Investigating Heritage-LED Urban Regeneration Strategy for the Historic District of Seremban

Chen Lit Ying[1], Nor Azlina Abu Bakar[1], Mohd Zairul[1,2]

[1]Department of Architecture, Faculty of Design and Architecture, Universiti Putra Malaysia,
[2]Institute for Social Sciences Studies, Universiti Putra Malaysia,Serdang Selangor, Malaysia
Email: m_zairul@upm.edu.my

Abstract
Due to accelerating urbanization and population growth, there is growing concern about how to regenerate deteriorated areas of old cities. Seremban's historic center currently exhibits various signs of urban degradation. A novel strategy for halting legacy deterioration and preserving the growth of historic cities is known as "heritage-led regeneration." However, within the context of redevelopment projects in Malaysia's historic cities, there is a lack of design requirements for a heritage protection strategy. This research aims to investigate historical conservation strategies to revive the dilapidated portion of Seremban's historical center. This study employs a qualitative approach, utilizing observation, desk review, and in-depth interviews to assess the need for a regeneration project and to propose an optimal heritage conservation plan for designing a regeneration project in Seremban's historical center. Additionally, the research will offer a design brief for a rehabilitation project in Seremban's historic district, contributing to making the area more livable and sustainably developed. Future studies may expand the scope of the design brief by incorporating additional variables to further enhance the heritage conservation and urban regeneration efforts.
Keywords: Heritage-Led Regeneration, Historic Cities, Conservation Strategy, Urban Regeneration, Seremban.

Introduction
Heritage cities in Malaysia are currently dealing with more severe urban issues due to growing urbanization, economic development, and population expansion. In Malaysia, new townships have been built on the outskirts of numerous old cities, subjecting them to intense pressure from commercialization, subpar architecture, and cultural uniformity that has eroded their sense of place. The idea of bringing new, modern development to historic districts, revitalizing the areas, and renovating historic buildings—often referred to as the tools for improving the cities—are central to Malaysia's development program for historic cities. However, many regeneration initiatives have failed to incorporate building conservation into their plans. As a

result, the old structures are typically demolished and replaced with new construction {Formatting Citation}.

Kuala Lumpur's, Penang's, Melaka's, and Taiping's local authorities are leading the charge in implementing conservation-based policies to regenerate historic places in their Special Area Plan. The measures and initiatives the local authorities took to address the issues on Malaysia's historical cities include zoning for conservation and buffer zones, pedestrianizing heritage cities, diversifying tourism offerings, managing heritage and tourism, and local participation in heritage conservation (Said et al., 2013). Urban regeneration initiatives are thought to breathe new life into historic locations by preserving the original community and enhancing their standard of living while also restoring the heritages' identity and the wealth of the illustrious past of historic cities (Ismail & Adam, 2020). Promoting growth that may enable the local populations of Malaysia's ancient cities to carry on with their traditional ways of life in newly revitalized physical environments while retaining their sense of place is the problem that urban regeneration faces in the country. A new, creative design that supports the demands of contemporary lifestyles with effective conservation work could help increase the value of the buildings.

According to Rancangan Tempatan Malaysia Vision Valley 2045 (RTMVV 2045) (Seman & Aiyub, 2023), Seremban city center, as Seremban's main historic urban core, plays an important role in smart tourism, edu-tourism and heritage tourism. However, due to rapid urbanization, Seremban's historical core is exposed to various physical deterioration symptoms of urban decay. This is especially true for the derelict and lack of conservation of historical buildings, declining the place characteristics with dramatic changes to replacing historical buildings and diminishing place meanings. The abandoned buildings and commercial sites have also discouraged the owners/investors from initiating new business ventures or cultural projects. There is a lack of practice for heritage conservation in the Seremban historical core in the context of urban regeneration, conservation, and sustainability (Seremban, 2025). Therefore, there is a need to revitalize the old town and safeguard its image as a heritage site.

The traditional approach of conservation that concentrates on building preservation, such as listed buildings, will not safeguard the urban heritage and secure the sense of place of the historic cities (Shamsuddin & Sulaiman, 2002). The vast majority of methods and action plans for identifying and protecting built heritage are often stalled at the designation (listing and conservation areas) stage. This is where intervention strategies are more suitable to deal with a singular heritage asset rather than with a whole urban heritage area and the many other less tangible features of townscape (Steinberg, 1996). The drawback of historic conservation concerning urban regeneration in Malaysia is the failure of stakeholders to think of conservation as a holistic approach. Conservation is merely based on the restoration and maintenance of individual buildings. Heritage-led regeneration is a new approach to prevent cultural heritage decay and decrepitude in the most important historical areas (Othman & Hamzah, 2013). Hence, this research aims to investigate the heritage conservation strategy in a regeneration project to revitalize Seremban's historic core.

