



A Study of the Adaptive Reuse Concept in Colonial Buildings in the Jalan Kawi Area, Malang City

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How to cite (in APA style):

Siregar, Aldika Prananda Vebrino, Ir. Gatot Adi Susilo, M.T. (2026). A Study of the Adaptive Reuse Concept in Colonial Buildings in the Jalan Kawi Area, Malang City. *Architectural Research Journal*. 6 (1), pp. 28-32.

DOI: <https://doi.org/10.22225/arj.6.1.2026.28-32>

Abstract—The Kawi Street area in Malang City contains a number of colonial buildings that have the potential to be preserved through the concept of adaptive reuse, which allows changes in the function of old buildings without eliminating their historical and architectural values. This study aims to explore the potential application of adaptive reuse to colonial buildings along Kawi Street by analyzing the opportunities, challenges, and impacts of this strategy on area sustainability and urban revitalization. Using a descriptive qualitative approach involving field observations, interviews with stakeholders, and a review of relevant literature, the study finds that although many colonial buildings in this area remain suitable for revitalization, there are constraints related to preservation regulations and public awareness of architectural heritage values. On the other hand, adaptive reuse can provide economic and social benefits, such as increased tourism attractiveness and the creation of sustainable public spaces. Therefore, synergy between the government, the community, and relevant stakeholders is required to implement this strategy effectively.

Keywords: adaptive reuse; colonial architecture; urban heritage; Kawi street, Malang; building conservation

1. Introduction

The Kawi Street area in Malang City is recognized as one of the urban heritage districts characterized by a concentration of colonial-era buildings that reflect the historical and architectural identity of the city. As urban development continues to intensify, these heritage buildings face increasing pressure from modernization, changing land-use patterns, and economic demands. Consequently, preserving colonial architecture while accommodating contemporary urban needs has become a significant challenge for sustainable urban development. In this context, adaptive reuse has emerged as a strategic approach that allows historic buildings to be reused for new purposes while maintaining their architectural and cultural significance.

The concept of adaptive reuse has been widely discussed as an effective strategy for

conserving heritage buildings while ensuring their continued relevance in modern society. According to Saputra and Purwanti (2020), the implementation of adaptive reuse in Jakarta's Old Town area demonstrates how colonial buildings can be transformed into functional spaces while maintaining their historical value. Their study reveals that the conversion of heritage buildings into facilities such as Kedai Seni Djakarta and Wonderloft Hostel has contributed to increased social and economic activities without compromising the original character of the buildings. Similarly, Artha and Purwanti (2022) argue that adaptive reuse provides a viable solution for preserving neglected historic structures, as illustrated by the Jakarta Maritime Museum, where new functions were successfully introduced while maintaining the building's primary architectural form and cultural identity.

Further evidence of the benefits of adaptive reuse can be observed in the transformation of the De Tjolomadoe building in Surakarta. Fanaya,

Septanti, and Novianto (2024) demonstrate that the conversion of a former industrial facility into a modern public and commercial space has generated new economic opportunities while preserving the historical significance of the site. Likewise, Setyohadi (2024) highlights the importance of preserving symbolic and architectural values through adaptive reuse by integrating semiotic approaches into the conservation of the Cepiring Sugar Factory in Kendal. The study emphasizes that elements such as chimneys and industrial machinery should be maintained as representations of local identity and collective memory.

The challenge of balancing preservation and modernization is also evident in several studies. Tumanggor (2025), in examining the Rajabally Building in Malang City, found that commercial adaptation often creates tensions between contemporary functional requirements and the preservation of colonial architectural characteristics. Similar findings were reported by Kusumaningtyas and Purnomo (2022), who studied Rumah Bodrie 1934 in Surabaya and demonstrated that colonial buildings can be successfully adapted into commercial functions such as cafés and creative studios while retaining their architectural integrity. Furthermore, Ayudyawati and Handajani (2022) explain that the adaptive reuse strategy implemented at M Bloc Space Jakarta through insertion and parasitic design methods allows modern functions to coexist with historic structures, highlighting the importance of balancing conservation objectives with functional innovation.

Beyond architectural preservation, adaptive reuse has also been shown to generate broader social and economic benefits. Ilmi and Widiyanti (2025) found that the revitalization of Gedung Juang 45 Tambun increased public awareness of local history and encouraged economic growth through heritage-based tourism activities. Similarly, Sihombing and Soewarno (2023) revealed that the adaptive reuse of Braga Hotel in Bandung strengthened the area's identity while increasing its economic value through tourism and commercial activities. Putri et al. (2024) further confirm that adaptive reuse enables heritage buildings to remain relevant to contemporary societal needs without sacrificing their historical character. Collectively, these studies indicate that adaptive reuse serves as an effective strategy for preserving colonial architecture, strengthening place identity, enhancing urban sustainability, and generating positive socio-economic impacts for surrounding communities.

