The adaptive reuse heritage building for fashion space: A strategy of sustainability

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Abstract. Adaptive reuse of heritage buildings can be used as a different strategy for fashion space purposes, especially for commercial sites. The use of adaptive reuse concept can affect some physical changes on the building's elements to fit its new purpose, as the strategy for the sustainability of architecture and development of the fashion spaces. The paper compared three tangible evidence of reusing old heritage buildings as fashion spaces and the impact on it by using a qualitative method. The result shows that there are some impacts, such as providing the right image among the community, grow realizations of the past, and increasing intention to visit the building as well as make their fashion space design looks authentic which also related to the economic value. The study case of the adaptive reuse heritage building also analyzed the side impact of this strategy. The conclusion states that the reuse of heritage building as a fashion space strategy indicates a positive value for sustainability in the economic, social, and environment.

Keywords: adaptive reuse, heritage building, fashion space, sustainability strategy

1. Introduction
Fashion and architecture are entirely two separate fields which differ from one another. Architecture is a discipline about building an environment, while fashion is about clothes for the human body. They both have entirely different types of history, construction, techniques, and functions, but they can somehow correlate in the case of concept design [1]. As been studied nowadays, these two fields have many similarities; for example, their relationship in art, design, science, and technology. That means, fashion and architecture significantly affect each other and can be a supporter of the development of both industries. Based on Adiwibowo, Widodo & Santosa (2015), in many city centers abroad as well in Indonesia, heritage buildings that have already lost their old function are commonly being used for retail industries and public spaces, including fashion spaces purpose [2]. Adaptive reuse seems to be a promising sustainability strategy for preserving cultural heritage. This concept also brings some opportunities for the fashion and heritage sector to cause these buildings located in the city where the center of public activities is usually shared, and their adaptive reuse concept may provide commercial purposes for maintenance and restoration.

On the other hand, the concept of heritage architecture as a public attraction has already been a common practice in many cities abroad as in Indonesia [2]. Moreover, it seems like this issue
can pose a threat and obstacles according to the viewpoint of people who just want to utilize commercialization alone because commercial based activities mostly influence the culture and characters of the cities. The fashion industry's development has changed rapidly and can affect the outside environment of this industry. Therefore, legislation needs to provide strict rules and high costs in the use of old buildings to avoid the occurrence of commercialization.

The requirements to meet the necessities in the fashion industry pose a significant challenge for historic buildings and cities. Overall, according to (Bullen & Love, 2011), the ideal sustainability should include three main things: economic, social, and environmental aspects [3]. The goals of adaptive reuse projects are to respect and retain a building's heritage significance as well as add a contemporary layer that provides value for the future. Therefore, to avoid the problem of changing the original form and destruction of buildings, it is essential to identify and plan the type and the scale of economic commercialism and other activities, especially for fashion space purposes so that the historical elements can be retained.

2. Method
The research applies a qualitative method with observations and literature study styles. Data were collected through reviewing professional publications, such as literature study from journals and books, or on-site visits, and from writings that related to fashion spaces, adaptive reuse projects in heritage building applied. Moreover, a direct observation was also conducted through a site survey at Spiegel Kota Lama, Semarang Indonesia as a heritage building used for fashion space. The observation to obtain comprehensive data for the final result was conducted by using a SWOT (strength- weakness-opportunities -threats) - analysis mainly to identify the strengths and weaknesses in using adaptive reuse building for fashion space purpose.

3. Result and discussion
The case studies illustrate different experiences for the impact of reusing heritage building as the sustainability for architecture and development, especially for fashion spaces in Indonesia as well as other countries such as Europe. Based on Jokilehto in Plevoets, et al. (2012), in Europe this can follow impacts for all aspects whose directly involved in reusing heritage building for sustainability [4], as follows:

For the conservators, reusing a heritage building is generally to provide a positive impact on conservation. Because it can provide a new useful function for abandoned historic buildings, and it can be found by investors to manage them as aspects of social or cultural activities. According to Plevoets,& Van Cleempoel, (2009), in some cases that exist outside the country, heritage buildings will be rented out to users and are not obliged to account for the unique characteristics that need to be maintained from the building [5]. In some cases, building tenants have practically no control over the use of heritage buildings after restoration. Sometimes, interesting interior details and a part of the heritage building entirely replaced with a new design style that feels similar to other interiors.