The following are the research objectives of this paper
- To identify the requirement of a regeneration project in a historic core in the current heritage conservation strategy.
- To recommend best practice of heritage conservation strategy to regenerate Seremban historic core.

Literature Review
Urban regeneration
According to Lei and Zhou (2022) heritage tourism-led urban renewal in historical and cultural urban spaces, such as the case study of Datong, is a significant strategy for urban regeneration. This approach not only helps in creating a unique city brand but also plays a crucial role in attracting property developers and investors to cities, thereby contributing to the overall development of urban areas. Another study by Falanga and Nunes (2021), on participatory culture-led urban regeneration initiatives, such as the EU-funded project ROCK in sbon, have aimed to address urban disparities by engaging citizens and stakeholders in context-specific interventions. The study highlights that while such projects have shown promise in revitalizing deprived areas, there are challenges in fully realizing community expectations and fostering connections within and beyond the project areas. This research underscores the complexities and opportunities associated with cultural heritage-led urban regeneration efforts in tackling spatial divides and socioeconomic inequalities (Falanga & Nunes, 2021).

Urban regeneration, particularly in the context of heritage-led development, plays a crucial role in revitalizing urban areas by integrating cultural heritage into regeneration schemes. This integration not only aims to create vibrant urban spaces but also to spur economic growth, foster social cohesion, and address various societal issues (Pace, 2019). While heritage-led initiatives are essential for sustainable urban development, challenges arise, especially in dilapidated areas with historic fabric, where property-led redevelopment often dominates the practice (Lei & Zhou, 2022). The involvement of cultural heritage in urban regeneration processes is increasingly recognized as a driver for economic development, social cohesion, and the preservation of cultural identity, particularly in developing countries facing political instability and social challenges (Amado & Rodrigues, 2019). By leveraging heritage assets, cities can achieve urban sustainability goals and promote the regeneration of consolidated urban areas and communities (Martins, 2020). Furthermore, the participation of various stakeholders, including the public, private, and community sectors, is crucial in heritage-led urban regeneration projects to ensure their success and sustainability (Falanga & Nunes, 2021).

In the realm of industrial heritage, which has become a focal point of culture-led regeneration projects, the adaptation of industrial heritage sites to urban development is essential. This adaptation involves complex factors that influence the regeneration and development of industrial heritage areas (Wu et al., 2022). Additionally, the conservation and renewal of industrial heritage play a significant role in urban regeneration efforts, aligning with the broader goal of sustainable development (Li, 2022). In short, heritage-led urban regeneration is a multifaceted process that involves integrating cultural heritage into urban development to create sustainable, vibrant, and socially inclusive urban spaces. By leveraging heritage assets, engaging stakeholders, and addressing challenges specific to heritage areas, cities can achieve their regeneration goals while preserving their cultural identity and historical fabric.

Urban regeneration in Malaysia is a multifaceted process influenced by historical, cultural, and environmental factors that interact to shape the development and preservation of urban areas. The preservation and adaptive reuse of historical buildings are key components of urban regeneration efforts in Malaysia, with a particular emphasis on heritage structures (Zulkanain et al., 2022). Initiatives such as green adaptive reuse not only promote conservation practices but also enhance environmental aspects, especially in heritage cities (Alauddin et al., 2022). Sustainable regeneration of historic and cultural cores in cities is essential, encompassing economic, social, cultural, and environmental dimensions (Chahardowli et al., 2020a).

In the realm of urban regeneration, safeguarding and revitalizing historical and cultural districts are crucial for maintaining the historical context of cities and conserving traditional spatial patterns (Shen, 2022). The utilization of heritage building information modeling (HBIM) contributes to efficient construction and demolition waste management in Malaysia (Salleh et al., 2022). Additionally, both governmental and private organizations are increasingly focusing on the assessment and conservation of heritage villages, reflecting a growing commitment to preserving Malaysia's cultural heritage (Ahmad Badri & Ramli, 2022). Smilarly, the adaptive reuse of historic buildings not only aids in heritage conservation but also influences tourists' appreciation and visitation, as evidenced in Kuching city, Malaysia (Ariffin et al., 2020). Furthermore, significant historical discoveries in Malaysia, such as those in Bujang Valley, underscore the country's rich archaeological heritage (Mohd Aminuddin et al., 2019). The rise in landslides in Malaysia is associated with infrastructural development, underscoring the importance of sustainable urban planning practices (Majid et al., 2020).

