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Research paper

EXAMINING THE TANGIBLE AND INTANGIBLE VALUES IN THE ADAPTIVE REUSE OF KHANS IN THE HISTORIC CITY

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Abstract

Adaptive reuse is a significant strategy for the conservation and long-term sustainability of historical buildings like khans, which may become obsolete due to changing economic and social conditions. Traditionally serving as centers for trade, accommodation, and social interaction, khans carry the historical accumulation of their period and contribute significantly to urban identity and memory. The adaptive reuse process engages with both the tangible and intangible values of these structures to ensure their continued relevance and preservation. Tangible values pertain to the physical fabric and characteristics of the khan buildings, including their architectural design, authentic features, construction techniques, materials, form, design, and overall integrity, while intangible values are the non-physical qualities that give meaning and significance to the khan, connecting people to the place and its history. This paper examines the tangible fabric and intangible aspects as inseparable and jointly contributing to the unique meaning and spirit of a historical place. While functional change is often necessary for adaptive reuse, the choice of a new function should be carefully considered to ensure it remains compatible with the building's values and contributes to its significance. The study looks beyond conservation and evaluates based on available literature and onsite observations, how adaptive reuse offers economic benefits by increasing the financial value of khans, creating opportunities for tourism, and contributing to the economic development of local people. It also looks at the environmental advantages by reusing embodied energy and reducing construction waste. Finally, it discusses how successful adaptive reuse requires a holistic approach, balancing socio-cultural, economic, and physical aspects based on detailed analysis and stakeholder collaboration to ensure long-term sustainability and the effective transfer of heritage to future generations.

Key words: *Adaptive Reuse, Cultural Values, Khan (caravanserai).*

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1. INTRODUCTION

Adaptive reuse, the process of repurposing old structures for new uses, has gained importance as a sustainable approach to heritage conservation. Khans, also known as caravanserais, were historically significant commercial inns that supported trade across regions like the Middle East, North Africa, and parts of Southern Europe. Their reuse today reflects broader discussions on preserving cultural identity, promoting sustainable development, and revitalizing urban spaces.

1.1. Understanding Khans and their Heritage Value

Khans typically date back to the medieval Islamic period and were critical infrastructure along major trade routes. Architecturally, they are characterized by large courtyards, robust stone walls, stables, and accommodations. Scholars such as Hill [1] and Grabar [2] emphasize the socio-economic and architectural significance of khans, noting their role not just as inns but also as centers for commerce and cultural exchange.

The historical importance of khans has led to growing interest in their preservation, as discussed by Salah Ouf [3], who points out that these structures offer unique opportunities to maintain tangible links with the past while serving contemporary needs.

1.2. Adaptive Reuse as a Preservation Strategy

Adaptive reuse is widely recognized as a sustainable and economically viable method for preserving historic structures. According to Plevoets & Van Cleempoel [4], adaptive reuse prolongs the life of heritage buildings by giving them new functions that meet current societal needs without significant alteration to their historic fabric. For khans, reuse projects often involve transforming them into boutique hotels, cultural centers, museums, restaurants, or artisan markets.

Yıldırim [5] highlights that successful adaptive reuse projects maintain a delicate balance between preserving a building's original character and introducing new functionalities that ensure economic viability. This is especially crucial for khans located in historic city centers where pressures for modernization are strong.

1.3. Challenges in the Adaptive Reuse of Khans

Several challenges arise in reusing khans:

Structural Integrity: Many khans have suffered neglect and require significant restoration before reuse, as observed in projects reviewed by Ashworth [6].

Cultural Sensitivity: As Daher [7] notes, inappropriate reuse that neglects the historical context can lead to cultural commodification or loss of authenticity.

Legal and Bureaucratic Hurdles: The reuse of khans often faces legal challenges, including unclear ownership, stringent heritage laws and complex approval processes, as discussed by Al-Houdalieh & Sauders [8].

1.4. Best Practices in the Adaptive Reuse of Khans

Community Involvement: Mason [9] stresses the need for engaging local communities to ensure that adaptive reuse projects are culturally appropriate and publicly supported.

Minimum Intervention: Keeping interventions to a minimum ensures that the historical and architectural integrity is respected [10].

Flexible Use: Adaptive reuse strategies should allow for flexible use over time to ensure continued relevance, as noted by Bullen and Love [11].

