework for designing shophouses that enhance social cohesion while preserving their cultural and historical value.

## **2.0 LITERATURE REVIEW**

The adaptability of shophouses in Malaysia has garnered significant attention in recent years, particularly in urban development, heritage conservation, and social cohesion (Firzan et al., 2022). Shophouses, a quintessential architectural typology in Southeast Asia, have historically served as residential and commercial spaces, reflecting their time's socio-economic and cultural dynamics (Sanchez et al., 2019). In Malaysia, shophouses are architectural landmarks vital to urban identity, particularly in cities like George Town, Malacca, and Kuala Lumpur. This literature review explores the adaptability of shophouses, focusing on their role in fostering social cohesion through end-user perception, and identifies gaps in existing research.

### **Historical and Architectural Significance of Shophouses**

Shophouses in Malaysia emerged during the colonial era, blending Chinese, Malay, and European architectural influences. Their unique design, characterised by a narrow frontage, elongated floor plan, and a five-foot walkway (*kaki lima*), reflects a response to tropical climates and urban density (Vardopoulos et al., 2021). Historically, shophouses were multifunctional, housing businesses on the ground floor and residences above, fostering a close-knit community life. According to Chen (2015), shophouses are adaptable because of their flexible spatial configuration, which allows for diverse uses over time. However, rapid urbanisation and modernisation have threatened the preservation of these structures, leading to debates about their relevance in contemporary society.

### **Adaptability and Urban Sustainability**

Adaptability is a key concept in sustainable urban development, emphasising the capacity of buildings to evolve in response to changing social, economic, and environmental conditions. Shophouses, with their inherent flexibility, are often cited as models of adaptive reuse (Sanchez et al., 2020). Studies by Lim (2018) and Tan (2020) highlight how shophouses have been repurposed for cafes, boutique hotels, and creative studios, contributing to urban revitalisation. However, these transformations are not without challenges. Commercialising shophouses, particularly in heritage zones, has raised concerns about gentrification and the displacement of long-standing communities. As Ismail and Said (2019) noted, the economic benefits of adaptive reuse often overshadow the social implications, leading to a loss of cultural continuity and community identity.

### **Social Cohesion and End-User Perception**

Social cohesion, defined as the sense of belonging and connectedness within a community, is increasingly recognised as a critical outcome of urban design (Han et al., 2021). Shophouses, with their mixed-use nature, have the potential to enhance social cohesion by fostering interactions between residents, business owners, and visitors (Dash, 2022). However, the extent to which this potential is realised depends largely on end-user perception. According to Said et al. (2022), end-users—from residents to tourists, perceive shophouses differently based on their cultural background, economic status, and personal experiences. For instance, while tourists may appreciate shophouses' aesthetic and historical value, residents may prioritise functionality and affordability (Foster, 2020).

End-user perception is also influenced by the quality of public spaces surrounding shophouses (Jin & Wang, 2021; Noriza et al., 2013). The five-foot walkway, a defining feature of

shophouses, is a semi-public space facilitating social interactions. However, as Goh (2017) highlighted, the encroachment of commercial activities and poor maintenance often diminish the walkway's role as a social connector. Furthermore, the lack of inclusive design in adaptive reuse projects can alienate certain user groups, particularly the elderly, disabled person and low-income residents, undermining social cohesion (Merciu et al., 2022).