For the city, reusing historical buildings for new functions can enhance the survival of the historic central area and thereby stimulate the city's regeneration. Also, (Kirby& Kent, (2010) said that the reuse of the city's architectural heritage could be part of the city's image and branding of the city [6]. They also explained that the purpose of the city's branding was to promote the city itself for specific activities and, in some cases, enrich the life and the economy of the city with the activities they are aware of.

From the owner's perspective, they chose a specific building mostly because of the location of the building. Some of them think that using heritage or historical buildings significantly does not necessarily affect both in terms of commercial viewpoints. It is also because the heritage building, which includes cultural reserve, has restrictions that need to considered when designing the place. The demands for building restoration and maintenance can have an impact on the price increase. However, according to (Plevoets, Petermans, & Van Cleempoel,, 2011), there are a lot of owners who assume that using
heritage buildings as their businesses is one of the differentiation strategies of their competitors and could lead to their economic values [7]. Besides, by using the location in the heritage building, they can offer a unique and authentic experience for visitors. This method had been explored more deeply by the disciplines of economic marketing. (Maclaran, P. & Brown, S., 2005) also made an analysis study in the Powerscourt Townhouse Center, a fashion space located in the eighteenth-century residential building. They found that after Powerscourt management switched to further accentuate and change the cultural identity for economic aspects, the customer felt betrayed [8]. It seems that the classical buildings are more liked than modern and contemporary, and the preserved old buildings are more liked than the undefended.

For contemporary designers, making creations through heritage and historical building is challenging but entertaining (Schittich, 2003). This case is undoubtedly not applied for some designers, because most contemporary designers prefer to design something completely new and different from old traditional buildings concept [9]. However, as time pass by, the growth of creative industries in the 20th century began to lead to the conservation of cultural heritage buildings by using the adaptive reuse concept. Currently, adaptive reuse has considered as the most appropriate way for heritage building conservation by implementing a new function for the abandoned old building but still pay attention to essential aspects and rules in the program. As a result, historic buildings in countries are transformed into a variety of programs, among retail and fashion space.

As in Indonesia, (Fajarwati, 2019) said, mostly heritage buildings adapt their original building with mixed-use [10]. This adaptive reuse strategy kept the original function of the building as it is and supported by additional functions for the sustainability of the heritage building. For (Msrlslosy, D. & Günde, K., 2016), adaptive reuse project divided into three categories: The first option is to use the building with its original function with some necessary adaptation to fit the building based on requirements. The second option is to mix-use the original function of the building and support additional functions for the sustainability of the heritage building. Moreover, the third option is by adapting the building with totally new use [11].

Furthermore, for Spiegel building, the result shows by reusing the heritage building into a co-working space, including fashion space inside, can provide the right image among the community. Not intended to boost the success of the Dutch East Indies that ever gave a dark period for the archipelago, but instead grew the realization that a nation grows and large due to events in the past, without the past may never appear a ‘freedom’ as it is now. Moreover, the interest to visit the building for taking photos is increasing because of the architectural outlook that still maintains the authenticity of the building. Based on Adiwibowo, Widodo & Santos (2015) analysis about Edward Forrer building which used as a heritage building for fashion space in Bandung, provides evidence that there is a correlation between public’s evaluation based on admiration for heritage building’s existence and their intention to visit the building reused as a fashion space, and this could increase economic values for the brand. Furthermore, for the H&M flagship store analyzed by (Plevoets, B. & Van Cleempoel, K., 2011), the retailer looked deliberately for a building which image is opposed to its store image. To make their fashion space looks authentic, the relationship developed between the contemporary interior design and the historic building marked by contrast. H&M dissociates oneself by creating an image of being fashionable, trendy, and low-priced.