1.5. Reference Case Studies

Khan Al-Umdan, Acre, Israel: Planned for conversion into a luxury hotel, this project raised debates about public access versus privatization of heritage [12].

Khan As'ad Pasha, Damascus, Syria: Successfully adapted as a cultural and exhibition space, while maintaining much of its architectural integrity [13].

Wakalat Al-Ghouri, Cairo, Egypt: Converted into a cultural venue, hosting musical and cultural events while preserving the building's original design [14].

These examples show the varying degrees of success and the different approaches to adaptive reuse, reflecting the importance of community engagement and careful planning.

2. LITERATURE REVIEW – ANNOTATED BIBLIOGRAPHY

Here is a short, annotated bibliography of the key authors and sources mentioned here:

Ashworth [6] discusses the tensions between preservation and modernization in heritage buildings. His work highlights the challenges of structural rehabilitation and maintaining authenticity, which are critical issues in the adaptive reuse of historic khans.

Bullen & Love [11] explore the sustainability benefits of adaptive reuse and emphasizes the need for flexible use to ensure long-term relevance of heritage structures like khans.

Burns [13] examines how historic structures can serve modern cultural functions while preserving architectural integrity, offering important lessons for similar projects.

Daher [7] discusses the cultural risks associated with commodifying heritage sites. His critique is important for understanding the cultural sensitivity required in reusing khans, especially in tourist-driven economies.

Grabar [2] provides historical and cultural context about Islamic architectural forms, including khans and caravanserais. His work is valuable for appreciating the original functions and cultural meanings of these buildings.

Hill [1] touches on the infrastructure supporting Islamic commerce and trade, offering insights into the original purpose and architectural design of khans, which informs their conservation and reuse.

ICOMOS [10] in this charter stresses the importance of maintaining authenticity in heritage conservation, a principle directly relevant to adaptive reuse practices for khans.

Mason [9] discusses how involving local communities in heritage planning can enhance the success of conservation projects. His insights are key when considering community participation in the reuse of khans.

Plevoets & Van Cleempoel [4] frame adaptive reuse as a growing field in architecture and heritage conservation, providing theoretical foundations for reimagining structures like khans in a contemporary setting.

Raymond [14] discusses the transformation of historic buildings in Cairo, including wakalat (urban caravanserais), offering practical examples of adaptive reuse that respect historical urban fabric.

Salah Ouf [3] emphasizes how adaptive reuse should preserve the 'sense of place' of historic structures. This is particularly important for khans, whose cultural identity is deeply tied to their urban and social context.

UNESCO [12] in this report focuses on projects such as the planned reuse of Khan Al-Umdan, highlighting issues around privatization of heritage spaces and balancing conservation with development pressures.

Yıldırim [5] examines the practical aspects of reusing historic structures, emphasizing the importance of balancing new functions with respect for original architectural and historical values.

More recent sources that delve into the adaptive reuse of khans and caravanserais, offering insights into sustainability, cultural heritage and community engagement, include:

Hassan [15] defines adaptive reuse as the process of modifying old monumental buildings for new, non-destructive uses, ensuring structures maintain their historical integrity while meeting modern needs. He provides a historical overview and discusses contemporary applications in architectural practice.

Hoursan & Mofidi [16] focus on the potential for adaptive reuse of the Golshan and Sharifiyeh caravanserais in Hamadan, Iran. They propose strategies to enliven both sites by creating interconnected spaces that serve contemporary needs while preserving historical value.

Lundgren & Kyrö [17] utilize the social lifecycle assessment (S-LCA) framework to evaluate the social impact of adaptive reuse projects. They emphasize the positive economic and social effects of shared spaces on local communities, highlighting the broader benefits of revitalizing historic structures.

Rezaei et al. [18] examine the adaptive reuse of the Sa'd al-Saltaneh Caravanserai in Qazvin, Iran, through the lens of 'place making'. They investigate users' perspectives on how the site's transformation into a cultural and tourist destination affects their experience and connection to spatial attributes.

Shehada [19] whose study examines the adaptive reuse and conservation of the Al-Khan building in Ramallah, Palestine, dating back to the late 18th century. He highlights how modernization and historic conservation can coexist, especially in conflict zones where resources are strained. The research underscores the potential for conservation projects to integrate historic sites into contemporary society.

The sources above provide valuable insights into the adaptive reuse of khans and similar historic structures, offering perspectives on sustainability, community engagement and cultural preservation.