Regeneration Project in Historic Areas

Regeneration in historic areas involves a multifaceted approach that encompasses various aspects such as urban identity, cultural heritage, sustainability, and community involvement. Studies have shown that urban regeneration efforts aim to enhance the sense of belonging and identity of local inhabitants within the historical context of the place (Hussein et al., 2019). These initiatives often involve strategic actions applied to heritage sets that trigger a domino effect of regeneration across different spatial scales, from individual buildings to entire neighborhoods and cities (Amado & Rodrigues, 2019). Urban regeneration typically integrates physical, socio-economic, and environmental aspects to revitalize urban areas under pressure from population growth and development policies (Natividade-Jesus et al., 2019).

Preservation and regeneration of historic areas have gained significance due to the destruction of social fabric caused by large-scale developments, leading to a shift towards prioritizing the conservation of historic districts (Zhang et al., 2019). Successful regeneration projects have demonstrated the benefits of mixing different income groups and including marginalized communities, contributing to the overall well-being of local populations (Cattaneo et al., 2020). Additionally, the adaptive reuse of heritage assets plays a crucial role in transforming historic buildings into sustainable and accessible spaces, fostering regeneration while preserving cultural heritage (Yoon & Lee, 2019). Furthermore, the regeneration of historical and cultural cores of cities has been linked to economic improvement and the preservation of urban cultural heritage, highlighting the importance of maintaining the historical context of cities (Chahardowli et al., 2020a).

Regeneration efforts extend beyond urban areas to include forest ecosystems, where studies have explored factors influencing regeneration conditions in forests over time, emphasizing

the role of ecological recovery and local land user motivations (Kimambo & Naughton-Treves, 2019). In the context of changing climates and disturbance regimes, understanding regeneration failure is crucial for effective forest management and post-fire recovery in coniferous forests (Rumann et al., 2022).

Regenerating historic areas in Malaysia involves a comprehensive approach that integrates various strategies to preserve cultural heritage, enhance community engagement, and promote sustainable development. The case study of the Central Market Waterfront in Kuala Lumpur exemplifies efforts to revitalize historic waterfront areas, emphasizing the regeneration of identity within these spaces (Iqbal et al., 2020). Participatory placemaking initiatives, as observed in cities like George Town, Ipoh, and Kuala Lumpur, have become popular in urban regeneration, particularly in historic urban centers, showcasing the importance of community involvement in shaping the regeneration process (Zaman et al., 2022). Projects such as the River of Life initiative in Kuala Lumpur have demonstrated positive impacts on the conservation of urban heritage quarters, highlighting the significance of such endeavors in preserving historical areas and promoting sustainable urban development (Zuraimi & Radzuan, 2021).

Understanding place attachment in tourist attraction areas within Kuala Lumpur City Centre is crucial for informing future regeneration efforts, emphasizing the importance of creating meaningful connections between visitors and historic sites (Ujang et al., 2019). Developing sustainable urban regeneration evaluation methods tailored to the Malaysian context is essential for assessing the effectiveness and sustainability of regeneration projects, ensuring that they meet the diverse needs of stakeholders and contribute to long-term urban development goals (Hashim, 2023). Nevertheless, regeneration projects in historic areas require a holistic approach that considers cultural heritage, community engagement, sustainability, and ecological factors to ensure the preservation and revitalization of these valuable spaces.

Concept of Heritage-LED Regeneration
Heritage-led regeneration is a strategic approach that integrates cultural heritage conservation into urban renewal initiatives to create vibrant and sustainable urban spaces. This concept aims to leverage the historical significance of heritage buildings and sites to drive economic development, enhance community well-being, and preserve cultural identity. By incorporating heritage assets into regeneration schemes, cities can create unique and attractive urban quarters that foster a sense of place and promote social cohesion (Pace, 2019).

In the context of heritage tourism-led urban renewal, the development of tourism precincts and heritage trails plays a crucial role in transforming historical and cultural urban spaces into thriving tourist destinations. These initiatives not only contribute to the preservation of cultural heritage but also stimulate economic growth and promote tourism (Lei & Zhou, 2022). Sustainable regeneration frameworks for urban industrial heritage emphasize the potential of integrating heritage conservation with post-industrial redevelopment to drive economic revitalization. By combining heritage preservation, adaptive reuse, and strategic planning, cities can unlock the economic and cultural value of industrial heritage sites (Arbab & Alborzi, 2021).

