REDC 82 (2025) *155-172*, ISSN: 0034-9372

Reutilización adaptativa de edificios del patrimonio religioso. Un caso de estudio de un convento del siglo XVI en Miranda de Ebro

Adaptive Reuse of Religious Heritage Buildings. A Case Study of the 16th-Century Convent in Miranda de Ebro

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Recepción: 09 de mayo de 2025
Aceptación: 28 de mayo de 2025

https://doi.org/10.36576/2660-9541.82.155

Resumen

La reutilización adaptativa de los edificios patrimoniales eclesiásticos es cada vez más necesaria, ya que las instituciones religiosas se enfrentan a una disminución de las vocaciones, restricciones financieras y cambios en sus funciones sociales. Este estudio examina la reutilización adaptativa de un convento del siglo XVI en Miranda de Ebro, España, utilizando un modelo de evaluación validado y adaptado a los edificios patrimoniales religiosos. El proceso de reutilización adaptativa consiste en transformar los espacios sagrados en lugares con nuevas funciones, conservando al mismo tiempo su importancia arquitectónica, histórica y cultural. En España, donde la Iglesia católica gestiona aproximadamente el 80 % de los lugares patrimoniales protegidos, este tipo de intervenciones son urgentes y complejas. El estudio analiza los factores económicos, sociales, culturales y eclesiásticos que influyen en la viabilidad y la sostenibilidad de los esfuerzos de la reutilización. Entre los principales beneficios de la reutilización adaptativa se encuentran la sostenibilidad ambiental, la revitalización económica y la implicación comunitaria, sin embargo los edificios religiosos presentan retos únicos debido a su simbología espiritual, su protección legal y su gestión institucional. Los resultados indican que una función híbrida cívico-cultural representa la opción de reutilización más viable y respetuosa para el convento. El artículo concluye con recomendaciones políticas para apoyar una reutilización sensible culturalmente y fortalecer la cooperación entre la Iglesia y las autoridades. Este estudio contribuye al avance de las metodologías de reutilización adaptativa y ofrece un marco replicable para los académicos y profesionales que se dedican a la remodelación del patrimonio eclesiástico.

Palabras clave: Reutilización adaptativa, patrimonio religioso, conservación del patrimonio cultural, desarrollo urbano sostenible, preservación histórica.

Abstract

The adaptive reuse of ecclesiastical heritage buildings is becoming increasingly necessary as religious institutions grapple with declining vocations, financial constraints, and changing societal roles. This study examines the adaptive reuse of a 16th-century convent in Miranda de Ebro, Spain, using a validated evaluative model tailored to religious heritage buildings. The adaptive reuse process involves transforming sacred spaces into venues with new functions while preserving their architectural, historical, and cultural significance. In Spain, where the Catholic Church oversees approximately 80% of protected heritage sites, such interventions are both urgent and complex. The study analyzes the economic, social, cultural, and ecclesiastical factors influencing the feasibility and sustainability of reuse efforts. Key benefits of adaptive reuse include environmental sustainability, economic revitalization, and community engagement, but religious buildings present unique challenges due to their spiritual symbolism, legal protection, and institutional

governance. Findings indicate that a hybrid civic-cultural function represents the most viable and respectful reuse option for the convent. The paper concludes with policy recommendations to support culturally sensitive reuse and strengthen cooperation between Church and authorities. This study contributes to the advancement of adaptive reuse methodologies and offers a replicable framework for scholars and practitioners navigating ecclesiastical heritage redevelopment.

Keywords: Adaptative Reuse, religious Heritage Buildings, Cultural Heritage Conservation, Sustainable Urban Development, Historical Preservation.

1. INTRODUCTION

The adaptive reuse of heritage buildings has gained increasing importance as cities strive to balance heritage conservation with sustainable urban development. While preserving architectural and historical value is essential for maintaining cultural identity across generations[1], heritage buildings are simultaneously facing increasing obsolescence and underutilization, especially in the case of religious structures. This conflict is particularly pronounced in Spain, where the Catholic Church is responsible for a significant share of buildings classified as *Bien de Interés Cultural* (BIC), or *Asset of Cultural Interest*.