Consequently, the adaptive reuse of khans presents a valuable opportunity to preserve these culturally and historically significant structures while giving them renewed life in contemporary society. However, success depends heavily on sensitive planning, community engagement, sustainable funding models, and respect for the building’s original character. As urban environments continue to evolve, the adaptive reuse of khans offers a critical model for integrating heritage conservation into modern development strategies.

3. INVESTIGATION METHODOLOGIES AND CONSIDERATIONS

Deciding how to re-use historical buildings can be difficult, especially when the concerns of decision-makers are not aligned. Methodologies for adaptive reuse have been developed and applied to historical patterns. A simple technique can assist decision-makers on the value of adaptive reuse can involve steps, such as assessing the condition of the historical pattern and its environment, the integrity of the place, re-use alternatives and stakeholder

requirements. It also requires knowledge of traditional construction techniques. Analysis of the existing fabric, including original function and physical characteristics, is crucial.

Identifying adaptive reuse potentials, which can be physical, economic, functional, environmental, political, social and cultural, is important for developing suitable strategies. The needs of the broader area should be investigated to inform the decision on the new function. For a successful adaptive reuse project, the heritage building should be economically, socially and physically sustainable. A management plan is recommended for the future use and economic sustainability of the building.

While general frameworks for adaptive reuse exist, there is noted to be a lack of a clear methodology specifically focused on the socio-cultural aspects of heritage buildings. The following case studies on khan reuse have utilized methods, such as a literature review, site surveys, on-site examinations, visual analysis, archive review and interviews with actors in decision-making. The success of adaptive reuse projects can be measured through user experiences, considering sociocultural, economic and physical aspects. Adaptive reuse projects re-functioned with public uses (commercial, cultural, educational) are often more successful in contributing to sociocultural and economic development.

A critical aspect highlighted is the necessity for interventions to be based on documented historical research and to be reversible. Documentation of both the existing condition and the interventions is also crucial for conveying cultural heritage knowledge. It is emphasized that evaluating the success of adaptive reuse projects goes beyond just conservation principles and should include economic sustainability and a management plan. The choice of a new function must take into account the economic and social objectives and the effects of reuse on the urban environment. Multi-criteria decision analysis can be a useful tool in contexts characterized by high complexity for supporting the choice of sustainable alternative functions and guaranteeing transparency.

3.1. Two Case Studies from Cyprus

The adaptive reuse of khans has been explored and implemented, as detailed in several case studies within the sources and in the following two recent examples – the result of international architectural competitions – in Cyprus.

The first case study is of the “Zouchouri” Khan complex (figure 1) which is located within the old town of Larnaca in an area that had developed as the commercial and social center of the city since the Middle Ages. The area was developed based on two main components. The first was the organic and disorderly development of the urban fabric around the important landmarks of the area (churches, mosques, Medieval Castle, etc.), with the natural consequence of the creation of a complex and multiform urban environment. The second component was the contradictory coexistence of the Christian / Western element with that of the Muslim / Oriental, given that the area functioned for centuries as a trading post between the Eastern Mediterranean and the rest of Europe.

These two components formed the basis of the central idea of the proposal. This is in practice attributed with three intersecting curves, which connect the main entrances of the complex with the points of interest (Mosque, Hostels). The curves then evolve into folded surfaces, which develop freely and organically within the strict boundary of the perimeter buildings and create the carvings, the routes and the various levels. This manipulation gives the space a sense of continuous and dynamic "flow" that is reflected, both in the form and in the function of the space, so that there is no distinct spatial boundary that defines the square,

the event spaces, the market, the promenade and that these stop to give way to green space or seating areas for the visitor.

The result of this is the polymorphic - multi-level use of the space and the continuous "movement" of functions, which allows flexibility and easy adaptation to the respective functional needs b. with the amphitheatrical organization of the space in a strategic way in order to emphasize and highlight the points of interest (orientation of uses towards the Mosque, traditional facades, etc.) and not to exclude or overshadow them during the operation of the complex with the use of modern, special, but contradictory forms in the individual elements (shelters, benches, etc.) that enhance a continuous dialogue between the new and the old, the Western with the Eastern. This interaction between such opposite and contradictory elements and the relationship between them reflect the character of the area that has been preserved over time, in a more modern and sophisticated version of it. Finally, the new materials chosen for the proposal are modern but simple and aim to modernize and highlight the special characteristics of the area, without unnecessary elements.