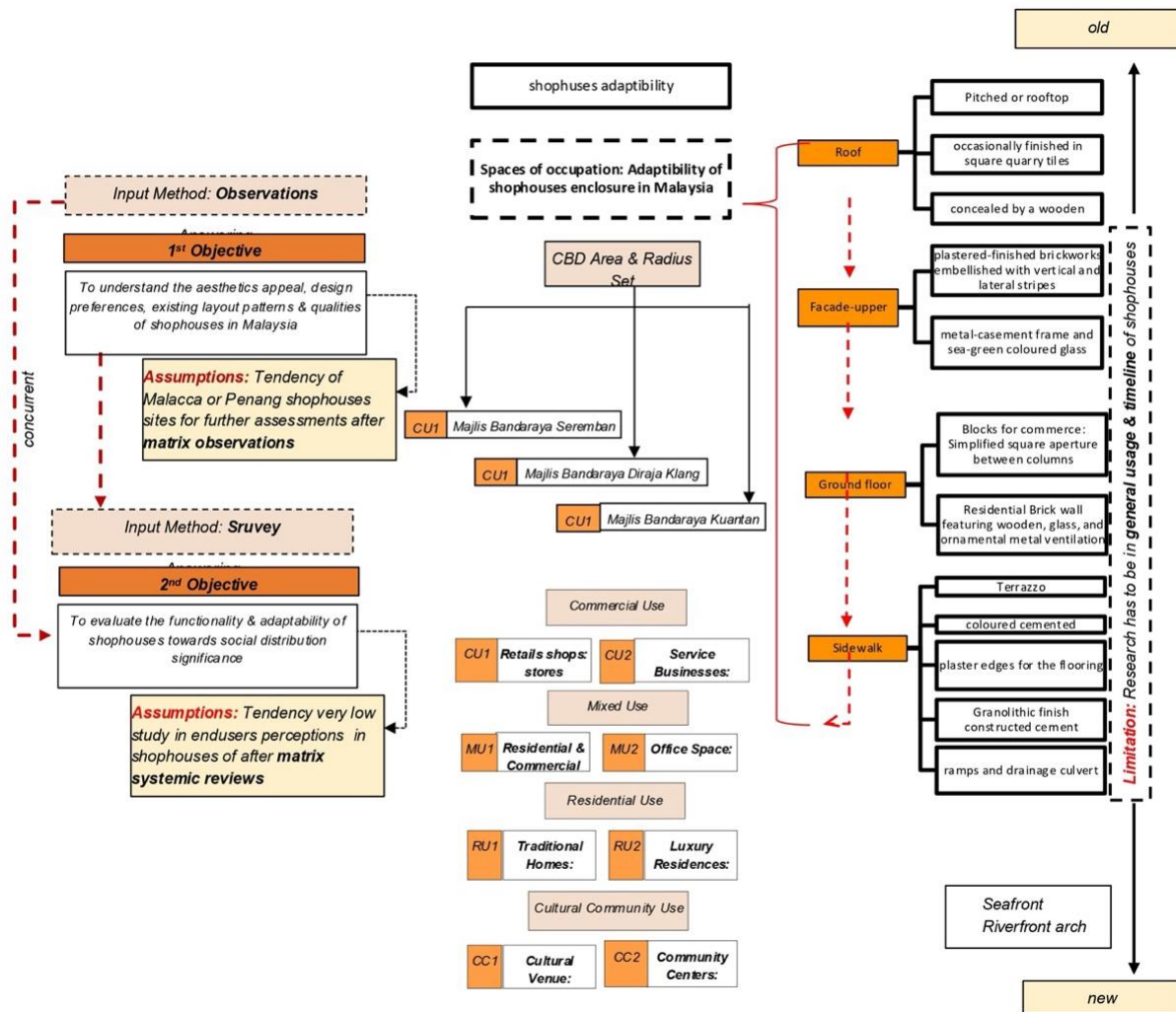
### **Gaps in Existing Research**

While existing studies have explored shophouse adaptability's architectural and economic aspects, there is a notable gap in research focusing on the social dimensions, particularly the role of end-user perception in enhancing social cohesion. Most studies adopt a top-down approach, emphasising policy and design strategies, but fail to incorporate end-users voices (Varady, 2022). Additionally, there is limited research on how cultural diversity in Malaysia influences the perception and use of shophouses. Addressing these gaps is crucial for developing a holistic framework that balances heritage conservation, economic viability, and social inclusivity.

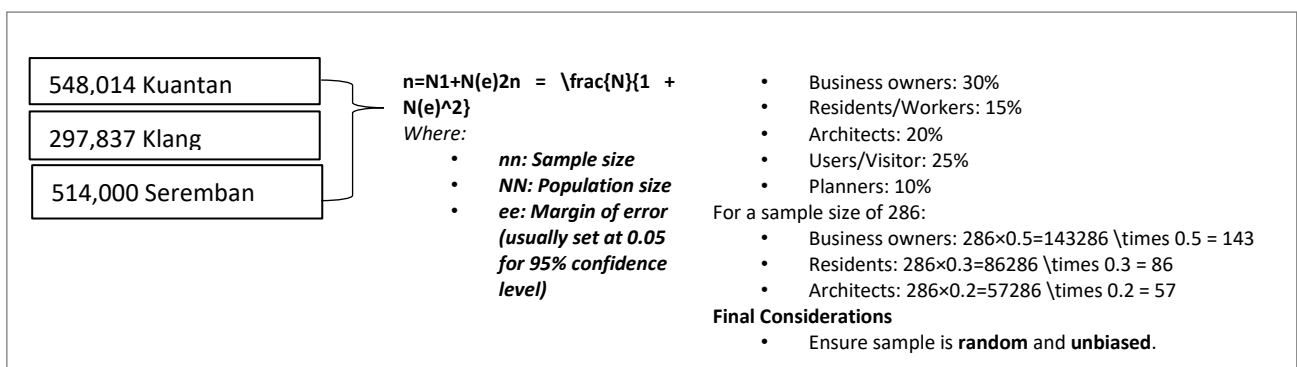
The adaptability of shophouses in Malaysia presents a unique opportunity to enhance social cohesion in urban areas. However, realising this potential requires a deeper understanding of end-user perception and its impact on the social dynamics of shophouse communities. By integrating insights from architecture, urban planning, and social sciences, future research can develop a comprehensive framework that ensures the sustainable and inclusive adaptation of shophouses in Malaysia. This framework should prioritise community engagement, cultural sensitivity, and equitable access to urban spaces, ensuring that shophouses remain vibrant social and economic activity hubs.