Heritage-based methods for urban regeneration in developing countries focus on strategies for heritage preservation, valorization, and requalification. By delineating heritage sets and implementing regeneration processes that extend beyond individual buildings, cities can

create sustainable and culturally rich urban environments (Amado & Rodrigues, 2019). Community participation and stakeholder engagement are essential components of heritage-led regeneration plans. By involving local residents, artists, and citizen groups in the regeneration process, cities can ensure that heritage conservation efforts align with community needs and aspirations, fostering a sense of ownership and pride in cultural heritage (Luca et al., 2021). This approach to regeneration is deemed inclusive, particularly in addressing social issues such as social exclusion within a multicultural community. The studies have provided an overview of the correlation between economic growth, the preservation and rehabilitation of culturally built heritage, and the social benefits of regeneration initiatives driven by heritage.

Nevertheless, heritage-led regeneration offers a holistic approach to urban development that recognizes the value of cultural heritage in shaping vibrant and resilient cities. By integrating heritage conservation, community engagement, and sustainable practices, cities can leverage their historical assets to create inclusive, livable, and culturally rich urban environments.

Heritage-LED Regeneration In Melaka and Georgetown
To explore the concept of heritage-led regeneration in Melaka and Georgetown, it is crucial to examine the specific dynamics and initiatives that have influenced these historic cities. Melaka and Georgetown, designated as UNESCO World Heritage Sites, have undergone significant transformations through heritage-led regeneration efforts aimed at preserving their cultural heritage while promoting sustainable development and economic growth (R. Said et al., 2020). In Georgetown, the George Town World Heritage Incorporated (GTWHI) oversees the management of heritage, underscoring the city's dedicated focus on heritage conservation (Lou et al., 2021).

In Melaka and Georgetown, the economic value of properties within the UNESCO World Heritage Zones has notably increased, with property prices experiencing significant rises following the recognition of these areas as World Heritage Sites (Cheng et al., 2021). This economic revitalization demonstrates the positive impact of heritage-led regeneration on property values and overall economic development within these historic cities. The adaptive reuse of heritage properties in Melaka and Georgetown has been a pivotal strategy in heritage-led regeneration, enabling the preservation of historical buildings while repurposing them for contemporary uses. This approach not only contributes to heritage conservation but also stimulates cultural tourism and economic activity within these urban areas (Yoon & Lee, 2019). Stakeholder engagement and participatory approaches have played a critical role in heritage-led regeneration initiatives in Melaka and Georgetown. By involving local communities, businesses, and organizations in the regeneration process, these cities have ensured that heritage conservation efforts align with the needs and aspirations of the residents in these historic areas (Spina, 2019).

Moreover, integrating heritage preservation with urban development strategies has been essential in creating vibrant and sustainable urban environments in Melaka and Georgetown. By leveraging the historical significance of these cities, urban planners and policymakers have successfully balanced heritage conservation, economic development, and community well-being (Arbab & Alborzi, 2021). Furthermore, heritage-led regeneration in Melaka and Georgetown stands as a model for successful urban revitalization that prioritizes cultural heritage preservation, community engagement, and sustainable development. By capitalizing on their rich historical legacies, these cities have crafted distinctive and thriving urban spaces that honor their heritage while embracing the future.

Conservation Strategy in Melaka and Georgetown

In Melaka and Georgetown, the conservation strategy plays a pivotal role in preserving the rich cultural heritage of these UNESCO World Heritage Sites while promoting sustainable development and economic growth. The conservation efforts in these historic cities involve a multifaceted approach that integrates various methodologies and technologies to ensure the protection and revitalization of their unique heritage. One essential aspect of the conservation strategy in Melaka and Georgetown is the documentation and 3D visualization of cultural heritage sites. By utilizing technologies such as UAVs for site documentation, conservationists can create detailed records of heritage structures, aiding in the development of effective conservation and management plans (Ismael, 2021). This documentation is crucial for understanding the historical significance of these sites and guiding conservation efforts. Adaptive reuse is another key component of the conservation strategy in Melaka and Georgetown.

By repurposing old buildings like the Old Johar Market in Melaka, conservationists can promote more effective protection of cultural heritage sites while ensuring their continued relevance and functionality within the urban fabric (Rukayah et al., 2021). This approach not only preserves historical buildings but also contributes to the sustainable use of heritage assets. Furthermore, valuing cultural landscape heritage in historic areas is essential for guiding conservation efforts in Melaka and Georgetown. Proposed assessment criteria, such as those developed in Thailand, help identify heritage conservation and management priorities, allowing for the acceptance of changes in historical areas while ensuring the preservation of cultural landscapes (Thinnakorn & Anurak, 2022).

