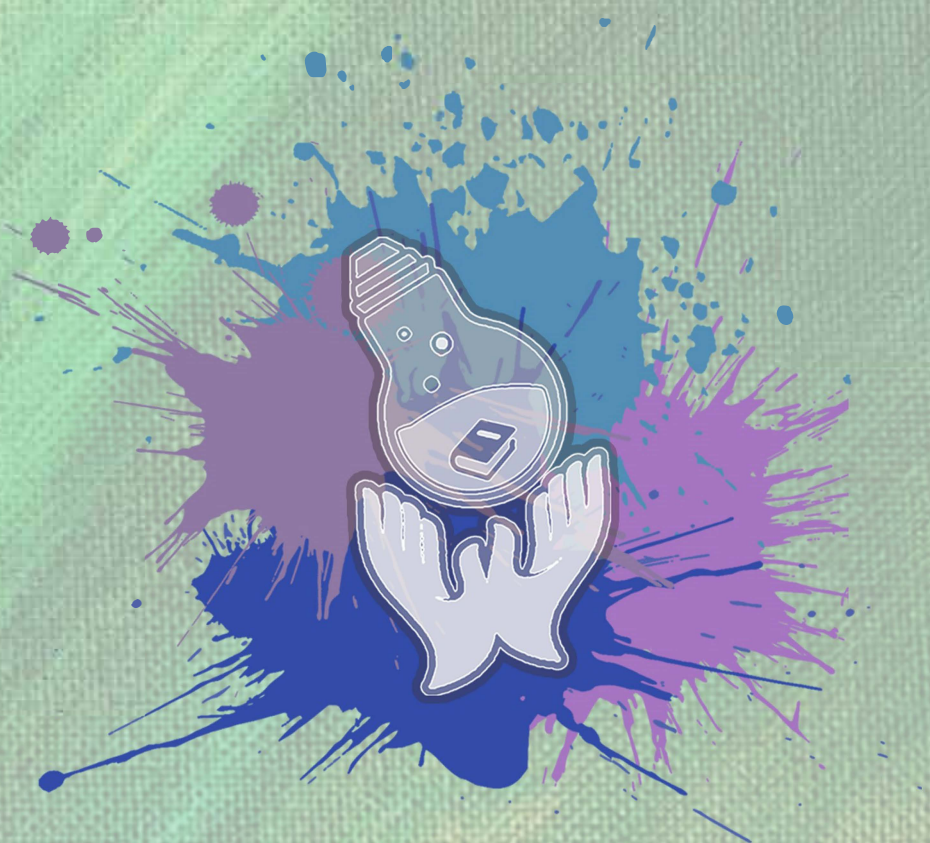




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2019



4th UNDERGRADUATE **SEMINAR** 2019

BUILT ENVIRONMENT & TECHNOLOGY

e-PROCEEDING

eISBN-978-967-5741-97-5



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FACULTY OF ARCHITECTURE, PLANNING & SURVEYING

UNIVERSITI TEKNOLOGI MARA PERAK BRANCH

SERI ISKANDAR CAMPUS

ECONOMIC PERSPECTIVES ON ADAPTIVE REUSE OF HERITAGE BUILDING AS HOTELS IN GEORGETOWN, PENANG

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Abstract:

Modern design have threatened older and historical buildings to evolve. However, heritage buildings are better to keep and maintain the way it is due to the high building value it possessed. Some of the problems identified in this research are high cost of construction and uneconomic building return. The aim of this research is to study the economic perspectives of adaptive reuse in heritage buildings. The objectives are a) to identify adaptive reuse of heritage building as hotels, b) to determine the success factors and c) to study the rate of success of economic return on adaptive reuse heritage building as hotels in Georgetown, Penang. Data was collected by observations, questionnaires and interviews methods. These data were then analysed using SPSS (Version 24) Software. The results of this study will benefit any property investors whom wishes to adapt any heritage buildings into hotel. From this study, 30 heritage buildings was identified and adapted into hotels with interior design as the main success factor. With an average duration of only 9 years to get back their capital return, hotel owners agreed that adaptive reuse is an investment that is worth to invest.

Keywords:

Economic Perspectives; Adaptive Reuse; Heritage Building; Hotels; Georgetown Penang

1.0 INTRODUCTION

Adaptive reuse is referred to as the process of reusing building property for the purpose of other than what it was built for. Adaptive reuse is not something rare in our country. In fact, adaptive reuse of heritage building have long being practised in many developed countries with the policies that have been implemented in their legislation (Silva and Perera, 2016).