The Catholic Church in Spain faces an unprecedented convergence of challenges related to the management of its real estate. Religious heritage buildings, once central to community life, are now facing declining use due to societal secularization, financial strain on religious institutions, and a significant reduction in vocations. For instance, according to data from the *Office of Statistics and Sociology of the CEE (Conferencia Episcopal Española,* Spanish Episcopal Conference*)*, between 2012 and 2021, baptisms in Spain fell from 268,810 to 149,711, while marriages declined from 62,847 to 25,762. These trends suggest that many religious buildings are increasingly vacant, deteriorating, or dismantled, resulting in the loss of architectural, cultural, and spiritual value (Dedeu, 2019). The challenge is further compounded by the limited resources of the Church, which relies heavily on diminishing contributions from the faithful to finance the upkeep of these properties.

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Furthermore, the relationship between ecclesiastical and civil authorities is marked by legal complexity and fragmented responsibilities, complicating cooperation on reuse initiatives. Efforts to address this issue have begun to emerge at institutional levels. In 2018, the Vatican published the *Guidelines on Decommissioning and Ecclesial Reuse of Churches*, which provide a structured framework for repurposing sacred spaces while maintaining respect for their symbolic and community roles[2]. These guidelines stress the role of local bishops in evaluating proposals, the need to avoid profanation, and the ethical imperative of community involvement. Such perspectives are particularly relevant in countries like Spain, where diocesan authorities and religious orders retain ownership over a substantial portion of heritage buildings.

The challenge extends beyond heritage conservation. Adaptive reuse aligns with global sustainability goals by reducing the need for new construction, preserving embodied energy, and revitalizing urban areas[3]. However, adaptive reuse in the religious context presents distinct obstacles—ranging from strict conservation laws and architectural constraints to the need for stakeholder consensus and market demand alignment[4]. Furthermore, the discipline still lacks a universally accepted, multidimensional framework for evaluating adaptive reuse potential—especially in religious settings where cultural significance and community memory complicate purely economic calculations.

The core problem remains how to assign new, appropriate uses to religious heritage buildings that are not only economically viable but also culturally sensitive, spatially coherent, and legally permissible. These realities make adaptive reuse a crucial strategy but one requiring cultural sensitivity, institutional coordination, and flexible policy frameworks. This study examines the adaptive reuse of a 16th-century convent in Miranda de Ebro, Spain, through a validated evaluative model tailored to religious heritage. Specifically, it assesses the economic, social, and cultural factors that influence the feasibility and long-term sustainability of

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reuse interventions. The ultimate objective is to identify viable future uses for the convent that honor its historical significance while fulfilling contemporary community needs. By doing so, this paper contributes to the advancement of adaptive reuse methodologies and offers a replicable framework for practitioners and scholars engaged in heritage redevelopment across Southern Europe and beyond.

2. LITERATURE REVIEW

Adaptive reuse refers to the process of transforming existing buildings—often obsolete or underutilized—into spaces with new functions while preserving their architectural, historical, and cultural significance[5]. It is now recognized as a multidisciplinary approach involving fields such as architecture, planning, sustainability, heritage conservation, and urban design. Originally emerging from conservation and sustainability movements in the 1970s, adaptive reuse has evolved into a practical response to contemporary urban challenges, including resource efficiency, identity preservation, and land scarcity[6].

This approach has relevance in the context of religious heritage buildings. As the ecclesiastical function of many structures becomes obsolete, their preservation requires creative interventions that maintain cultural identity while offering new public or private functions[7]. The spiritual symbolism and protected legal status of such sites make them uniquely complex for reuse, especially in countries like Spain, where the Catholic Church manages the largest number of buildings designated as *Bien de Interés Cultural* (BIC).

A variety of reuse strategies exist, including cultural, residential, commercial, educational, and tourism adaptations[8]. In religious contexts, adaptive reuse often

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transforms former churches, monasteries, or convents into libraries, cultural centers, social housing, or mixed-use developments while preserving their architectural identity.

Key benefits include environmental sustainability—through reduced construction waste and preservation of embodied energy—and economic revitalization, including increased land value, reduced material use, and the attraction of tourism and business[9]. Socially, adaptive reuse contributes to community engagement, urban regeneration, and cultural continuity by retaining historic landmarks as part of the living urban fabric.

Successful adaptive reuse is driven by multiple interrelated factors. These include understanding a building's historical and cultural significance, engaging local stakeholders, maintaining architectural integrity, and ensuring long-term financial viability[10]. Community support, flexible design approaches, and sustainable material use also emerge as critical contributors.