## **3.0 METHODOLOGY**

The research employs a mixed-methods approach, combining qualitative and quantitative techniques. Site observations were conducted in key urban areas in recent years of the local municipalities, which are Klang Royal City Council (2024), Seremban City Council (2020) and Kuantan City Council (2021), to document physical adaptations and usage patterns. Surveys were distributed to a diverse end-user group to gather data on their perceptions of shophouse functionality and social interactions, as outlined in Figures 1 and 2 below. The sample size of 286 respondents would be representative of the population. Focus group discussions were held with stakeholders, including architects, urban planners, and local authorities, to gain deeper insights into the challenges and opportunities of shophouse readaptation.



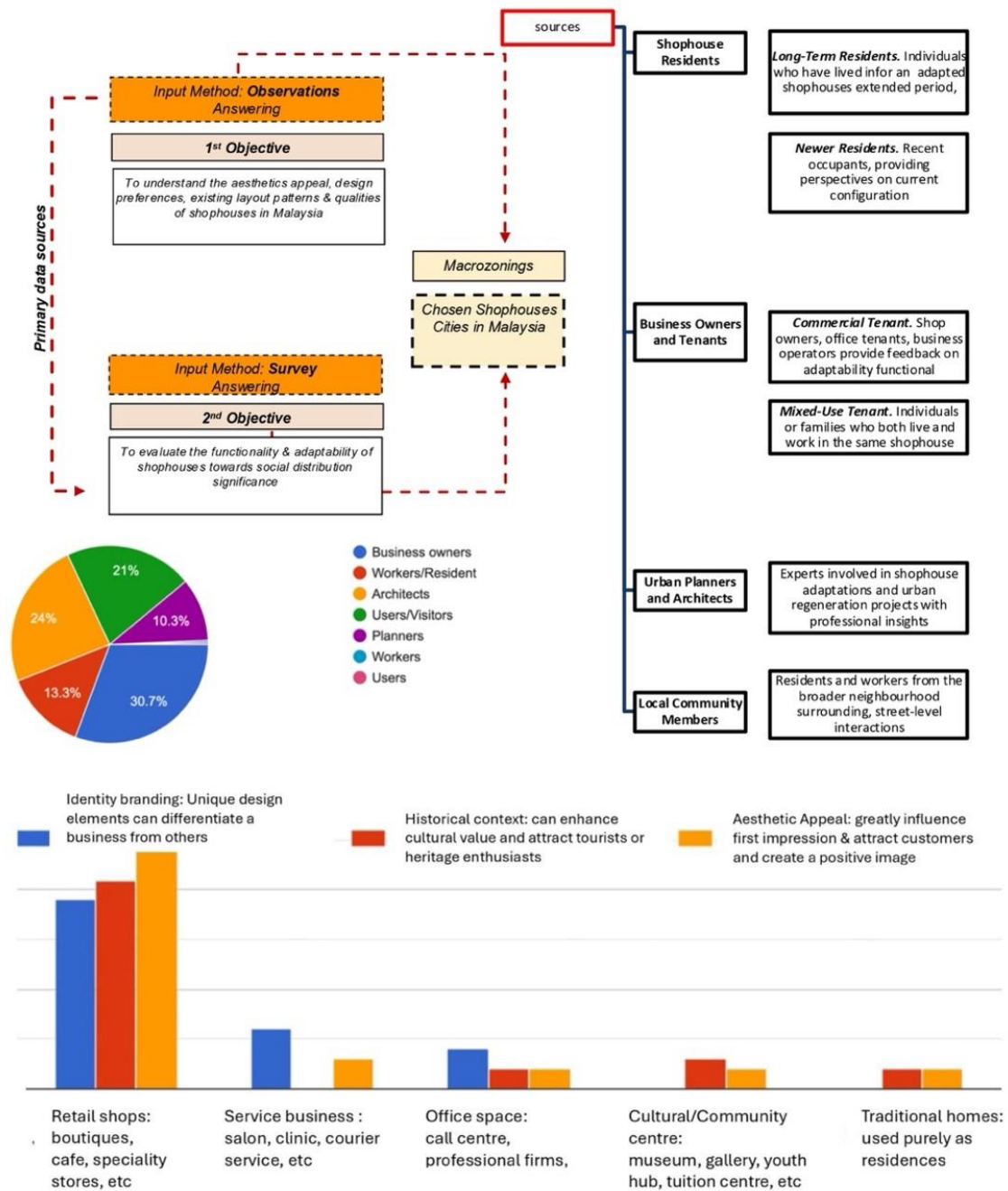
**Fig. 1:** Subjects or data sources for the methodology.  
(Source: Author).