Cost of construction plays a major role and has to be taken into account when considering adaptive reuse as an alternative for building conservation (Bullen and Love, 2010). In a study by Wilkinson, James and Reed (2012), adaptation costs of heritage building exceeds the cost of a new building due to the complexity and legislation requirements of heritage buildings. Based on a study done in Ontario, Canada by Shipley, Utz and Parsons (2006), historical buildings are being demolished in the past, as a result of an argument by the owner, bankers and developers regarding the renovation and adaptation costs of buildings for new purpose was too high.

Adaptive reuse of buildings does not really provide economic return to the investors. Instead, these investments are done due to the high value of the heritage building that is embedded within it. In deed, adaptive reuse is a very expensive investment. The economic efficiency seems to equal to zero if people only count on the economic return and overlook the intangible non-economic values (Yung and Chan, 2012). Mohamed, Boyle, Yang & Tangari (2017) mentioned, for a more return of investment buildings must be able to offer more such as find a way for it to be reuse multiple times in the future and avoid from being vacant in a long term.

2.0 LITERATURE REVIEW

Adaptive reuse is an alternative way to give building a new life. It is also a way to prevent buildings with high historical value from being abandoned or demolished in order to make way for new constructions.

2.1 Heritage Buildings

Heritage buildings are buildings that have been standing tall together with history ever since it was built. For most Malaysians, heritage buildings represent buildings of the past that is related to the history of pre-war periods and is being inherited from one generation to another. Heritage buildings offer chance for the buildings to be restored or adapted for similar or different function (UNESCO, 2015). However, actions to the buildings which include additions, new buildings and even change in use are ought to have minimum intervention (Worthing and Bond, 2008).

2.2 Adaptive Reuse

Buildings are built with specific function during construction. However, buildings may have outlived their intended function as time pass by. According to Conejos, Langston & Smith (2011), adaptive reuse is the act of modifying a building to accommodate uses that are different from those originally intended. This statement is supported by Niroumand Shidhvan (2013) when he mentioned that building must adapt to their environments in order to be more sustainable and provide a more comfortable condition to the users. Compared to demolition, adaptive reuse offers a more efficient and effective process of dealing with buildings (Bullen and Love, 2011b, 2011a). However, owners and practitioners have come to an agreement that not all buildings are suit to be reuse.

2.3 Economic Perspective

Niroumand Shidhvan (2013) mentioned that, adaptive reuse can generate great financial saving and capital return to the owner or investors. This is so because the buildings are not required to be constructed from the very beginning. On top of that, it is expected that the value of heritage buildings will keep on rising over time. However, that is not always the case. According to Ahamd (2012), the capital return is uncertain as the amount of return may be lower than expected. Hoesli and Macgregor (2000) added that the falling net rent is another risk factor that can lower the expected income growth of a property investment. Therefore, making the selling and leasing of the adapted reuse building can be a major concern for the owner in order to get back their capital return.

3.0 METHODOLOGY

To achieve the objectives of this study, there are several stages of the study that need to be done systematically. In Stage 1, literature by previous researchers were reviewed to determine the field of study. The sources of study were derived from articles, journals, papers, books and relevant websites. This stage was conducted to identify problems and issues, determine the research and title of the study. From there, only the objectives and scope of study were formed. Stage 2 was the data collection stage. In this research, adaptive reuse heritage hotels was identified through observations. From the list of identified hotels obtained, 3 adaptive reuse heritage hotels were chosen based on hotel price range as the case study for this research. Structured interview questions was prepared to owners of the chosen hotels as they have the first hand experience on the topic of study. For each hotel, 20 sets of closed ended and Likert scale questions were distributed to the hotel guests. The rate of questionnaires return was 100%. Statistical Package for Social Sciences (SPSS) Software was used to analyse the data. In Stage 3, based on the results of the analysis, conclusions and recommendations of this study are made.

The scope of this research focused on the economic of heritage buildings being adapted. Georgetown is chosen for the study as it has quite a number of heritage buildings compared to Malacca. The type of building conversion was further narrowed into hotels. The hotels then were categorized to choose the best range of hotel prices that the interview can be conducted. Hotel price ranging from RM400.00 to RM600.00 as only this hotel range got the most number of interview sessions compared to other range of hotel price. From the same range of hotel price, only hotels were chosen for the interview session due to time constraint.

