ASSET MANAGEMENT IN HISTORIC BUILDINGS CONSERVATION: CASE OF BRAGA AREA BANDUNG

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This paper tries to explore the initial possibility of asset management in managing assets governed by the local government. In this research, historic building assets conservation is treated as a model in implementing asset management.

Asset management model is implemented in many places in managing infrastructure network, but has never been implemented in historic building management in Indonesia. Quite different than any other modeling in general, the case for historic building should iteratively relate to the characteristics and issues of historic buildings and any management opportunities that can be done by the government as the responsible party in managing historic buildings.

Asset management implementation in this research initiated with identifications of related attributes of the historic building assets based on available and applicable management possibilities. This paper shall not explore the detail exposition of each attributes found, but the approach that is implemented through asset management which shows comprehensive understanding on this issue of historic building management.

The effort of understanding the issues and types of management that is possible in historic building that then may give rise to the identification attributes of this issue that shall be the start of asset management implementation for historical buildings based on information system. It is also understood that this study may be further developed especially in drilling down the attributes used prior to asset management model implementation.

Asset management, historic building, and conservation

INTRODUCTION

In general, asset can be defined as a thing or anything that may have economic value, commercial value or exchange value, owned by business entities, institutions or individuals (Siregar, Doli D., 2004). Asset can be categorized into four types: current asset, permanent investment, fixed asset and other asset. This terminology of asset management may infer different meanings for different

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organizations. It may also be differently understood within the same institution. In several aspects, asset management may be a means to an end, as for a certain institution this may be the core aspect of its duties. Asset management appear in many form in all aspects of life (Maheswari Ankur, 2006). These forms may be in the form of managing wealth, land or vehicles for individuals (on a smaller scale) and for corporations (on a larger scale).

There appears many definition regarding asset management, and we can see this on numerousasset management planning being developed by organizations which are responsible in managing buildings, universities, utilities, industries, and other types of infrastructure according to the needs of the related organizations (Maheswari Ankur, 2006). One of the definition mention: appropriating planning and physical asset with services needed. This definition elaborates how physical assets are planned, developed, and utilized and managed. If assets are no longer appropriate with needs they are destroyed or replaced or re-functioned (asset journey). This can be achieved by managing all decision making processes through the assets' "lifecycle".

Asset management may also be defined as an important consideration in maintaining, regulating and utilizing public assets in decentralization era (Kombaitan, 2009). Asset management combines theory and practice to ensure high effectiveness and efficiency of central and regional policies on asset management.

World Bank defines that asset management is a process to upgrading asset condition, operational cost and performance which provide tools in the decision making process (World Bank, 2000). According to World Bank (2000), the advantages of implementing asset management are: 1. gaining higher financial benefit, 2. improve social benefit, 3. income growth and improve jobs faster in the private sector, and 4. higher work opportunities and property tax base.

In the implementation, asset management works on five process stages (Siregar, Doli D., 2004): asset inventory, legal audit, asset valuation, asset optimization and supervision/control. The five level processes are interconnected and integrated.

1.   Asset Inventory

There are two aspects of inventory: the physical and the legal aspects. Physical aspect consists of form, area, location, volume, type, address and others. As for the legal aspect, it consists of acquisition process, acquisition period and others. The work processes are as follows: data gathering, labeling, grouping and administering according to asset management purpose.

2.   Legal Audit

It is within the scope of asset management such as inventorying asset acquisition status, system and procedures of acquiring or transferring assets and identifying and transferring solution in legal issues, and strategies to resolve legal issues relating to acquisition or asset transfer.

3.   Asset Valuation

Asset valuation is a work process to conduct research on asset acquired. This usually is conducted by independent research consultants. The result of this valuation shall be beneficial in understanding the economic value or information to set price if asset is being sold.

4.   Asset Optimization

Optimizing asset is a work process in asset management with the purpose of optimizing physical, location, value, volume, legal and inherent economic potential of the asset. In this process the assets acquired by Regional Government are identified, grouped by its potentials. The result of this process is the recommendation in the form of goal, strategy and program to optimize asset acquired.