**Fig. 2:** Sampling sizing of the end users.

(Source: Slovin's formula is commonly used for determining sample size when the population size is known Mahame et al., 2023)

## 4.0 RESULTS



**Fig. 3:** Preference typology and selection parameter percentage of shophouse end-users.

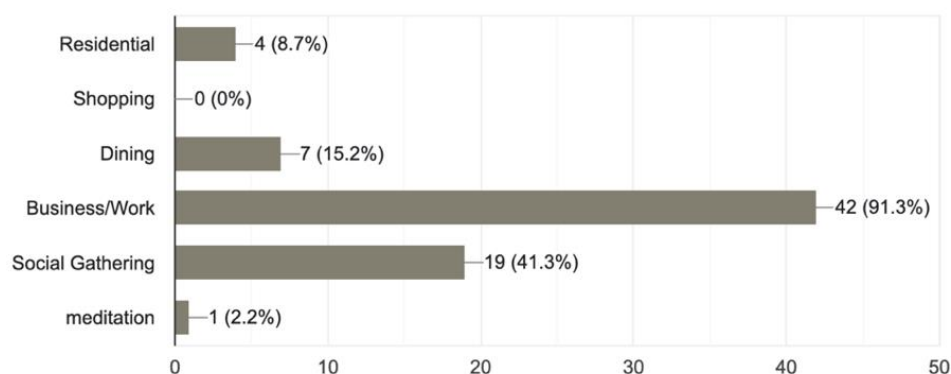
The study reveals that end-users value shophouses for their historical significance and adaptability to modern needs. However, the lack of inclusive design and community engagement in adaptation projects often leads to social fragmentation, as addressed in Figure 3. The research identifies key factors influencing roughly 80% of the Kuantan, Klang, and Seremban end-users and acknowledges shophouses as retail stores such as boutiques, cafes, restaurants, and speciality stores. In conjunction with that, the percentage will likely be the highest recorded for aesthetic appeal, greatly influencing first impressions and attracting customers. The findings suggest that thoughtful design and stakeholder collaboration are essential for creating shophouse environments that foster social interaction and community well-being.

## 5.0 DISCUSSIONS

The adaptability of shophouses in Malaysia, particularly in enhancing social cohesion through end-user perception presents a multifaceted discussion that intersects urban development, heritage conservation, and community well-being (Varady, 2022). The findings explore the variations of percentages of preservation of communal spaces, the integration of green areas, and the implications of shophouse adaptability for social cohesion, focusing on end-user perspectives, challenges, and opportunities for inclusive urban design in the three site surveys.

### End-User Perception and Social Cohesion

End-user perception plays a pivotal role in determining the success of shophouse adaptability in fostering social cohesion. Figure 4 emphasises that the diverse user groups of shophouses' results, ranging from residents and business owners to tourists, have varying expectations and needs. The most common reason, indicating 91.3% of the primary visits, is due to work-business related, while 41.3% of the respondents indicate social gatherings. Siad et al. (2021) found that residents often prioritise functional aspects such as affordability, accessibility, and maintenance, while tourists and new business owners value aesthetic and historical significance. This dichotomy highlights the need for a balanced approach that accommodates both functional and cultural dimensions of shophouse adaptability.

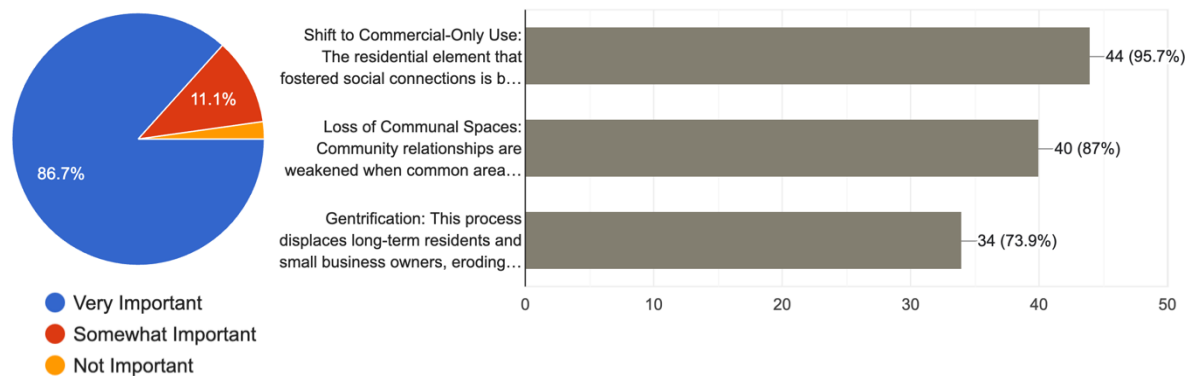


**Fig. 4:** Purpose and primary visits recorded for the Kuantan, Klang and Seremban shophouses.

(Source: Author)

The five-foot walkway, a defining feature of shophouses, is a critical social space fostering interactions among diverse user groups. However, its potential is often undermined by poor maintenance and encroachment by commercial activities. According to Goh et al. (2022), the

walkway's role as a social connector can be enhanced through inclusive design strategies, such as improved lighting, seating, and signage. The findings in Figure 5 below show that 86.7% of the community acknowledges the awareness engagement among shophouse users. These interventions not only improve usability but also encourage spontaneous social interactions, thereby strengthening community bonds.