Figure 1. The "Zouchouri" Khan from left to right: Aerial perspective of the proposal; master-plan of the area; diagram of the organization of the various program elements. (Source: Cyprus Architects Association Archives)

The second case study is of the "Ibrahim" Kahn complex (figure 2) in Paphos. The khan was a place where travelers and merchants resided and served as a resting place. A place of exchange of material and spiritual goods between travelers. A funnel of experiences. Its structure consists of architectural members, which have eroded and altered over time and the interventions it has received so far. The purpose of the study is to create an atmosphere in the space where memories of the past will come alive and will redefine the character of the khan and the historical center of the city. In addition to recalling the historical memory of the khan to every visitor, the study aims to achieve business sustainability, economic viability and generally improve the quality of life of Paphos.

The space is defined by two axes and an envelope, which compose a complex of building entities that encloses three open central spaces. One axis defines the entrance with the existing arch, crosses the passage defined by the series of buildings that currently house the carpenter and the car paint shop and ends in the space, which is currently empty and surrounded by a stone wall. The other axis intersects the previous axis, while also facing a blind wall. The very structure of the complex speaks of a dialogue of spaces and uses that may be entangled in a canvas of uses and movement. The very structure of the existing buildings constitutes an evocative building ensemble, which creates a "theatrical setting" and provokes and invites the visitor to use the space.

The proposal has as its theme the overview of the trace of the past and its reading as a dynamic structure that moves between the boundaries, which exist and function in the courtyard. The overall intervention is read as a “flow” within the space of Chania, both in form and function. The three units of space have been translated as “neighborhoods”, where scenes of work - production and projection of cultural work, as well as recreation, take place. The exhibition space opens on the one hand to the event space as a transparent volume and on the other to the workshop-activity space, thus connecting these spaces visually, on a horizontal level and morphologically on a vertical level, thus creating, on both sides, the feeling of a gallery-tunnel.

In addition to the required uses, the free building at the western entrance is converted into an installation room, where it will function as a communication transmitter for the passerby. It will be a flexible space with interactive information screens about events in the space, as well as the history of the khan and the wider area. It will also host exhibits (installations) by local and foreign artists. Also, in the building with the N2 marking, the creation of a restaurant or multi-purpose space with the possibility of expansion, with a number of open-air activities proposed. Copper was chosen as the shell of the new structures, thus highlighting a material used since antiquity in Cyprus in a modern version, integrating it harmoniously with the traditional buildings. In conclusion, due to the limited space, the element of nature is integrated with vertical plantings at the two entrances and in the event area as well as with smaller-scale, more intimate landscape elements.

Figure 2. The “Ibrahim” Khan complex from left to right: Aerial perspective with organizing principles diagram; proposed plan and sections; interior and exterior views with materiality. (Source: Cyprus Architects Association Archives)

4. EXPLORING TANGIBLE AND INTANGIBLE VALUES IN THE ADAPTIVE REUSE OF KHANS

Adaptive reuse of historical buildings like khans is a significant strategy for their conservation, preventing demolition and prolonging their useful life. It's considered a sustainable long-term approach to preservation. Khans, traditionally used for accommodating travelers, traders, animals, and selling goods, may become obsolete due to changing economic practices, demographics, or maintenance costs. Adaptive reuse offers a way to rehabilitate and keep them in use. This process engages with both the tangible and intangible values of khans.

4.1. Tangible Values in the Adaptive Reuse of Khans

Tangible values relate to the physical aspects and fabric of the khan buildings. Adaptive reuse aims to preserve these values by maintaining the structure's inherent qualities through a new use. Preserving the tangible aspects requires knowledge of traditional construction techniques. A crucial first step in the adaptive reuse process for khans is assessing the

condition of the historical pattern. This involves a detailed architectural survey documenting the physical state, original uses, building techniques, plan, architectural details, and materials. Analysis of the existing fabric is essential.

Specific tangible aspects considered important for khans include:

- The building's physical state, condition and environment.
- Its physical characteristics, such as its unique architectural design, authentic features, construction techniques, and materials.
- The form and design of the building, emphasizing respect for the original vernacular form and shapes. Originality in format, elements, and shape contributes to authenticity.
- The material and substance of the building, highlighting the accuracy and perfection of the original material and physical substance. Respecting existing material is important.
- The integrity of the place, encompassing the structural and architectural description of the whole and its existence with all elements that document its heritage status. Assessing integrity can involve considering literal aspects, wholeness, and honesty. Preserving spatial integrity is crucial, as disruption can lead to a loss of values. The legibility of the building's original plan scheme is a component of its integrity.