4.0 ANALYSIS AND FINDINGS

The findings of this research objectives are indicated as in Table 1. With the findings for each objectives are found, the it can be said that the objectives of this study have been achieved.

Table.1: Objectives and findings of the study

Objectives		Findings
Objective 1 (Observation)	To identify adaptive reuse of heritage buildings as hotels in Georgetown, Penang.	There are 30 heritage buildings identified to have undergone adaptive reuse into hotels in Georgetown, Penang.
Objective 2 (Questionnaire)	To determine the success factors of adaptive reuse of heritage buildings as hotels in Georgetown, Penang.	The top five success factors of adaptive reuse of heritage buildings as hotels were ranked which are interior design, architectural design, staff's courtesy, staff's efficient service and nearby attraction area.
Objective 3 (Interview)	To study the rate of success of economic return of adapting heritage building into hotel from the owner's perspective in Georgetown, Penang.	The average duration taken for owners to obtain their capital investments are 9 years. 2 of 3 hotel owners (Love Lane and Coffee Atelier) agreed that it is worth it to adapt the building into hotel.

5.0 CONCLUSION

From the study, it was identified that there are 30 heritage buildings undergone adaptive reuse as hotels. Interior design and architectural design are the top two success factors of adaptive reuse of heritage building as hotels. With an average duration of only 9 years for owners to get their payback period, it can be said that most of the hotel owners agreed that adaptive reuse is an investment that is worth to invest.

REFERENCES

- Ahamd, K. H. (2012) *Construction Economics: Problems and Solutions 2*. Kuala Lumpur: Pearson Custom Publishing.
- Bullen, P. A. and Love, P. E. D. (2010) 'The rhetoric of adaptive reuse or reality of demolition: Views from the field', *Cities*. Elsevier Ltd, 27(4), pp. 215–224.
- Bullen, P. and Love, P. (2011a) 'A new future for the past: a model for adaptive reuse decision-making', *Built Environment Project and Asset Management*, 1(1), pp. 32–44.
- Bullen, P. and Love, P. (2011b) 'Factors influencing the adaptive re-use of buildings', *Journal of Engineering, Design and Technology*, 9(1), pp. 32–46.
- Conejos, S., Langston, C. and Smith, J. (2011) 'Improving the implementation of adaptive reuse strategies for historic buildings', in *Le Vie dei Mercanti S.A.V.E. HERITAGE: Safeguard of Architectural, Visual, Environmental Heritage*. Naples, Italy., p. 11.
- Hoesli, M. and Macgregor, B. D. (2000) *Property Investment: Principles and Practice of Portfolio Management*. New York, USA: Pearson Education Limited.
- Mohamed, R. Boyle, R., Yang, A.Y. and Tangari, J.. (2017) 'Adaptive reuse: a review and analysis of its relationship to the 3 Es of sustainability', *Facilities*, 35(3/4), pp. 138–154.
- Niroumand Shidhvan, S. (2013) 'Comparative Investigating of Adaptive Reuse and Sustainable Architecture With', *Alam Cipta*, 6(December), pp. 101–111.
- Shipley, R., Utz, S. and Parsons, M. (2006) 'Does adaptive reuse pay? A study of the business of building renovation in Ontario, Canada', *International Journal of Heritage Studies*, 12(6), pp. 505–520.
- Silva, D. D. and Perera, B. A. K. S. (2016) 'Barriers and Challenges of Adaptive Reuse of Buildings'. UNESCO (2015) *Caring for your Heritage Building: Building Owner's Information Kit*. Available at: <http://www.unesco.org/new/en/jakarta/culture/ TO>.
- Wilkinson, S. J., James, K. and Reed, R. (2012) 'Using building adaptation to deliver sustainability in Australia', *Structural Survey*, 27(1), pp. 46–61.
- Worthing, D. and Bond, S. (2008) *Managing Built Heritage: The Role of Cultural Values and Significance*. Oxford: Blackwell Publishing.
- Yung, E. H. K. and Chan, E. H. W. (2012) 'Implementation challenges to the adaptive reuse of heritage buildings: Towards the goals of sustainable, low carbon cities', *Habitat International*. 36(3), pp. 352–361.