5.	Supervision and Control

Supervision and control utilization in transferring assets is an issue that often become an object of mockery to the Regional Government. An effective way in improving performance aspect is the development of Asset Management Information System. Through Asset Management Information System, work transparency in managing asset shall be ensured without worrying in weak supervision and control.
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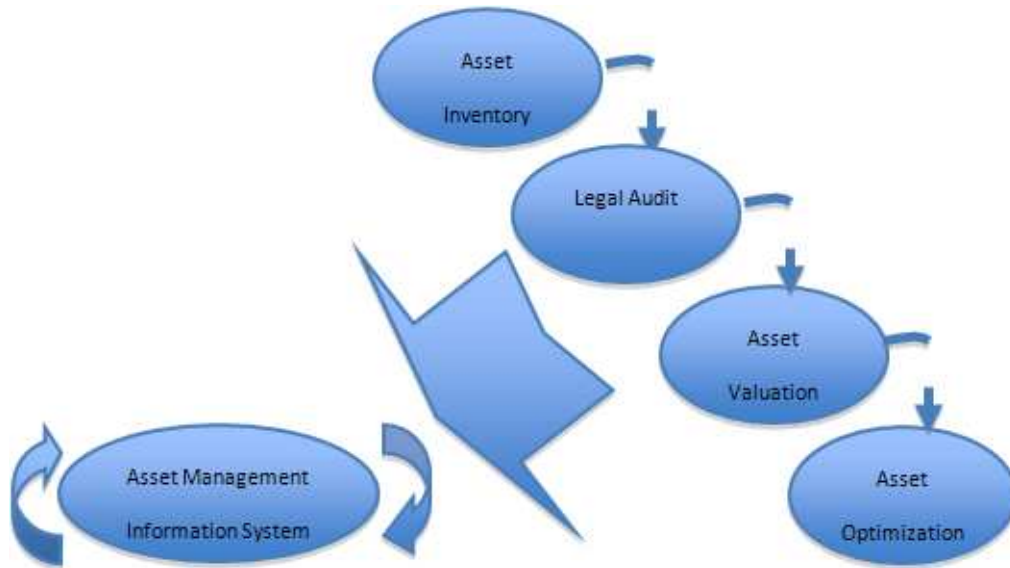
Figure 1.   Asset Management Workflow
Source: Siregar, Doli D., 2004

The five levels are one integrated unit, one with the others. For this to work, implementation should not be partial or only implemented in parts only.

All this time, most of all asset management model are used in the maintenance and management context of the city infrastructure, and never been in used for the historic building maintenance that always has a dilemma because of economic interest. Using this asset management model, the management of historic building is expected to be seen in various aspect of issue, including its potential management.

The objective of this research is to look for the identification of attribute for the asset management to be applied in heritage building conservatioon in Bandung. Historic building is one categories of a conservation object (mentioned in Catanese & Snyder, 1988, that the categories of conservation object are: Natural Environment, City and Village, Skyline and View Corridor, Region/District, Neighborhoods, Street Appearance, Former Building/Historic Building and Historic Object/Debris).

The categories of conservation object which is historic buildings are referred to the Act No. 5 of 1992 regarding Cultural Reservation Object which means the object of human creation, movable or immovable in the form of entity or group, or the parts or the remains, which is at least 50 years, or represent a style period at least 50 years, also considered to have an important value to the history, science, and culture. Moreover, this historic building has to meet the requirement to be preserved, i.e.

must have values such as historical value, architectural value, the value of science, socio-cultural value and the value of age (Perda of Bandung City Number 19/2009 about historic building conservation).

This research paper tries to explore the initial possibility for using asset management model in conserving historic buildings in the City of Bandung. The completion of attributes of historic building is therefore to be the focus of this research rather than the detailed examination of these attributes. This model is expected to provide relevant information on the characteristics of asset management owned by Bandung City Government especially historic building within the region. Through this developed model, Bandung City Government is expected to optimize historic building asset utilization in that this shall provide benefit value that is optimum.

For this, the paper will be presented with the following structure: 1) theoritical background on historic buildings and asset management, 2) identification of attribute through an exercise in Braga, and 3) concluding section.

HISTORIC BUILDING CONSERVATION

The history of a city is reflected in the wealth heritage of historic building architecture existed in the city.

Definition of a historic building according to Regulation No. 5 Year 1992 regarding Cultural Heritage Object is "immoveable manmade object or not in which is an integrated unit or group, or its parts or the rest of it of at least 50 (fifty) years, and is considered having a significant value for history, science and culture". Historic building has value and important information for future generations. In addition, historic building is a national culture treasure that has an important meaning for the understanding and development of history, science, and culture. It needs to be protected and conserved to nurture self awareness of national interest (Regulation No. 5 Year 1992 Regarding Cultural Heritage Object).

Conservation of historic objects may be defined as an effort to maintain and protect a heritage in the form of an artifact, building, city or historic region according to its condition and optimizing the respective heritage by utilizing it according to its initial or new function to pay its existence. It should be noted that upon its utilization it shall not lessen any values inherently in the building as such provide a memorable memory of the past that enhances the present. The historic building conservation has given much benefit. According to Budiharjo (1991), the presence of conservation of environment and historic building may become: (1) commercial asset for international tourist, (2) enhances visual experience, (3) provide a permanent and refreshing nuances, (4) provide a psychological security for individuals to see, touch and feel facts of history and (5) the architecture heritage conservation shall be well preserved.