Religious buildings require sensitivity due to their spiritual context. Projects that fail to recognize symbolic meanings, or that neglect proper stakeholder engagement, often face social backlash or planning delays[11]. Furthermore, strict conservation regulations and lack of adaptive planning policies can severely constrain the design flexibility required for new uses.

Several models have been proposed to assess and guide adaptive reuse strategies. One of the most comprehensive is the Adaptive Reuse Strategies Model for Heritage Buildings developed by Misirlisoy & Günçe[12], which outlines a five-step methodology: defining stakeholders, analyzing the existing structure, establishing conservation needs, identifying adaptive reuse potentials, and selecting viable

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future functions. This model is adaptable to various contexts and includes criteria across economic, cultural, environmental, and architectural dimensions.

Other notable tools include:

- The Adaptive Reuse Potential (ARP) Model[13], which ranks buildings based on reuse feasibility across sustainability dimensions.
- The System Dynamics Model[14], which evaluates urban rehabilitation scenarios over time.
- Reno-Evalue[15], which integrates environmental, economic, and social factors for early-stage renovation planning.

Additionally, Participatory Multi-Criteria Analysis (MCA), as used by Amato et al. (2021), engages stakeholders in evaluating future uses based on community needs, economic viability, and cultural integration.

Despite increasing scholarly attention, research on adaptive reuse—especially of religious heritage buildings—still faces several gaps. First, while multiple evaluation models exist, few have been tested in practical projects involving religious typologies. Second, most tools emphasize either architectural or economic feasibility but fail to integrate stakeholder governance and cultural sensitivity comprehensively. Third, there is limited empirical evidence from Southern Europe, particularly Spain, where legal rigidity and high historic density demand context-specific frameworks.

Drawing on this review, the study addresses the following core research questions:

1. What are the key cultural, economic, and social factors influencing the adaptive reuse of religious heritage buildings in Spain?
2. How can a structured model—such as that of Misirlisoy & Günçe—be applied to evaluate and guide the reuse of a specific religious heritage building?

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3. What challenges and opportunities arise when applying these tools to a case study like the 16th-century convent in Miranda de Ebro?

3. METHODOLOGY

This study adopts a qualitative case study approach, chosen for its ability to provide rich, contextualized understanding of the complex factors influencing the adaptive reuse of religious heritage buildings. As Baxter and Jack, and Flyvbjerg argue[16], case studies are especially suited to exploring phenomena embedded in real-life contexts, where multiple variables—cultural, historical, economic, and regulatory—interact in unique ways. In the context of religious heritage buildings, which involve sensitive cultural meaning and rigid institutional frameworks, a case study approach facilitates not only descriptive depth but also the practical validation of reuse methodologies.

The selected case is a 16th-century convent in Miranda de Ebro, Spain, owned by a religious congregation. The building previously underwent adaptive reuse as a hospice, but this use proved economically unsustainable, leading to its closure. The building is currently unoccupied and represents a financial burden due to its protected status and ongoing maintenance needs.

This case was selected for several reasons:

- It is a religious heritage building that has already experienced an unsuccessful adaptive reuse, offering the opportunity to analyze both success and failure factors.
- It is representative of the broader category of ecclesiastical properties in Spain facing obsolescence.
- The researcher's close relationship with the congregation ensures access to comprehensive archival data and stakeholder interviews.
- It provides a platform to test the applicability and validity of a recognized adaptive reuse evaluation model in a Southern European context.

16 P. BAXTER - S. JACK, Qualitative Case Study Methodology: Study Design and Implementation for Novice Researchers, in: The Qualitative Report, 13/4 (2008) 544–559, https://doi.org/10.46743/2160-3715/2008.1573; B. FLYVBJERG, Five misunderstandings about case-study research, in: Qualitative Inquiry, 12/2 (2006) 219–245, https://doi.org/10.1177/1077800405284363

To structure the evaluation process, the study uses the Adaptive Reuse Strategies for Heritage Buildings model proposed by Misirlisoy & Günçe. This model is well-suited for religious heritage applications due to its holistic inclusion of architectural, cultural, economic, and community factors. The model consists of five stages:

1. Definition of Actors – Identifying stakeholders involved in the reuse decision: users, producers (e.g., architects and planners), investors, and regulators.
2. Analysis of the Existing Fabric – Examining the physical condition, heritage value, and functional limitations of the structure.
3. Definition of Conservation Actions – Categorizing required interventions (maintenance, restoration, remodeling).
4. Definition of Adaptive Reuse Potentials – Assessing opportunities across economic, functional, and sociocultural dimensions.
5. Decision of Possible New Functions – Evaluating and selecting the most viable use scenario: original, mixed-use, or new function.