However, preserving these tangible values during adaptive reuse can be challenging. Some adaptive reuse projects for khans have been implemented without sufficient consideration for spatial and structural features, material, or color texture, leading to incompatible interventions. Interventions should ideally not harm the originality and integrity of the historical fabric and care must be taken not to change or deteriorate the plan, mass, and material properties. Additions that are not compatible or "crush and suffocate" the structure should be avoided. To mitigate these issues, interventions should be based on documented historical research, be reversible where possible, and be thoroughly documented. New applications should be distinguishable from the old fabric and compatible in terms of mass, form, size, color and material.

4.2. Intangible Values in the Adaptive Reuse of Khans

Intangible values are the non-physical qualities that contribute to the significance and meaning of a historical building and its connection to people and its location. Adaptive reuse plays an important role in conserving these values.

Key intangible values associated with khans include:

- *Historical Significance*: Khans embody the accumulation of the period in which they were built, contributing to urban identity. Adaptive reuse helps prevent the loss of this historical value and aims to preserve and enhance the building's cultural significance.
- *Cultural Identity*: Heritage buildings are vital for transferring cultural identity across generations. By preserving heritage buildings and giving them new life, adaptive reuse contributes to the conservation of cultural identity.
- *Social Value*: Adaptive reuse can strengthen social relations and enhance the connection between people and the historical environment. Re-functionalizing khans as cafes, restaurants, hotels, and shopping areas has created socio-cultural spaces in historical city centers, becoming important meeting and visiting points that contribute to the social development of local people. The potential for khans to serve as meeting and socializing spaces is a key value for reuse. Maintaining their use for commercial purposes and keeping them open to the public is important for urban memory. Adaptive reuse can also contribute to community growth and social stability.

- *Memories, Spirit of Place and Genius Loci*: Historical buildings are carriers of collective memories. The tangible fabric and intangible aspects are inseparable, giving meaning to a place and creating its special spirit or genius loci. These associations are integral to the local community, telling a unique story. Adaptive reuse aims to preserve this spirit of place and compel the genius loci. Preserving this intangible memory is a challenging task. Involving the appreciation and opinions of inhabitants, often tied to their memories, is considered crucial for enriching the sense of place and achieving successful conservation. Khans, even with changed functions, can keep the sense of the buildings and memories alive within the space.
- *Intangible Heritage Elements*: This includes customs, oral traditions, music, languages, dance, festivities, and traditional knowledge and skills. Proposed reuses for khans aim to represent and display these intangible values of the context. Adaptive reuse can preserve and promote local skills and cultural identity. Examples include handicrafts and traditional techniques.
- *Function Value*: The concept of "function value" is linked to aesthetic, spiritual, social, historical, and symbolic values, strengthening social relations and connections to the historical environment. While the original function may be lost or changed, the new function contributes to the building's value by ensuring it remains active and integrated into community life.
- *Tradition and Technique*: The historical techniques used in building the khans are part of their intangible heritage. Understanding and respecting these techniques and potentially reviving traditional practices can be incorporated into the adaptive reuse.
- *Location and Setting*: A khan's location, particularly its integration into the historic urban fabric or road networks, is an important value. Adaptive reuse needs to consider this connection. The original location contributes to its authenticity.
- *Creating Bonds*: Adaptive reuse creates a bond with the past, connecting history to the present. It brings together the past and new architectural understanding.

Adaptive reuse of khans also provides economic value, increasing their financial standing and creating opportunities for tourism and local economic development. This economic viability is often crucial for covering restoration and maintenance costs, ensuring the long-term survival of the structure. Environmentally, it contributes to sustainability by reusing embodied energy and reducing construction waste.

Successful adaptive reuse projects require a deep understanding of the heritage values, physical characteristics, and adaptive reuse potentials of the building. The decision on the new function should be based on detailed analysis, considering socio-cultural, economic, and physical aspects, as well as the needs of the district. Collaboration and alignment between various stakeholders, including experts and the local community, are crucial for a truly successful outcome. Methodologies exist to assist in this complex decision-making process, helping to evaluate alternatives and prioritize criteria for the most appropriate reuse that achieves an optimal balance between conservation, usability and the future use and economic sustainability of the building.