Historic building management at this time has several problems such as: Numerous transfers of function, physical and architectural/design change, negligence, no regional policies to regulate conservation towards cultural heritage. In dealing with this situation, Bandung City Government has implemented several policies such as: Control via permits, control via city planning and grant via maintenance funding. Control implemented via permits and city planning has not been effective, this is evident in the demolishing of existing historic buildings. Additionally, existing and previous city planning merely provides general direction on historic building area. The assistance provided only covers part of existing historic buildings (in Bandung's case, assistance are provided to only 240 of "approximately" 421 existing buildings), and the remaining buildings are left untouched because their conditions and their numbers are unknown. The unavailability of these historic buildings information

(number, locations, status, etc.) has made proper management of these historic buildings impossible. Within the context of asset management, it is obvious that the unavailability of information on assets conditions hampers the efforts for good buildings management. This is true because the condition of each asset require different type of viable management. Although the goal of asset management is already clear, it is only focusing on existing type of management and not covering viable management opportunities.

In order to determine whether or not a historic building must be preserved, conservation criterion must be formulated. This research uses conservation criterion according to the Draft of Regional Regulation of Bandung Municipality year 2008 on Cultural Heritage Conservation (Cultural and Tourism Office of Bandung Municipality & Bandung Heritage Society, 2009. These criterion are: (1) Historic Value, (2) Architectural Value, (3) Knowledge Value, (4) Social and Cultural Value (Collective Memory), and (5) Age Value.

Table 2. List of Bandung's Historic Buildings

No	Name of Historic Buildings	No	Name of Historic Buildings
1	Asia Africa Culture Center (Majestic Building)	14	Sinsin's/Tifany's/Sinar Mas' Row of Buildings
2	Kimia Farma Pharmacy's Row of Buildings	15	Kasoem's, etc. row of buildings
3	Kimia Farma Building (Former Au Bon Marche building)	16	Coero's, etc. row of buildings
4	Braga Hotel (Former Wilhelmina Hotel)	17	Merdeka's/Meuble's/North Sea Bar's Row of Buildings
5	BDP Jabar & Banten (Former Denis Bank)	18	Elegance's Row of Buildings
6	Dekranas Jabar Building	19	Central Billyard's Row of Buildings
7	LKBN Antara Building	20	Bank Indonesia Building
8	Lingling Store /Braga Meuble Building	21	Ega Kineta Building
9	Gas Negara Building	22	Leather Palace Building
10	Forty Three Furniture Building	23	Center Point Building
11	Former Populair Store Building	24	Landmark Building
12	Sibayak/Bank Sukapura/Etc. Row of Buildings	25	Insulinde Building
13	Former Bank Modern/Concurent Store Building		

Source: Historic Buildings Database of Bandung City Year 1997

The reasons to choose those objects are:
1. The object is in Jalan Braga's corridor which has been a trade and service center since the beginning of its establishment. In the colonial period, the displacement of government center from Batavia to Bandung was followed by a plan to make the area of Jalan Braga as a prestigious trade center.
2. The building in Jalan Braga's area has a specific character from the whole historic building in Bandung because the buildings are in line and gather along Jalan Braga and does not look like the buildings in another location which is built separately to another building.

3. The number of historic building in Jalan Braga compared to the total historic building in Bandung, is only about 6.6 % of the total. But if compared based on the distribution by street's name, Braga Street has more historic buildings (28) compared to other historic streets like Dago (23) and Asia-Afrika (19).
4. In addition to its number, the historic buildings in Jalan Braga is relatively more threatened by commercial activity, where economy interest is considered as the most important thing rather than the conservation of the historic building in this area.

Preserving buildings with historic value requires appropriate method and technique so that the actions taken will keep the object of conservation intact. According to Catanese & Snyder (1988), there are several applicable methods to maintain old/historic buildings, i.e.: (1) *Legal protection*, (2) *Punishment/regulation*, (3) *Loan,* (4) *Subsidy*, (5) *Adaptive reuse* (6) *Licensing rights to build,* and (7) *Transfer Zoning (Development Rights Transfer).*

To support the conservation methods there are several applicable conservations techniques available. Conservation techniques according to experts (Fitch, 1982) and Attoe (in Catanese & Snyder 1992) Conservation, Preservation, Consolidation, Restoration, Reconstitution, Rehabilitation, Renovation, Adaptive Reuse, Reconstruction, Replication, Protection, and Stabilization.