This model was selected over others due to its flexibility, qualitative methodology, and proven adaptability across different European contexts. It has also been proposed in recent literature as particularly relevant to the complex, multi-stakeholder decisions involved in religious heritage projects.

Data was collected through a triangulated strategy to ensure rigor and depth:

- Archival Research: Historical documentation, blueprints, and records concerning the building's original and adaptive uses.
- Site Analysis: Architectural and spatial assessment of the building's fabric, layout, deterioration, and constraints.
- Stakeholder Interviews: In-depth interviews with members of the religious order, local planners, and potential users to gather insight into cultural significance, past failures, and future aspirations.

Additionally, comparative case studies from similar adaptive reuse projects were analyzed to identify best practices and patterns.

The five-step model by Misirlisoy & Günçe was used as the guiding structure for data analysis. Each step involved a set of guiding questions and decision criteria adapted from the original framework. Results were interpreted through thematic coding, with stakeholder input used to validate interpretations where applicable.

To ensure validity, the study aligns its research design and questions with established academic literature and frameworks. The use of a structured model allows for replication and transparency in the evaluative process. Reliability is further strengthened by systematic documentation of data collection methods, triangulation of sources, and stakeholder corroboration during interviews and analysis. The inclusion of religious perspectives was prioritized in stakeholder interviews, including conversations with members of the owning congregation, who expressed a desire to preserve the convent's spiritual dignity while opening it to new community uses. Their insights contributed to understanding the emotional and theological considerations that formal evaluation models often overlook.

4. RESULTS

The first stage of analysis involved identifying the key stakeholders relevant to the adaptive reuse of the 16th-century convent in Miranda de Ebro (see figure 1). This included both internal and external actors. Internally, the property owner—a religious congregation—was central, alongside potential investors, architects, and project managers. Externally, the list extended to local government representatives, heritage conservation bodies, and the broader local community. This stakeholder mapping clarified the various roles, interests, and levels of influence each group would hold throughout the planning and implementation process. Notably, the religious order served a dual role as both custodian of the physical property and as a guardian of its cultural and symbolic heritage, while municipal authorities were identified as potential co-financiers, particularly within the scope of heritage preservation and tourism initiatives.

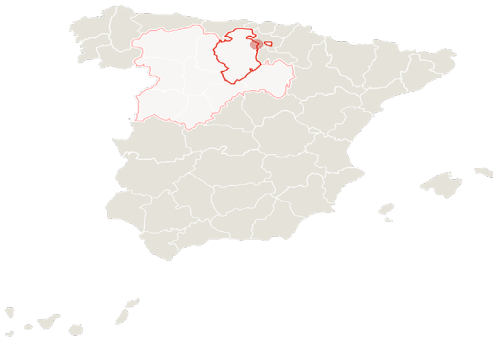

Figure 1: Location of Miranda de Ebro
Source: By the authors

In the second phase, the analysis of the existing architectural fabric confirmed that the convent—originally a Baroque complex—retains essential historical and spatial features, including a cloister, a chapel, several courtyards, and monastic living quarters (figures 2 and 3). Architecturally, the structure holds substantial historical and typological value. However, its prior adaptation into a hospice introduced interior modifications that now limit spatial flexibility for alternative uses. Although the building remains structurally sound, it requires interventions in the roof, internal plasterwork, and mechanical systems. At the urban scale, the convent is situated within the city's historic core, an area marked by demographic decline and economic stagnation. The aging local population and limited disposable income constrain the viability of high-end commercial or residential redevelopment, steering reuse options toward community-oriented or low-impact civic programs.

Figure 2: Courtyard of the convent
Source: Google Images

The third stage focused on conservation actions. Given the building's heritage status and well-preserved elements, the appropriate strategy involves restoration and rehabilitation rather than invasive remodeling. The proposed interventions prioritize architectural integrity, particularly with regard to culturally significant components such as the cloister and chapel. At the same time, compliance with contemporary standards for safety, accessibility, and functionality is considered essential. As such, the project would necessitate infrastructure upgrades without compromising the building's historic character.