5. DISCUSSION OF BEST PRACTICES AND CONCLUSIONS REGARDING THE ADAPTIVE REUSE OF KHANS

Based on the investigations and the bibliographical sources [20, 21, 22, 23, 24, 25, 26, 27, 28], the adaptive reuse of khans in historic cities involves addressing both their tangible

physical properties and their intangible cultural significance to ensure their preservation and continued relevance. Khans historically served as centers for trade, accommodation, and social interaction, contributing significantly to urban identity and memory. Due to changing economic and social conditions, many have lost their original functions and become obsolete or disused, necessitating adaptive reuse for their survival.

The value of adaptive reuse for khans is multifaceted:

Conservation and Sustainability: Adaptive reuse is considered an important strategy for the conservation and long-term sustainability of historical buildings. It prevents the loss of historical value and helps structures survive deterioration. Adaptive reuse is also seen as an environmentally friendly approach by reusing embodied energy, reducing construction waste and extending the useful life of buildings. Successful adaptive reuse projects are often described as socially, economically and physically sustainable.

Economic Benefits: Adaptive reuse can increase the financial value of khans and create new income-generating functions, contributing to their economic sustainability. It creates opportunities for tourism and contributes to the economic development of local people.

Socio-Cultural Value and Intangible Heritage: Adaptive reuse enlivens historical values, allows history to be rediscovered, and maintains the characteristics of the structure. Khans carry the accumulation of their period and contribute significantly to urban identity and memory. Adaptive reuse can preserve and transfer cultural identity to future generations and strengthen social relations by creating socio-cultural spaces and meeting points. The intangible values, such as historical significance, cultural identity, social value, collective memories, the spirit of place (genius loci), and traditional knowledge, are essential to the meaning of the khan and connect people to its history. Adaptive reuse helps to keep these memories and the sense of the buildings alive, contributing to urban memory. They represent and display the intangible values of the local context and promote local skills and cultural identity and preserve shared or communal memories and social meanings.

5.1. Best Practices and Conclusions Regarding Value

When considering the best practices regarding costs and benefits that have a bearing on tangible and intangible values associated with the adaptive reuse of khans in the historic city, the following actions may be taken into consideration:

Holistic Approach: Successful adaptive reuse requires a holistic approach, considering socio-cultural, economic, and physical aspects together. The tangible fabric and intangible aspects are inseparable and jointly contribute to the unique meaning and spirit of a place.

In-depth Analysis: A thorough analysis of the existing fabric, including its physical characteristics, original function, history, and heritage values, is crucial before deciding on a new function.

Selecting an Appropriate and Compatible Function: The choice of a new function should be carefully considered to ensure it is compatible with the building's values, minimizes interference with its originality, and contributes to its significance. The function should contribute actively to the understanding of the heritage value of the place. It is important to understand the significance and meaning of heritage buildings, not just their physical aspects.

Respecting Tangible Integrity: Interventions must respect the physical fabric, materials, and original features of the khan. Changes should be based on documented research and ideally be reversible. Incompatible interventions can negatively impact originality and integrity. Maintaining the legibility of the original plan scheme is crucial.

Preserving Intangible Spirit: Adaptive reuse strategies should actively seek to preserve intangible values like collective memories and the spirit of place. New functions can be designed to maintain or display aspects of the building's intangible heritage.

Stakeholder Involvement: Engaging stakeholders, including owners, users, experts, and the local community, is vital for successful decision-making and implementation. Involving the opinions of inhabitants can enrich the sense of place through their memories, leading to more realistic and successful conservation.

Ensuring Sustainability Beyond Conservation: Successful adaptive reuse projects are not only evaluated on conservation principles but also require a management plan to ensure long-term economic sustainability for maintenance and rehabilitation.

In conclusion, adaptive reuse is a vital method for preserving historical khans by providing them with new life and functions. It adds significant economic, social, and environmental value to these structures and their contexts. However, achieving successful adaptive reuse requires careful planning, in-depth analysis of both tangible and intangible values, selecting compatible functions, respecting the building's physical integrity, and involving stakeholders, particularly the local community whose memories and association contribute to the intangible value and spirit of the place. Failures can occur if the new function is chosen randomly, interventions are incompatible, or future economic sustainability for maintenance is not addressed. The goal is to ensure that khans remain "living assets" that connect the past with the present and contribute to urban sustainability.

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