Despite the growing body of research on adaptive reuse in Indonesia, studies focusing on colonial buildings in the Kawi Street area of Malang remain limited. Given the area's unique concentration of colonial architecture and its strategic role within the urban fabric of Malang, a comprehensive investigation is needed to understand how adaptive reuse can support heritage conservation while fostering sustainable

urban development. Therefore, this study aims to analyze the application of adaptive reuse in colonial buildings along Kawi Street, identify the opportunities and challenges associated with its implementation, assess its social and economic impacts on the surrounding community, and formulate strategies that integrate heritage preservation with sustainable urban development. Ultimately, the research seeks to contribute to the development of adaptive reuse practices that maintain the cultural significance of historic urban areas while ensuring their continued relevance in contemporary cities.

2. Methods

This study employs a descriptive qualitative approach aimed at understanding the application of the adaptive reuse concept to colonial buildings in the Kawi Street area, Malang City. This approach is chosen because it provides a comprehensive overview of the architectural conditions of the buildings, the functional changes that have occurred, and their impacts on the social and economic life of the surrounding community.

Research data were collected through field observations and literature studies. Observations were conducted to examine the physical condition of colonial buildings, the functional adaptations applied, and the social and economic activities emerging in the surrounding environment. Meanwhile, literature studies were used to strengthen the analysis through theories and references from previous research related to adaptive reuse and the conservation of historic buildings. The collected data were analyzed using descriptive qualitative methods to illustrate the potential, challenges, and impacts of adaptive reuse implementation on the sustainable preservation and development of the Kawi Street area. the research diagram can be seen as follows

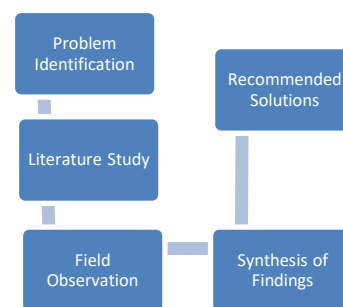


Figure 1. Research diagram
Source: Siregar, 2025

3. Results and Discussion

Based on field observations, the Kawi Street area still contains a number of colonial-style buildings with distinctive architectural characteristics such as symmetrical façades, large window openings, simple geometric ornaments, and the use of materials such as exposed brick, thick plaster finishes, and hipped

(limasan) roofs. In general, these buildings are in relatively well-maintained condition, particularly those currently used as retail spaces, clinics, and guest houses. However, several buildings are less well maintained, showing signs of deterioration such as peeling paint, damaged wooden frames, or façade alterations that do not comply with conservation principles.

Visually, the colonial character along Kawi Street remains fairly strong, although pressures from modernization are increasing. The addition of signage, renovations without proper supervision, and the construction of large-scale new buildings have begun to affect the visual uniformity of the area. These findings indicate that colonial buildings on Kawi Street still possess significant potential to be developed through an adaptive reuse approach; however, integrated management is required to prevent the area's identity from being further eroded by modern development.

Existing Patterns of Adaptive Reuse Implementation



Figure 2. Existing Buildings on Site
Source: Siregar, 2025

Several colonial buildings along Kawi Street have already undergone functional adaptation, although not formally referred to as adaptive reuse. These transformations have emerged as responses to the demand for commercial space and urban lifestyle changes. The adaptation patterns identified include :

1. Colonial buildings adapted into retail spaces and guest houses. This adaptation generally preserves the original façade to attract visitors through heritage aesthetics, while interior spaces are modified to meet comfort standards and commercial functions.
2. Conversion of colonial residential buildings into retail spaces and guest houses. This approach retains the main building structure but often adds modern elements such as canopies, new fences, or additional partition walls.
3. Buildings that are preserved but not optimally utilized. Some owners choose to maintain the physical form of the buildings merely as property assets without meaningful functional adaptation. This reduces social and economic activity in the

area and increases the risk of gradual building deterioration.

These patterns indicate that functional adaptation is already occurring on site; however, clearer and more structured adaptive reuse principles are needed to ensure that historical values and the visual character of the area are not lost.

Potential for Adaptive Reuse Implementation on Kawi Street



Figure 3. Existing Buildings on Site
Source: Siregar, 2025

Field findings reveal several strategic potentials that can support more optimal implementation of adaptive reuse:

1. Strategic location as a commercial corridor and access route to educational and tourism areas. Kawi Street is located near the city center, Ijen Boulevard, and other heritage areas, giving it high economic value for the adaptation of public and commercial spaces.
2. Physical condition of buildings suitable for revitalization. Many colonial buildings along this corridor still have strong structural conditions, allowing functional transformation without major reconstruction, making adaptation costs relatively efficient.
3. Aesthetic appeal that can enhance economic value. The distinctive colonial architectural style has high aesthetic value that can be optimized as an area identity, attracting culinary, retail, and heritage tourism sectors.
4. Opportunities for developing public spaces and social activities. Adaptive reuse can create interactive spaces such as art galleries, community centers, coworking spaces, or boutique shops that enrich local activities.

These potentials position adaptive reuse as a highly relevant strategy for enhancing the functionality of the area while preserving its colonial heritage values.