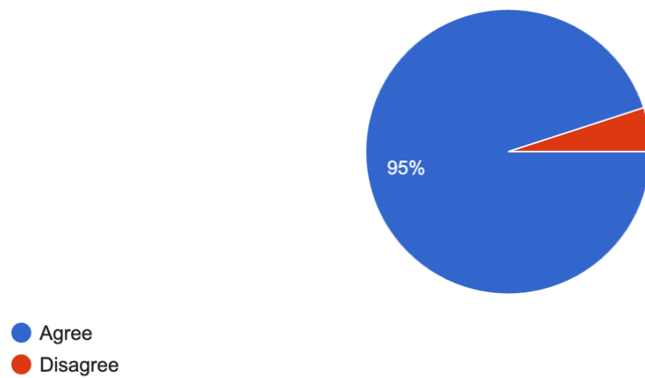
**Fig. 5:** The awareness and impression of social cohesion and engagement among shophouse users in Kuantan, Klang, and Seremban.  
(Source: Author)

### Challenges in Adaptive Reuse

Despite their potential, the adaptation of shophouses faces several challenges that hinder their contribution to social cohesion. One significant issue is gentrification, which often accompanies the commercialisation of heritage areas, as addressed in Figure 3 above. Ismail and Tan (2023) argue that transforming shophouses into high-end cafes, boutique hotels, and galleries can lead to the displacement of long-standing communities, particularly low-income residents and small businesses. This statement is, however, proven in the survey conducted, as 73.9% of the respondents addressed this issue. This activity will likely erode the social fabric of neighbourhoods, replacing traditional community networks with transient, consumer-driven interactions in which 95% agree that the economic viability significantly influences the sustainability of the shophouse in Figure 6 below.

97.8% of the respondents stated that the high renovation cost includes unaccountable electrical upgrades, structural reinforcements, and adherence to building requirements. The second factor, profit-driven development, constitutes 82.6%, and this was due to developers putting profit first, frequently at the price of preserving cultural assets, causing a loss of historical value due to profit. Inequitable economic benefits were also recorded as the third factor. Larger corporations or outside investors frequently gain more from commercialising shophouse districts than local communities. Another challenge is the lack of inclusive design in adaptive reuse projects. Many repurposed shophouses fail to accommodate the needs of vulnerable groups, such as the elderly and people with disabilities. A study by Lim and Ng (2021) revealed that the absence of ramps, elevators, and accessible facilities in repurposed shophouses limits their inclusivity, excluding certain user groups from participating in community life. Addressing these barriers is essential for ensuring that shophouses remain vibrant and inclusive spaces for all.

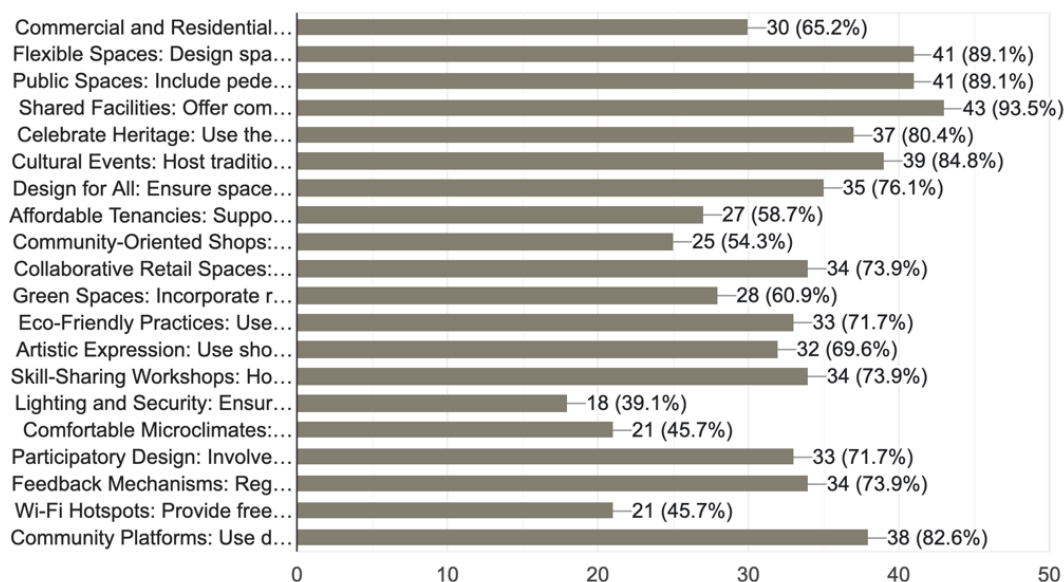




**Fig. 6:** The economic factor significantly influences shophouses' sustainability.  
(Source: Author)

### Opportunities for Enhancing Social Cohesion

Despite these challenges, shophouses offer significant opportunities for enhancing social cohesion through thoughtful design and community engagement. One promising approach is participatory design, which involves end-users in the planning and decision-making. According to Lee et al. (2023), participatory design fosters a sense of ownership and belonging among community members, ensuring that adaptive reuse projects align with their needs and aspirations. For instance, involving residents in redesigning public spaces around shophouses can create environments that reflect their cultural values and social practices. The survey conducted as per Figure 7 below represents the three most suggested options addressed by end-users) Flexible Spaces: Design spaces that can accommodate multiple uses, such as pop-up stores, community workshops, or cultural events, allowing for greater community participation; b) Public Spaces: Include pedestrian-friendly areas, shaded walkways, or small plazas where people can gather and interact, and c) Shared Facilities: Offer communal amenities such as gardens, seating areas, or co-working spaces that encourage interaction among a diverse group.