This holistic approach considers the complex processes involved in heritage conservation and management. Incorporating digital technologies and visualization principles into heritage rehabilitation efforts is also crucial for enhancing conservation practices in Melaka and Georgetown. By developing digital conservation handbooks and utilizing visualization tools, such as those investigated for heritage rehabilitation, conservationists can improve the planning and implementation of conservation projects, ensuring the effective preservation of heritage structures and sites (Al-Sakkaf et al., 2020; Trillo et al., 2020). In a nutshell, the conservation strategy in Melaka and Georgetown encompasses a range of approaches, from documentation and adaptive reuse to cultural landscape valuation and digital technologies. By integrating these methodologies, conservationists can safeguard the cultural heritage of these historic cities while promoting sustainable development and resilience for future generations.
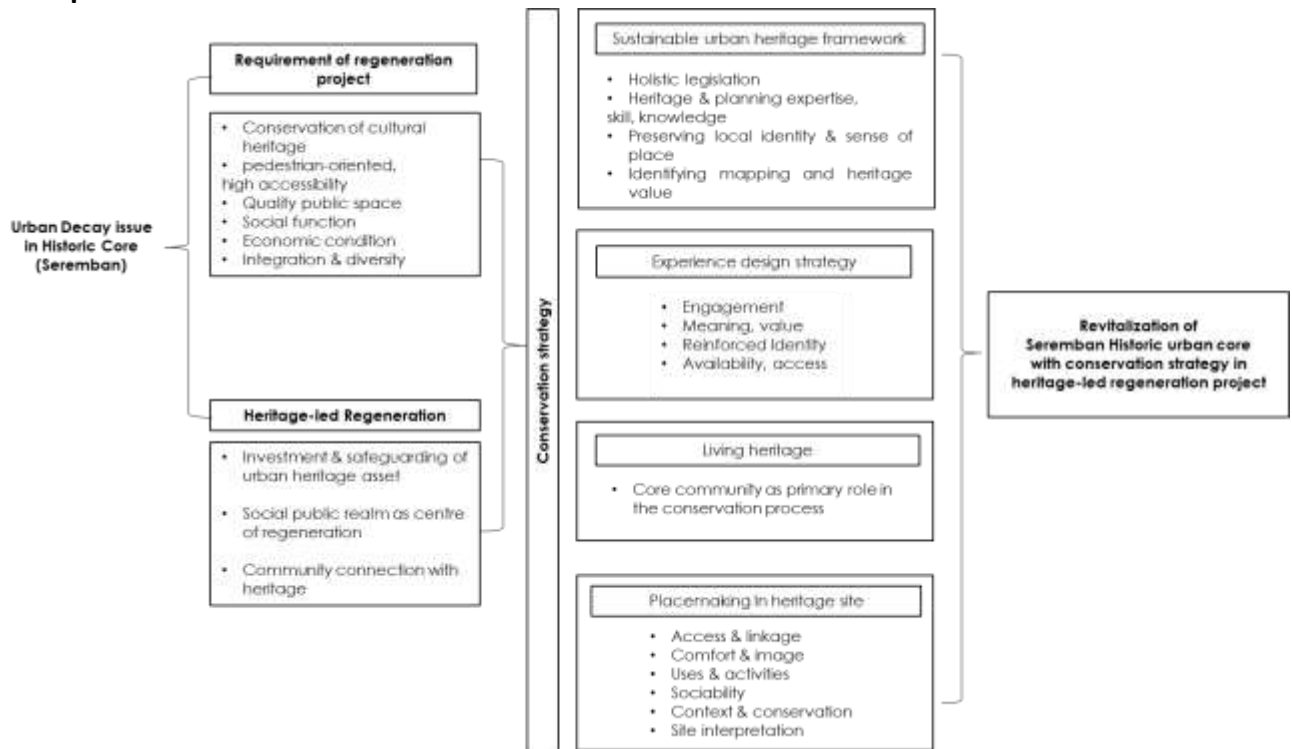
Conceptual Framework

Figure 1 Conceptual framework
Source: Author, 2023

The conceptual framework for the revitalization of the Seremban historic urban core integrates a conservation strategy within a heritage-led regeneration project. The framework identifies essential requirements for the regeneration project, including the conservation of cultural heritage, pedestrian-oriented high accessibility, quality public spaces, social functions, economic considerations, and promoting integration and diversity. It emphasizes heritage-led regeneration by advocating for investment and safeguarding urban heritage assets, utilizing social public realms as centers of regeneration, and fostering community connections with heritage.