3.1. Spiegel building in old town Semarang
Spiegel Building is located on the road of Letnan Jenderal Suprapto No. 34, Kota Lama, Semarang Utara. Winkel Maatschappij "H Spiegel" which used to own this building. He opened a family shop that provides a variety of goods, either household or office needs with the latest models. Some items sold between the textile of cotton or linen, household utensils, typewriter, furniture, sports needs, etc. The company was first built in 1895 by Mr. Addler. Then Mr. H. Spiegel was appointed as the manager of the company. Five years later, Mr. H. Spiegel became the owner. In 1908 the company became a limited company. At first, this heritage building was somehow less cared for and eventually used as a storage warehouse, but on June 8, 2015, building functions diverted into a Co-Working
space and is often used as a fashion space such as fashion exhibition and retail. The reuse of heritage building in Spiegel building ia presented in Figure 1 and Figure 2.

![Figure 1. Gedung Spiegel, Kota Lama. (2017). Retrieved March 8, 2020, from Seputar Semarang.com: http://seputarsemarang.com/gedung-spiegel/](image)

![Figure 2. Spiegel Building in Current Condition (2020) Source: Febianti, (2020).](image)

3.1.1. Heritage perspective
The main door is indented into and sheltered by curved roofs that make up a balcony, and above the balcony, there is not any roof—double leafy doors with wooden panels. On the door, there is *bouwenlicht* as a decorator. Above the cornice along the western facade, there is a full glass window that serves as ventilation. Moreover, on the top of the roof, there is a *wind-wijzer*. Curved upper and double-leaved windows and panels of glass and wood. Spiegel building style is influenced by the *Dutch Colonial* style but it is adapted by the tropic climate in Indonesia. The building is built with the application of a high roof that is about 6 meters on the first floor and large windows for air ventilation. However, this building does not have its yard and terrace because it located in a complex area of Old Town, which is quite dense and narrow with its position right by the highway Letjend Suprapto, the Old City of Semarang.

3.1.2. Architectural perspective
The strategy towards adaptive reuse applied in Spiegel building. Besides maintaining the outside looks, it appears on the wall in its interior that still retains the '1 stone' brick wall, which cement and paint are not applied, to reflect the European ambience if we enter this building. Wallpaper of old newspapers and magazines as wall decorations in the toilet area successfully displays an Old impression. Entering
the service area and the 2nd floor, there are solid natural woods as the floor. Moreover, for stairs and void on the 2nd floor are still retain its original form. Other interior elements are replaced with new ones because they are damaged, but the designer still makes it look natural based on the building's concept.

3.1.3. Fashion space perspective
Reusing the heritage building into a co-working space, including fashion space inside, can provide the right image among the community. The contrast between Old and New can make a unique perception and intention to visit the building to take photos for fashion editorial purposes also for communities is increasing because of the architectural outlook that still maintains the authenticity of the building. Not intended to boost the success of the Dutch East Indies that ever gave a dark period for the archipelago, but instead grew the realization that a nation grows and large due to events in the past, without the past may never appear a ‘Freedom’ as it is now.

3.2. Edward Forrer building in Bandung
Edward Forrer is an industrial company engaged in textile producing fashion needs which are footwear and bag made in Indonesia. The company is named based on its founder, Edward Forrer. He starts his business by selling door-to-door shoes. As many orders, it changes his sales system. He is no longer visit doo to door but instead changes his home living room, which measures four square meters, into a workshop and showrooms. His efforts continue to expand until he can rent a shop in Saad Street, Bandung. Four years later he opens a more extensive shop on Jalan Veteran No. 44 Bandung, which is now the headquarters of Edward Forrer. The company later expands its business by making Australia the head office for Go International and opened outlets in countries like Malaysia, Hawaii, Australia, and Indonesia. Edward Forrer also has outlets in these countries. The reuse of Edward Forrer building is presented in Figure 3 and Figure 4.

![Figure 3](source: emanS. (2012). Bangunan Kuno Sepanjang Jalan Dago. Retrieved March 4, 2020, from Sepanjang Jalan Kehidupan: https://sepanjangjk.wordpress.com/2012/03/24/bangunan-kuno-sepanjang-jalan-dago/)

![Figure 4](source: emanS. (2012). Bangunan Kuno Sepanjang Jalan Dago. Retrieved March 4, 2020, from Sepanjang Jalan Kehidupan: https://sepanjangjk.wordpress.com/2012/03/24/bangunan-kuno-sepanjang-jalan-dago/)

3.2.1. Heritage perspective
The use of adaptive reuse on buildings for new functions are seen in this Edward Forrer building in Juanda Street Bandung. The building once was used to be a living space, and was designed by famous Dutch architect during 1920, A.F. Aalbers by using the Art Deco style. Seen here, many elements of the original building are still preserved or maintained, and only some elements added to support the new function. Using the original material is also still maintained on the outside look, but the
material finishes of the main door has been changed. The added elements here are still adjusted to look unified with the original building.