**Fig. 7** Shows how end-users think about steps to foster social cohesion.  
(Source: Author)

Another opportunity lies in leveraging digital technologies to enhance the functionality and accessibility of shophouses that could be implemented in the precinct backland promenade,



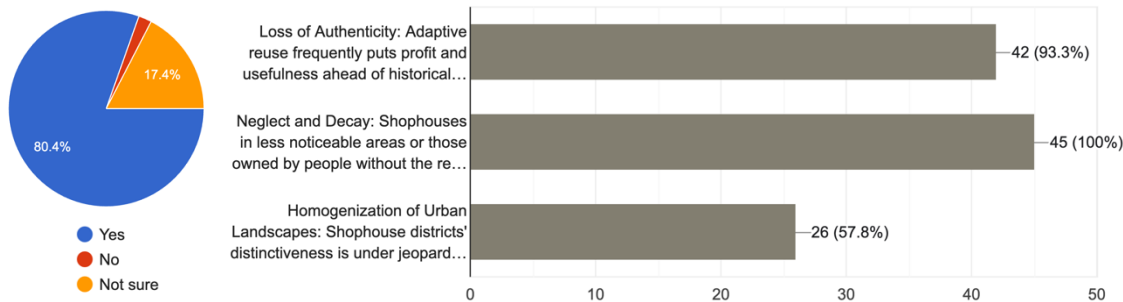
like what we have in Kuantan, as per Figure 8 below. Smart design solutions, such as sensor-based lighting, mobile apps for wayfinding, and virtual tours, can improve the user experience while preserving the historical integrity of shophouses. A study by Wong and Teo (2022) demonstrated that digital interventions can attract younger generations to heritage areas, bridging the gap between tradition and modernity. These technologies also provide opportunities for storytelling and cultural education, fostering a deeper appreciation for the historical significance of shophouses.



**Fig. 8:** Shophouses-community engagement revitalisation feedback survey observations of Jalan Besar and Jalan Makhota, Kuantan. (Source: Author)

### Cultural Diversity and Social Cohesion

Rapid urbanisation and commercialisation have led to the homogenisation of these spaces, diminishing their role as cultural connectors. As per Figure 9 below, 80.4% find difficulties in preserving the cultural legacy of the shophouses. 100% selected neglect and decay as one of the major problems. Shophouses in less noticeable areas or those owned by people without the resources, are frequently allowed to fall into disrepair. Another recorded was the loss of authenticity by 93.3%. Adaptive reuse frequently puts profit and usefulness ahead of historical preservation. Although several shophouses have been converted into cafes, galleries, and boutique hotels, these changes may deprive buildings of their original cultural character. Recent research by Ahmad et al. (2024) highlights the importance of cultural narratives embedded in shophouses to serve multicultural heritage, fostering mutual understanding and respect among diverse communities.



**Fig. 9:** Manifestations number of difficulties in adapting shophouses.

### Policy and Governance

Effective policy and governance are critical for ensuring the sustainable adaptation of shophouses. Current heritage conservation policies in Malaysia often prioritise physical preservation over social sustainability, leading to a disconnect between conservation goals and community needs. According to Cheong and Lim (2023), a more holistic approach is