Figure 3: Dining area, cloister and interior spaces
Source: Google Images

In the fourth stage, the adaptive reuse potential was evaluated across economic, social-cultural, and functional-legal dimensions. Economically, the convent's previous function as a hospice proved unsustainable, primarily due to limited demand and high operating costs. However, alternate functions—particularly those centered around education, cultural tourism, and community services—present stronger financial viability when paired with moderate public or philanthropic investment. Co-working spaces, creative training centers, or cultural hubs are considered suitable and economically supportable. Socially and culturally, the convent remains a valued landmark within the community. Local stakeholders expressed a strong preference for public-facing uses that preserve access and promote cohesion, including proposals for public libraries, art exhibitions, or youth-focused programming. Functionally and legally, the building's internal segmentation allows for diverse uses to coexist. However, its designation as a *Bien de Interés Cultural* restricts major structural interventions, limiting options such as hotels or retail operations that require significant internal modification or traffic flow.

Finally, the fifth stage examined specific future use scenarios. Maintaining its former use as a hospice was ruled out due to high operational costs and insufficient demand. A second scenario—a mixed-use adaptation—was identified as the most viable option. This approach would integrate civic and cultural uses such as exhibition areas, multipurpose training facilities, and rentable facilities for community events or social enterprises. Such a strategy not only aligns with stakeholder priorities and architectural constraints but also enhances eligibility for regional redevelopment funding. A third scenario proposing full commercial transformation (e.g., boutique accommodation) was considered incompatible both legally and culturally, given the site's spiritual significance and urban zoning restrictions.

Overall, the study recommends a hybrid civic-cultural function as the most sustainable and contextually appropriate path forward for the convent's adaptive reuse.

5. DISCUSSION

The adaptive reuse of the Miranda de Ebro convent offers compelling insights into the practical application of theoretical models and the multidimensional challenges faced in the repurposing of religious heritage buildings. The case supports and extends existing frameworks—particularly the five-step methodology proposed by Misirlisoy & Günçe in 2016— by testing its applicability in a Southern European context with strong religious, historical, and regulatory constraints.

The first major finding is that the success of adaptive reuse in religious heritage contexts is not merely a function of architectural feasibility or financial potential, but is equally dependent on cultural compatibility, stakeholder engagement, and contextual flexibility. This aligns with the conclusions drawn by Dyson et al. (2016) and Arfa et al. (2022), who emphasize the role of community integration and symbolic continuity in such projects.

Comparing the convent case with other European adaptive reuse projects, it becomes clear that congruence between old and new functions—termed "functional matching"—is one of the most critical determinants of reuse success. In Miranda de Ebro, the previous reuse as a hospice failed due to economic unsustainability and poor alignment with local demand. In contrast, the proposed cultural-educational hybrid functions exhibit a closer fit with the site's historical identity and community needs, enhancing the likelihood of long-term acceptance and viability.

Another important contribution of the study lies in refining the reuse evaluation model. While Misirlisoy & Günçe's framework provides a strong qualitative basis, the Miranda case shows the value of integrating local policy incentives, demographic trends, and municipal development plans into the early stages of reuse assessment. For instance, local funding mechanisms and revitalization goals from the city council and regional bodies provided critical inputs in shaping viable reuse scenarios.

Furthermore, the study highlights that adaptive reuse of religious buildings demands a broader definition of sustainability—one that encompasses spiritual,

cultural, and social dimensions, not just environmental and economic criteria. This holistic perspective is echoed in literature from Longhi and Dimodugno[17], who argue that religious spaces are deeply embedded in collective memory and should be repurposed in ways that retain this intangible heritage.

The role of design and architectural restraint also emerged as a key success factor. Minimizing intrusive changes, preserving significant elements like cloisters and chapels, and creatively adapting interior layouts without undermining the building's character were consistently emphasized by stakeholders and confirmed by precedent studies[18].

Finally, the case reinforces the notion that institutional support and community involvement are indispensable. From zoning flexibility and financial aid to participatory planning, successful reuse strategies require co-governance frameworks that mobilize both public and private actors. Participatory MCA tools such as those described by Amato et al. (2021) are instrumental in facilitating this collaborative evaluation process.