Challenges in Implementing Adaptive Reuse

Despite its significant potential, the implementation of adaptive reuse on Kawi Street faces several challenges:

1. Lack of binding regulations related to the preservation of colonial façades and structures. Not all buildings on Kawi Street are designated as cultural heritage sites, allowing owners to make modifications that may damage original characteristics.
2. Limited awareness among building owners of historical value. Many owners view buildings primarily as economic assets rather than cultural heritage, resulting in adaptation approaches that prioritize efficiency and modern functionality.
3. Perception of high maintenance and adaptation costs. The maintenance of colonial materials such as teak wood, large ventilation systems, and original ornaments is considered more costly than modern renovations using concrete and prefabricated materials.
4. Pressure from modern development and changes in spatial planning. The growth of multi-story commercial buildings can alter the scale of the area and put pressure on smaller colonial buildings.

These challenges indicate the need for policy frameworks and multi-stakeholder collaboration to ensure that heritage building adaptations balance modern needs with historical values.

Social and Economic Impacts of Adaptive Reuse

The implementation of adaptive reuse in colonial buildings along Kawi Street demonstrates several positive impacts:

1. Increased economic activity through culinary, retail, and tourism sectors. Historic buildings converted into commercial spaces have high attractiveness and potential to increase visitor traffic.
2. Strengthening area identity as a modern heritage corridor. Active and functional colonial buildings create a positive image and distinguish Kawi Street from other commercial areas in Malang City.
3. Enhanced involvement of local communities. Adaptive reuse encourages the formation of more inclusive public spaces such as community cafés, creative spaces, or art venues that strengthen social interaction.
4. Sustainable conservation through active building use. Productively used buildings are better maintained and less likely to be abandoned or demolished.

These impacts align with previous studies indicating that adaptive reuse provides economic added value while increasing public awareness of heritage.

Implications and Development Strategies

Based on the research findings, several implementation strategies can be proposed:

1. Formulation of adaptive reuse design guidelines specifically for the Kawi Street heritage corridor, including regulations on façades, signage, and structural modification limits.
2. Provision of tax incentives or technical assistance for building owners who implement conservation in accordance with established principles.
3. Collaboration among government agencies, heritage communities, academics, and business actors to support the functional adaptation process.
4. Development of area branding as a “Heritage Commercial Corridor” to enhance economic value and tourism appeal.
5. Public education programs on the value of colonial architecture to increase community awareness of the importance of preserving historic buildings.

4. Conclusion

The findings of this study indicate that the implementation of adaptive reuse in colonial buildings along Kawi Street, Malang City, has occurred informally through the transformation of heritage buildings into various commercial functions, including retail outlets, cafés, clinics, and guest houses. Although these functional adaptations have enabled the continued use of historic buildings, the process has not yet been guided by a comprehensive adaptive reuse framework that prioritizes the preservation of historical and architectural values. Nevertheless, the colonial buildings in the area retain considerable potential for revitalization due to their relatively good physical condition, strategic urban location, and distinctive architectural characteristics that contribute significantly to the identity of the area.

The study also reveals several challenges that hinder the effective implementation of adaptive reuse. These include the absence of specific preservation regulations, limited awareness among property owners regarding the importance of architectural heritage conservation, the relatively high costs associated with building adaptation, and increasing development pressures that may gradually alter the historical character of the area. Despite these challenges, adaptive reuse has generated positive social and economic impacts by stimulating local economic activities, strengthening the identity of Kawi Street as a heritage corridor, enhancing

community interaction, and supporting the sustainable conservation of historic buildings through continuous use.

Overall, adaptive reuse can be considered a relevant and sustainable strategy for preserving colonial architecture in the Kawi Street area while accommodating contemporary urban development needs. By balancing conservation objectives with functional adaptation, adaptive reuse provides an opportunity to maintain the historical significance of colonial buildings while ensuring their continued contribution to urban life and economic development.

Based on these findings, several recommendations can be proposed. First, local government authorities should establish specific conservation regulations and design guidelines for the Kawi Street heritage area, particularly concerning façade preservation, building scale, and the protection of colonial architectural elements. Second, incentive mechanisms such as tax reductions, technical assistance, and design support should be introduced to encourage property owners to implement adaptive reuse practices in accordance with conservation principles. Third, stronger collaboration among government institutions, academic researchers, heritage communities, and private-sector stakeholders is necessary to ensure that economic interests are balanced with cultural preservation objectives. Furthermore, public education and awareness programs should be enhanced to increase understanding of the historical, cultural, and economic value of colonial buildings. Finally, future research should consider employing quantitative approaches or comparative studies involving other heritage districts in Malang City and other Indonesian cities to provide broader insights into the effectiveness of adaptive reuse as a strategy for sustainable urban heritage management.

Acknowledgement

Authors would like to express their sincere gratitude to all individuals and institutions that contributed to the completion of this research. Special appreciation is extended to the respondents, local stakeholders, and building owners in the Kawi Street area, Malang City, for their valuable information and cooperation during the data collection process. The authors also acknowledge the support provided by their affiliated institution, which facilitated the successful completion of this study.

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