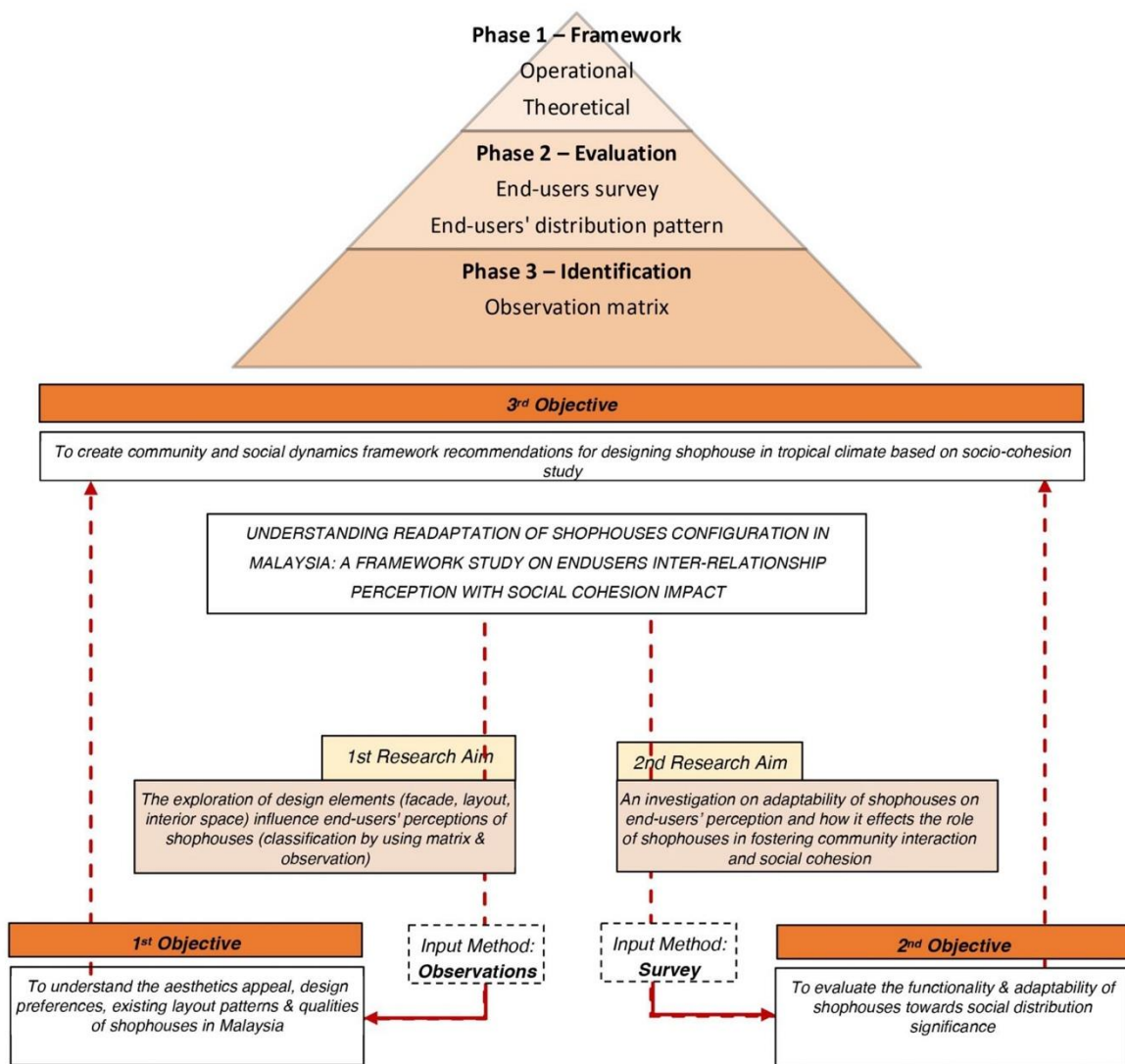
needed to integrate social, economic, and environmental considerations into heritage management. This initiative includes providing financial incentives for inclusive, adaptive reuse projects, establishing guidelines for participatory design, and enforcing regulations to prevent gentrification, as highlighted in Figure 5 above. Local governments also play a crucial role in facilitating community engagement and ensuring equitable access to shophouse spaces.

Figure 10 below describes the result in the three states, demonstrating that collaborative governance models involving local authorities, community organisations, and private stakeholders can lead to more inclusive and sustainable outcomes, where 85% of the respondents agree with it. It is recorded that 97.8% of respondents agree that limited stakeholder engagement contributes to policy improvements. Local communities, entrepreneurs, and historical specialists are frequently left out of policymakers' decision-making processes. Thus, this research will support the new guidelines for future reference. Secondly, inconsistent guidelines imposed in Kuantan, Klang and Seremban also contributed to the factor. Weak enforcement is frequently insufficient, even in regions where regulations exist. However, there are thorough rules to safeguard shophouses in some places, such as UNESCO World Heritage Sites like Malacca and George Town, which could be absorbed by building units in preservations.



**Fig. 10:** Balance modernisation and preservation requires effective governance.  
(Source: Author)

These models encourage shared responsibility and collective action, ensuring that the benefits of shophouse adaptability are distributed equitably. The adaptability of shophouses in Malaysia offers a unique opportunity to enhance social cohesion in urban areas. However, realising this potential requires a nuanced understanding of end-user perception and its impact on the social dynamics of shophouse communities. By addressing challenges such as gentrification, lack of inclusivity, and cultural homogenisation and leveraging opportunities such as participatory design, digital technologies, and collaborative governance, shophouses can continue to serve as vibrant social and economic activity hubs. Based on the criteria and results achieved, the following framework in Figure 11 above was a reference for future guidelines to help the local authority and community benefit and preserve better shophouse implementation based on their preferred typology.