As the research is focused on a single case study in Miranda de Ebro, a medium-sized Spanish city, the findings may not be universally generalizable to all urban contexts. The specificity of the cultural, institutional, and economic context limits the broader applicability of certain recommendations. Second, the data collection process—while rich in archival resources and stakeholder input—was constrained by a limited number of interviews with community actors, which may have reduced the depth of understanding regarding local social dynamics.

In addition, some technical and economic data were incomplete or difficult to retrieve due to privacy concerns and the religious order's internal documentation protocols. These factors limited the possibility of conducting a fully quantitative feasibility analysis, which could complement the qualitative methodology used in this research.

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This research confirms the potential of adaptive reuse as a sustainable and culturally sensitive strategy for preserving religious heritage buildings that have fallen into disuse. The findings demonstrate that the application of the Misirlisoy & Günçe model provides a viable evaluative tool that accommodates economic, cultural, and social dimensions, particularly when applied to sacred spaces with unique community attachments.

By testing this model on the 16th-century convent in Miranda de Ebro, the study has illustrated both the challenges and opportunities inherent in adaptive reuse. Notably, the convent's prior failure as a hospice highlights the risks of functional mismatches, while the proposed hybrid cultural and educational function illustrates the importance of aligning new uses with community needs, historical continuity, and economic feasibility

Three key drivers of successful reuse were identified: (1) stakeholder alignment and transparency, (2) compatibility between the original building spirit and the proposed new function, and (3) support from institutional frameworks and urban planning policy. Conversely, barriers include rigid zoning laws, high restoration costs, and the absence of financial incentives for culturally aligned development.

Comparative reflections also support the selected reuse model. In Tuscany, France, and southern Germany, similar projects have demonstrated the viability of integrating cultural and educational functions into former convents and churches, provided that ecclesiastical stakeholders are included from the earliest stages. In this respect, Spain lags behind other European contexts in establishing formal reuse protocols that integrate theological, legal, and social criteria.

Based on the insights generated from this case study, several policy actions are recommended to support the sustainable and culturally sensitive adaptive reuse of religious heritage buildings. First, there is a clear need for both national and municipal governments to develop comprehensive guidelines specifically addressing the reuse of religious structures. These should be inspired from the Vatican's 2018 reuse framework while being tailored to the requirements of secular planning systems and local governance contexts.

Second, financial incentives must be aligned with reuse goals. Tax benefits, targeted grants, and co-financing mechanisms through public—private partnerships should be made available to projects that demonstrate cultural sensitivity, social impact, and environmental responsibility. Projects that pursue recognized

certifications such as LEED or BREEAM should be prioritized in funding assessments, as these frameworks reinforce sustainability and long-term performance.

Third, land use and zoning regulations should be updated to facilitate the flexible reclassification of religious and heritage buildings. Adaptive reuse often demands transitions into mixed-use or community-oriented formats, and such changes must be enabled without undermining architectural integrity or heritage protections. This calls for a more dynamic and responsive urban planning approach.

Fourth, participatory evaluation processes should be institutionalized through the use of tools like Multi-Criteria Analysis (MCA). Engaging local stakeholders at the earliest planning stages ensures that proposed functions align with both community needs and the symbolic value of the building. This is particularly important in cases involving spiritual or emotionally significant landmarks, where public acceptance is a critical success factor.

Fifth, Church-State cooperation must be strengthened through the creation of joint task forces or institutional liaisons dedicated to ecclesiastical heritage reuse. Such structures could streamline permissions, coordinate funding, and align goals across secular and religious governance frameworks. Spanish regional and national governments should consider adopting models used in Italy, where ecclesiastical property reuse is managed through concordats and heritage compacts that respect religious autonomy while facilitating adaptive transformation.

Finally, capacity building is essential. Training programs should be developed for local governments, property owners, heritage professionals, and architects to build technical expertise in adaptive reuse, heritage-sensitive design, and cultural mediation. Such initiatives will help bridge the existing knowledge gap and empower actors to manage the complexities of religious building transformation more effectively.

In sum, this study offers both theoretical insights and practical strategies for the future of religious heritage buildings, particularly in regions facing high vacancy rates in ecclesiastical properties. Adaptive reuse—when carried out with cultural sensitivity, community participation, and institutional alignment—can become a transformative mechanism for urban revitalization, cultural preservation, and sustainable development. The ecclesiastical dimension of these buildings must remain at the forefront of reuse strategies to ensure spiritual continuity and respect for sacred traditions.

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