Based on the above methods and techniques, a historic building classification is required to facilitate the application of applicable methods and techniques of historic building conservations. This research use historic building classification according to the Draft of Regional Regulation of Bandung Municipality year 2008 on Cultural Heritage Conservation (Cultural and Tourism Office of Bandung Municipality & Bandung Heritage Society, 2008), i.e.:

1. Cultural heritage object group A (Main) which meet (4) out of the (5) conservation criterion.
2. Cultural heritage object group B (Medium) which meet (3) out of the (5) conservation criterion.
3. Cultural heritage object group C (Basic) which meet (2) out of the (5) conservation criterion.

ASSET MANAGEMENT IN PRESERVING HISTORIC BUILDINGS

This chapter contains the formulation of historic building's asset attributes, asset management operation, and optimization of asset's conditions through conservation methods.

The analysis is in line with asset management approach where the conditions or attributes as the main variables of historic building are gathered. The attributes of these historic buildings are determined through control of management approach being applied, i.e. type of authorities available to the regional government (including their capabilities) as well as the available opportunities of the historic buildings in question within the framework of historic building protection.

Attribute Formulation

The result of characteristics analysis of historic buildings shown that historic building conditions can be divided into three (3) conditions, i.e. poor, average and good condition. As for the methods available for use to preserve historic buildings are legal protection, punishment/regulation, loan, subsidy, adaptive reuse, licensing of rights to build, and transfer zoning (development rights transfer). Based on historic building's characteristics and method of conservations, the necessary attributes to provide necessary information are derived.

Table 2. Applicable Attributes

No		Attributes	Asset Management
I	1.	Building Name	Asset Inventory
	2.	Building Location	
	3.	Land Allotment	
	4.	Land Size	
	5.	Building coverage ratio (BCR)	
	6.	Floor Size	
	7.	Floor area ratio (FAR)	
	8.	Existing Number of Floor	
	9.	Required Number of Floor	
	10.	Original Function	
	11.	Existing Function	
	12.	Construction year	
	13.	Architect	
	14.	Building Condition	
II	15.	Loan	Legal Audit
	16.	Subsidy	
	17.	Building Ownership	
III	18.	Historical Value	Asset Valuation
	19.	Architectural Value	
	20.	Knowledge Value	
	21.	Social and Cultural Values	
	22.	Building Age	
	23.	Historic Building Type	

Source: Analysis, 2009

From these formulated attributes, asset management phase is possible. Information on historic building assets in question is possible upon obtaining these attributes. It will provide information on assets conditions, i.e. potential and hindrance of the historic building.

Asset Management Operation

The most important thing to implement the Asset Management is the attribute formulation as explained above. If the attribute formulation has already explained all aspects, then the asset management process of historic building can be implemented.

Asset inventory. Asset inventory will provide information on the following attributes: Building name, Building location, Land allotment, Land size, BCR, Floor Size, FAR, Existing Number of Floors, Required Number of Floors, Original Functions, Existing Functions, Construction Year, Architect and Building Conditions.

Legal audit. This phase provides information on the following attributes: Loan, Subsidy, and Building Owner.

Assets valuation. This phase will provide information on history, architectural value, knowledge value. Social and cultural values, and age. Based on the information of historic building values, the following classifications is possible.

Optimization of Historic Building's Assets Conditions through Conservation Method

Based on the information obtained from *asset inventory, legal audit, and assets valuation phase* (see Appendix-A, Appendix-B and Appendix-C)*,* it is possible to find out the conditions of the assets. In this optimization phase, historic building conditions are classified according to its potentials and hindrances, and also compared with the type of regional government's available authority (including their capabilities) as well as available opportunities of the historic buildings in question within the framework of historic building protection. For buildings with conservation potentials, several steps to optimize these potentials are made. As for the assets with hindering conditions, efforts to minimize existing hindrance are required in order to have optimum assets utilization.

Based on the conditions of abovementioned historic buildings condition, several programs to optimize and reduce the hindrance to preserve historic buildings:

1. Optimizing historic buildings potentials to obtain maximum benefits.
2. Reducing the historic buildings hindrance for better functionalities.

CONCLUSION

The process of asset management in this research focuses on identification of related attributes of Bandung City's historic building management, based on types of applicable management available. This paper shall not explore the detail exposition of each attributes found on the dynamics perspective of historic buildings asset management issue, but the approach that is implemented through asset management which shows complete comprehensive understanding on this issue of historic building management.

The effort of understanding the issues and types of management that is possible in historic building in Bandung City that then may give rise to attributes of this issue that shall be the start of asset management implementation for historic buildings through information system. It is also understood that this study may be further developed especially in detailing attributes used prior to asset management model implementation.

The next step to be done in this asset management template is to map the entire historic building including its attribute in a spatial information system template based on geographical information system. The established database (spatial and non-spatial) can observe dynamically the historic building concern thus it can be used in decision making process.

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