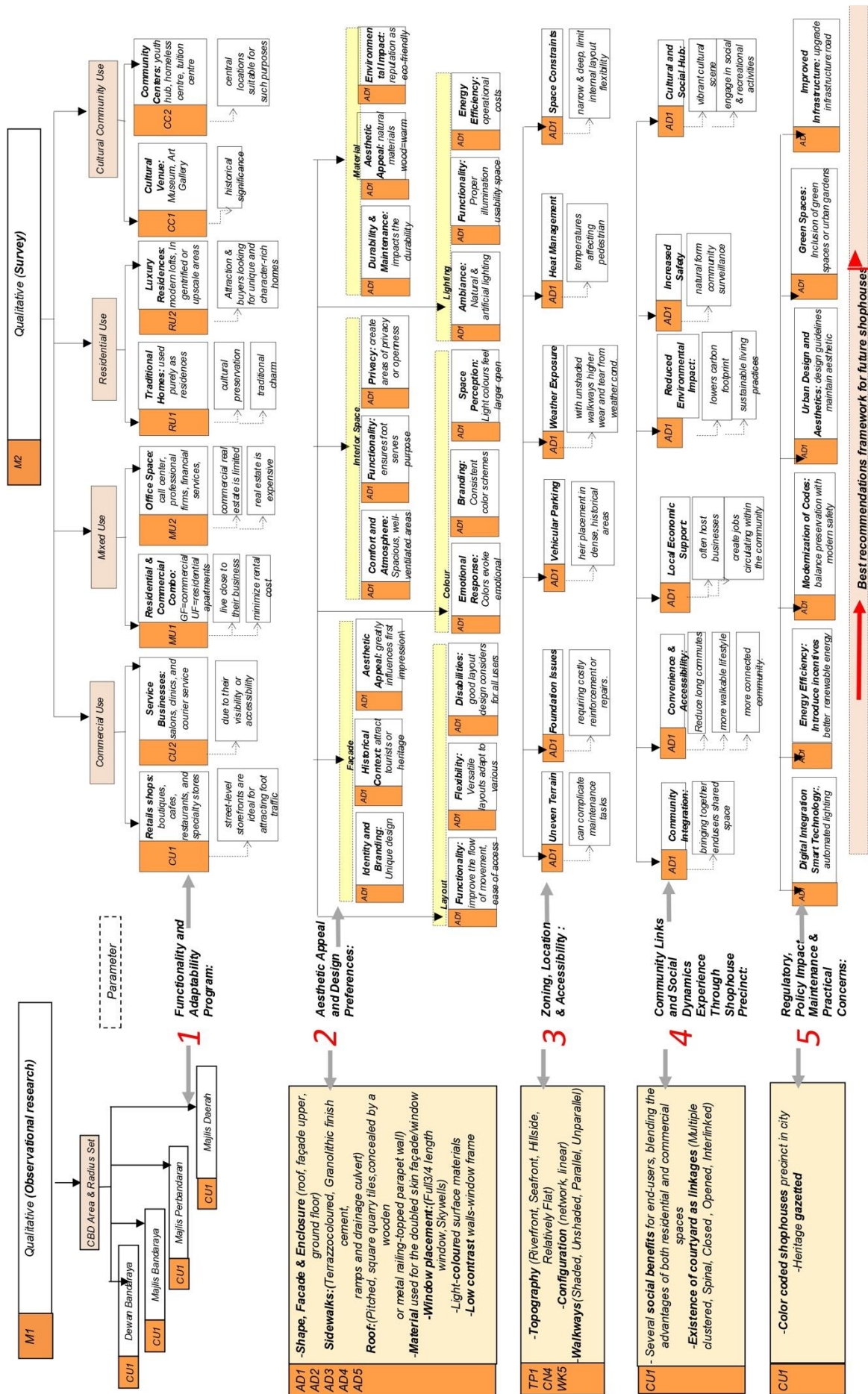


**Fig. 11:** Operational step to form a framework for fostering better social cohesion.  
(Source: Author)

## 6.0 CONCLUSION

This paper concludes that the adaptability of shophouses in Malaysia offers a unique opportunity to enhance social cohesion in urban areas. Architects and urban planners can create functional and culturally resonant spaces by incorporating end-user perceptions into the design process and forming a framework. The proposed framework provides guidelines for balancing modernisation with heritage conservation, ensuring that shophouses continue to serve as vibrant hubs of social and economic activity that benefit the stakeholders. As shown in Figure 12 below, the detailed proposed performance-based framework has three primary areas of objective with different methods to approach: Each category is measured by relevant criteria. These crucial elements have been discussed previously in assessing the viability of repurposing shophouses' adaptability impact on end-user preference in building resilient and sustainable urban environments.

This framework combines quantitative breadth with qualitative depth, ensuring a comprehensive analysis of shophouse readaptation and its social implications. This framework utilises a matrix observation-based illustration of this shophouse phenomenon between shophouses from different municipalities. This practice aims for future recorded reference studies, which are more structured and easier for end-users to refer to according to locality. These cities 'morphological variations witness the multitude of ethnicities and civilisations that have settled there, that harmonious blending of development of the main central business district (CBD). This approach will demonstrate matrix zonings involving mapping locations, architectural styles, governing-statutory bodies, topography and layout explorations of selected buildings. Future research should focus on developing a comprehensive framework that integrates these elements, ensuring that shophouses remain inclusive, sustainable, and culturally significant for future generations.



**Fig. 11:** The insights gained from observation techniques have significant implications for the development of a shophouse (Source: Author)



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