The conservation strategy comprises three key approaches: an experience design strategy that enhances engagement, meaning, value, reinforced identity, and accessibility; promoting the concept of living heritage, where heritage is an active and celebrated part of community life; and placemaking within heritage sites to create vibrant, functional, and meaningful spaces that encourage community interaction. This framework is encapsulated within a sustainable urban heritage framework, ensuring that conservation and regeneration efforts are effective in the short term and sustainable for future generations. The central objective of this framework is to achieve the revitalization of the Seremban historic urban core by employing a balanced approach that integrates heritage conservation with urban development and community engagement strategies.

Method
The research utilized a qualitative methodology to gather data essential for addressing the research objectives and questions. The data collection phase employed various methods, including in-depth interviews, desk reviews, and case studies. Primary data were obtained

through in-depth interviews, while secondary data were sourced from desk reviews and case studies.

Data collection on design considerations and requirements in heritage-led regeneration schemes involved reviewing initial information, such as case citations, official publications from relevant authorities, and articles from journals and mass media. The research specifically concentrated on the historic core of Seremban, while the historic urban centers of Melaka and George Town were selected as primary case studies due to their significant heritage-led regeneration initiatives.

The study employed purposive sampling, targeting information-rich cases to ensure the data collection process was focused, relevant, and efficient. The research primarily utilized qualitative interviews to gather primary data, with three main objectives:

1. To ascertain existing policies, measures, and future plans of the local authority regarding the management of the Seremban historic core.
2. To gauge local community perceptions concerning the conservation of local heritage.
3. To explore the optimal heritage conservation strategy for a regeneration project in Seremban.
4.

Interviewees from the local authority included a town planning officer and a professional architect, while local community representatives comprised key personnel from the local heritage body and business owners within the historic core of Seremban. Consequently, two sets of semi-structured interview questions were developed, tailored to the specific backgrounds, knowledge, and perspectives of the local authority and community members.

The qualitative interview data were analyzed using thematic analysis, which involved identifying recurring themes, topics, ideas, and patterns. Data organization was facilitated by ATLAS.ti, a software that aids in reducing the data set into a more manageable form for analysis. In thematic analysis, codes and themes serve as data reduction techniques. Using the software, the researcher "coded" the data by applying succinct, descriptive phrases to larger data segments, summarizing them for subsequent analysis.
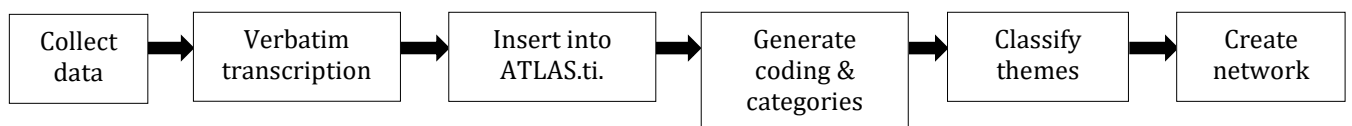
| Collect data | → | Verbatim transcription | → | Insert into ATLAS.ti. | → | Generate coding & categories | → | Classify themes | → | Create network |

Figure 2. Process of data analysis using ATLAS.ti.
Source: Author, 2023

Result and Discussion
The interview transcriptions were analyzed as supportive data using a thematic analysis matrix to organize identified codes and develop themes. To answer Sub Research Question (RQ) 1, five key themes emerged as essential requirements: 1) Conservation and Preservation, 2) Governance and Collaboration, 3) Cultural Integration, 4) Urban Planning, and 5) Economic Development and Entrepreneurship. To address Sub RQ 2, four final themes were identified for an effective heritage conservation strategy: 1) Heritage Building Conservation, 2) Adaptive Reuse and Integration, 3) Public Space Revitalization, and 4) Community Engagement and Awareness.

Table 1
Thematic Analysis Matrix (Zairul et al., 2017)

Main RQ: How does heritage conservation strategy assist regeneration projects to revitalize Seremban's historic core?

Aim of the research: To investigate the heritage conservation strategy in the regeneration project to revitalize Seremban's historic core.