3.2.2. Architectural perspective.
Distinctive architectural features that still preserved in this building are curved shapes on one side of the building. Besides, it looks like this building has a flat roof decorated with a parapet (low barrier on the edge of the roof) made of steel, and a vertical line on the left resembles a tower. The use of concrete and rocks on white painted walls gives a contrasting yet harmonious effect.

3.2.3. Fashion space perspective.
Retnasih, S. Adiwibowo, et al., (2015) analyse about the Edward Forrer building, as a heritage building for fashion space in Bandung that still preserve their facade, it provides evidence that there is a connection between public's evaluation based on people's admiration for heritage building's existence and their intention to visit the building reused as a fashion space [2]. Furthermore, it also creates positive economic values for the brand. The exterior outlooks of the heritage building are considered as one of the unique selling points in adaptive reuse implementation, especially for fashion commercial purposes.

3.3. H & M store in Barcelona
The H&M store Barcelona is located in the Portal de l'Angel Barcelona, Spain, at the former office head center of Catalana de Gas, which is now considered a heritage monument. In 1908 the building was built by architect Domènech Estapà (1858-1917) with neo-classical style. Somehow later, in 2008, the building changed function into the H&M flagship store by designers group Estudio Mariscal [7]. The historical elements of the building are a unique setting for architects and designers to deal with it. The final results make a unique fashion space design that contrasts sharply with the old classical architectural elements of the building. The new design represents as a new layer and a new image for the building. While at the same time is still considered respecting the original structure and features of the old building. Figure 5 and Figure 6 present the reuse of H&M store building.

Figure 5. Building in original condition
Source: H&M store Estudio Mariscal, Barcelona. (2011). Retrieved March 4, 2020, from Retail Design Blog: https://retaildesignblog.net/2011/06/07/hm-store-estudio-

Figure 6. Building in the current condition
Source: Basulto, D. (2008). H&M Store in Barcelona /Estudio Mariscal. Retrieved March 2, 2020, from archdaily: https://www.archdaily.com/10512/hm-store-in-barcelona-estudio-mariscal
3.3.1. Heritage perspective

The most authentic elements seen in the facade of the building and the store display area based on the heritage view. By the restoration, some original elements are not changed much and have adapted carefully. Therefore, the results of the restoration in this building are quite looking sustainable by minimizing the size of the H&M logo on the front of the building façade, and the display area uses fairly standard and minimalist furniture. With the selection of modern and minimalist furniture in the room can accentuate the historical character of the building and give the impression of fashion space boutiques atmosphere into this building.

3.3.2. Architectural perspective.

In the entrance area, there uses lightings, colours, and movement elements through the LED screens. This entrance area works as a shop window, signage, commercial features, and access to the building. The relations between interior and exterior looks, which shown through the virtual shop window. There are three public rooms on the first floor, which used to be office places for the directors of Catalana de Gas and had been restored and turned into a shopping space later. In these public rooms, the contrast looks between old and new seen in the wooden display cabinets, the chimneys, and the original wooden material has been preserved and shares the space with the new metal furnishings.

3.3.3. Fashion space perspective.

The relationship between the fashion's brand and the building’s own space marked by contrast. H&M choses its spot in the historical building to strength its brand image. Instead of identifying itself with the classic image of the building space, H&M wants to reimagine itself by creating an image by using the contrast looks, and this can be a unique economic strategy of the brand.

Based on the results of data collections and analysis, it presents the opportunities and threats in adaptive-reusing heritage buildings as the strategy for the sustainability of architecture and the development of fashion spaces for the three places. Table 1 shows the results of the analysis of the three buildings.