Sub RQ 1:	Deductive	Inductive Codes	
		Coding	**Final Theme**
What are the requirements for a regeneration project in Seremban historic core?	- Requirements for a regeneration project - Heritage-led regeneration	• Façade preservation • Heritage preservation and conservation • Gazetting support	Conservation and Preservation
		• Public-Private cooperation • Compliance with local plans	Governance and Collaboration
		• Integration with local food • Integration with local events	Culture Integration
		• Pedestrianization • Streetscape enhancement • Traffic and parking management • Safety and security	Urban Planning
		• Reinvention of craftsmen industries • Unique business concept	Economic Development and Entrepreneurship
Sub RQ 2: What is the best practice of heritage conservation strategy to regenerate Seremban's historic core?	- Heritage conservation strategy	• Building preservation • Facade enhancement Structural maintenance	Heritage building conservation
		• Adaptive reuse • Integrating with local culture	Adaptive reuse and integration
		• Vibrant activity • Public space design • Mural art • Placemaking	Public space revitalization
		• Community engagement • Heritage awareness	Community engagement and awareness

Source: Author, 2023

Requirements For a Regeneration Project in Seremban Historic Core

Based on the primary and secondary data, the requirements of a heritage-led regeneration project emphasize the need to protect and safeguard historical and cultural heritage sites and structures. In urban regeneration initiatives, it is crucial to prioritize the preservation of a city's continuity and authenticity, as these factors are fundamental elements of its place identity (Lei & Zhou, 2022). By preserving heritage assets, local communities can maintain a connection to their past, promote cultural diversity, and foster a sense of pride and belonging. Besides, government policies also play an important role in preventing unnecessary changes in heritage building and heritage building retention in a historic district (Ismail, 2018).

A regeneration project shall consider involving public and private entities in planning and implementation for more comprehensive and successful outcomes. (Chahardowli et al., 2020b) highlighted that a regeneration project can embrace participatory approaches by actively involving local stakeholders to enhance social management and promote community

empowerment. Collaboration between the public and private sectors will allow the pooling of resources, expertise, interest, and diverse perspectives, which can contribute to effective decision-making and achieving shared goals.

The study also found that the local community is aware of Seremban's historic core's rich multiracial characteristics, local delicacies, and local trading culture. (Chahardowli et al., 2020b) noted that development strategies for historic cores can effectively incorporate functional features, physical characteristics, local and seasonal retail, stakeholder participation, cultural and religious events, and creative and native culture. Therefore, it is suggested that regeneration projects integrate local culture to respond appropriately to the site context.

The study revealed that urban planning in Seremban's historic core is perceived as ineffective, primarily due to inadequate parking space and persistent traffic congestion issues. These problems hinder development and discourage new business ventures within the dense city center. Given the evolving transformation of Seremban's historic core into a heritage-tourism district, addressing these urban planning challenges is imperative by prioritizing pedestrian-friendly design. According to Hew et al., (2014), revitalization efforts should prioritize the needs of local communities rather than solely focusing on tourism development. Additionally, enhancing safety and security in the old town, especially during the evening and night when most shops are closed, is crucial.

Based on interview findings, as a traditional business district, Seremban should inject new and young businesses, such as reinventing craftsmen industries and incorporating unique business concepts, to foster economic development in urban regeneration. Burnham (2022) emphasized that successful urban regeneration initiatives are not solely the result of government leadership but also involve social enterprises driven by civic interest and entrepreneurship. Thus, regeneration projects should consider the active participation of social enterprises, civic interest, and entrepreneurship to add dynamism, creativity, and community engagement to the regeneration process.

Heritage Conservation Strategy to regenerate Seremban Historic Core
To investigate a suitable heritage conservation strategy for regeneration projects in Seremban's historic core, interview data reinforced and complemented findings from existing literature, offering real-life examples and perspectives on heritage conservation strategies. Building preservation, facade enhancement, and structural maintenance are crucial for conserving Seremban's historic core, given the prevalence of dilapidated heritage buildings, particularly traditional shophouses. Abdullah et al., (2013) emphasized the importance of compatibility, visual harmony, meaning, and appropriate architectural design tools to respect authenticity and achieve aesthetic fitness in a historical context. This approach preserves the historical and cultural significance of the site, enhances the townscape's visual appeal, and ensures the safety and longevity of building structures.

Successful adaptive reuse projects in Seremban, such as LEHPAK Café, Bunga & Gula Café, and Seremban Citizen Gallery, have transformed original buildings into vibrant and attractive spots in the old town. These projects conserve heritage assets and save energy, resources, and emissions that would otherwise be required for demolition and new construction. Chahardowli et al., (2020b) suggested incorporating functional features, physical characteristics, local and seasonal retail, stakeholder participation, cultural and religious events, and creative and native culture to develop historic cities.