Table 1. The Reuse of Spiegel, Edward Forrer, and H&M Buildings

| Opportunities | Spiegel Building in Old Town Semarang | Edward Forrer Building in Bandung | H&M Store in Barcelona |
|---------------|--------------------------------------|-----------------------------------|------------------------|
|               | Using a historic building is considered to give a good image among the community. | Provide people's admiration for this heritage building's existence. | Strengthen its own personal image by using the contrast elements. |
|               | Its unique setting enhance 'customer experience'. | Intention to visit the building is increasing. | Improved retail branding. |
|               | Building receives a new public function. | Its exterior outlooks considered as one of the unique selling points for commercial purposes. | Give a pleasant, fun-filled experience for the customer. |

| Threats | Spiegel Building in Old Town Semarang | Edward Forrer Building in Bandung | H&M Store in Barcelona |
|---------|--------------------------------------|-----------------------------------|------------------------|
|         | Time-consuming legal procedures.     | Retail design is basically a short-term while restoration should be longlasting. | Problems in complying with the heritage regulations. |
|         | Limitations to the interior & exterior design. |                                  | The high cost charged to do the restoration and maintenance. |

Source: Febianti, C. (2020).
The overall results show the dominance of opportunities for the three places. In that case, adaptive-reusing heritage building as the strategy for the sustainability of architecture and development of the fashion spaces gives more positive impacts on the aspects included in the conservation.

4. Conclusion
The case studies analysis shows three kinds of experience for fashion space by using heritage building as their place. The concept of adaptive reuse by implementing new functions for old buildings that have been abandoned as a form of sustainability considered gives an authentic image for the brand. This unique concept proved to affect the increasing number of visitors who come, although they were only taking pictures. It also considered offering emotionally engaging experiences to customers, aiming to enhance store loyalty and increase economic value for the brand.

The adaptive reuse as a sustainability strategy for architecture and development of the fashion spaces can also create a specific brand identity and provide a positive image among the community. However, for those three cases, many heritage building owners feel disturbed by the high cost charged to do the restoration and maintenance. Moreover, some limitations are required to restrict excessive commercial use. To conclude, this differentiation strategy of reusing heritage building overall has positive impacts on fashion spaces' purpose as well for visitors. It is indicated the sustainability in the economic, social, and environment.

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References
[1] Farahat B 2014. The Interrelationships Between Architecture and Fashion Design. J. Al-Azhar University Engineering. 9 1-17.
[2] Adiwibowo R S, Widodo P and Santosa I 2015. Impacts Between Public Appreciation of Historical Building and Intention to Visit Heritage Building Reused as Retail Store. J. Procedia. 184 357–64.
[3] Bullen P A and Love P E D 2011. Adaptive reuse of heritage buildings. Emerald Group Publishing Limited. 29 411-21.
[4] Plevoets B, Petermans A and Van CleempoelK 2012. (Re)using historic buildings as a retail differentiation strategy. J. Proceedings the Heritage.
[5] Plevoets B and Van Cleempoel K 2009. Retail-reuse of historic buildings: developing guidelines for designers and conservators. J. Building Materials and Building Technology to Preserve the Built Heritage. 33 61-8.
[6] Kirby A and Kent T 2010. The local icon: Reuse of buildings in place marketing. J. Town and City Management. 1 80-91.
[7] Plevoets B and Van Cleempoel K. 2011. Adaptive reuse within the retail design discipline: exploring the concept of authenticity. Proceedings Architectural Design between Teaching and Research 2565-74.
[8] Maclaran P and Brown S.2005. The Center Cannot Hold: Consuming the Utopian Marketplace. J.Consumer Research 32 311-323.
[9] Schittich C 2003. Building in Existing Fabric - Refurbishment, Extensions, New Design. J. Basel Birkhäuser.
[10] Fajarwati A A S 2019. Adaptive reuse for Dutch East Indies colonial building: Connecting identity, memory, and social media in De Tjolomadoe. J. WoMELA-GG. EAI DOI: 10.4108/eai.26-1-2019.2282905.
[11] Misirlisoy D and Günce K 2016. Adaptive reuse strategies for heritage buildings: A holistic approach. J. Cities Soc. 96 91-8.