Effective heritage conservation strategies in urban regeneration also involve integrating vibrant activities and elements such as public space design, mural art, and placemaking. Lorong Seni Seremban, a 500-meter-long street art attraction, exemplifies "Returning the street to the public," providing space for tourism, leisure, and placemaking activities. The local government encouraged local street vendors to establish businesses in Lorong Seni, promoting cultural and social vibrancy through activity-based interventions (Samir et al., 2019). Dreyfuss et al., (2013) also suggested balancing heritage preservation and creative architectural elements to ensure urban spaces' vitality. Revitalizing public spaces within heritage sites enhances the overall sense of place, encourages community engagement, and promotes local culture and heritage.

The study identified a lack of awareness among local communities regarding heritage conservation, contributing to the abandonment and demolition of heritage shophouses. (S. Y. Said et al., (2013) highlighted the importance of public awareness in urban conservation processes. Actively involving and empowering local communities nurtures a heritage community, ensuring that regeneration efforts align with local needs and aspirations. Stakeholders should be involved in policy design and enforcement to address heritage conservation concerns effectively. Promoting awareness and community involvement mitigates abandonment and demolition issues, fostering a sustainable approach to heritage preservation and urban regeneration.

Conclusion

This study aims to provide a valuable resource for regeneration initiatives in Malaysia's historical cities, addressing the shortage of comprehensive guidelines for heritage-focused revitalization projects in towns beyond Melaka and Penang. By focusing on the historic core of Seremban as a case study, the research seeks to create a customized design brief that considers the area's distinctive features and the challenges associated with urban decline.

The study highlights several important practical implications for the regeneration of Seremban's historic core, emphasizing conservation and preservation, governance and collaboration, culture integration, urban planning, economic development, entrepreneurship, and heritage conservation strategies. It underscores the necessity of prioritizing the protection and safeguarding of historical and cultural heritage sites and structures in heritage-led regeneration projects. Preserving a city's continuity and authenticity is emphasized as fundamental to maintaining its place identity. Government policies play a crucial role in preventing unnecessary alterations to heritage buildings and promoting their retention in historic districts.

The significance of governance and collaboration is also highlighted, advocating for the involvement of both public and private parties in the planning and implementation processes. This collaborative approach allows for pooling resources, expertise, and diverse perspectives, leading to more comprehensive outcomes. Integrating local culture into regeneration projects is another vital aspect, responding to the site's context and acknowledging the multiracial characteristics, local delicacies, and trading culture present in Seremban's historic core. Incorporating functional features, physical characteristics, and cultural events can effectively enhance the area's vibrancy and uniqueness.

The study further emphasizes addressing urban planning challenges, such as inadequate parking space and traffic congestion, by prioritizing pedestrian-friendly design. Enhancing safety and security, particularly during evening and nighttime, is crucial to encouraging business growth within the dense city center. Additionally, economic development and

entrepreneurship are key factors in the regeneration process. The study suggests injecting new and young businesses, reinventing craftsmen industries, and incorporating unique business concepts to foster economic growth. It highlights the value of social enterprises, civic interest, and entrepreneurship in adding dynamism, creativity, and community engagement to the regeneration process.

Moreover, the research stresses the importance of heritage building conservation, adaptive reuse, public space revitalization, community engagement, and awareness. These strategies contribute to preserving the area's historical and cultural significance, enhancing the overall sense of place, encouraging community participation, and fostering sustainable approaches to heritage preservation and urban regeneration. By considering and implementing these practical implications, stakeholders and decision-makers can guide the regeneration of Seremban's historic core towards a more sustainable, culturally vibrant, and community-centric future.

The research faced limitations, including a lack of comprehensive written investigations on the heritage significance and conservation movements specific to the Seremban historic core, which hindered analysis and understanding. Accessing archival information from local authorities and NGOs was challenging, limiting the availability of historical data and records. Socioeconomic and physical data, such as demographics, economic indicators, building demolitions, and abandonment rates, were insufficient or inaccessible. Further research and data collection are necessary to bridge these gaps in understanding the heritage significance, conservation efforts, and socioeconomic aspects of the Seremban historic core.

Besides the Seremban historic core, other historic sites in various states of Malaysia face deterioration due to urban decline. Heritage-led regeneration initiatives aim to revitalize and preserve these areas but are not without limitations. Future research can explore different conservation initiatives implemented in various historic cities across Malaysia, analyzing the drawbacks of heritage-led regeneration to provide a comprehensive understanding of these initiatives' limitations and offer valuable insights into effective strategies to overcome them. This knowledge can contribute to developing more inclusive, sustainable, and socially beneficial approaches to heritage-led regeneration in Malaysia's historic areas.

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