

Architectural Design Failures A Case Study of BSD Junction and Gianyar People's Market

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Abstract

Not every architectural design outcome aligns with the aspirations of both the architect and the client. There are instances where, post-construction and after the buildings have been utilized for a period, they end up deserted, eventually transforming into abandoned structures. Architectural design failure refers to instances where the design of a building, structure, or space is failed, resulting in negative consequences such as safety hazards, functional problems, financial losses, or aesthetic issues. These failures can arise due to various reasons, including inadequate planning, poor design decisions, lack of attention to detail, insufficient consideration of user needs, and sometimes unforeseen circumstances. This study investigates two commercial buildings situated in South Tangerang and Gianyar, Bali. The study's methodology relies on conducting on-site observations using case studies, gathering primary data, and subsequently analyzing the observations' outcomes. Additionally, the study will draw upon the theoretical frameworks of various scholars to substantiate the findings and derive conclusive insights.

Keywords: design failures, abandonment, human behaviors, building users

INTRODUCTION

Architectural design failures are a prevalent occurrence, both within Indonesia and on a global scale. Researchers have conducted studies in various regions across the world, delving into the phenomenon of architectural design failures that often result in project abandonment.

Yahya (et.al., 2016) investigated the factors contributing to abandoned housing projects in Malaysia, while Ayalp (et.al., 2023) pinpointed the causes of failures in the architectural design process in Turkey. Nsiah-Asamoah (2019) concentrated on both the reasons behind, and the consequences of abandoned building projects scattered throughout Ghana. In a comprehensive analysis involving three key stakeholders, Khudhaire (et.al, 2020) identified the reasons for construction project abandonment in Iraq, considering the perspectives of owners, consultants, and contractors. Taking an environmental standpoint, Aiminhiye (2022) explored the environmental impact of abandoned building projects in Nigeria.

Architectural design failure is defined as the implementation of tasks that are executed incorrectly which potentially pose substantial risks to safety and result in inaccuracies within engineering and construction undertakings. The consequences of these failures can have impacts on the economy, society, and the environment. Design failure represents significant deviations from the specified guidelines or drawings (Ayalp and Metinal, 2023).

Design failures also have impacts on abandonment of the buildings, after buildings being occupied for a period of time. Building users vacate the building for a number of reasons.

Nana-Addy (et.al., 2022) indicated that the primary contributing factors of abandonment were poor location, lack of supplementary amenities, exorbitant rent fees, substantial distance from local communities, limited shed and stall sizes, and absence of user input. The consequences of deserted buildings included the squandering of resources, unemployment, and a reduction in state revenue.

The purpose of this paper is to discuss two commercial buildings in Tangerang Selatan and Gianyar that were abandoned by the building users.

RESEARCH METHOD

The objective of this study was to address the following question: "Why a building was abandoned after it had been occupied for a period of time?" In order to provide an answer to this question, the research methodology employed a participatory observational case study, which combined components of participatory research, observational research, and case study methodology. This approach entailed actively involving the building's users within a specific context or environment, observing their actions and behaviors, and conducting a thorough investigation into two selected buildings as the case study.

RESULTS AND DISCUSSIONS

Two commercial buildings were selected as the study case to understand the reasons of architectural design failure, BSD Junction and Gianyar People's Market. Each of the case is described as follows:

Case 1: BSD Junction.

Figure 1. BSD Junction



BSD Junction, located in BSD City, South Tangerang City, is a shopping mall that boasts a convenient link to ITC BSD via a connecting bridge. Constructed by the Sinarmas Group, the developers behind BSD City, BSD Junction was erected in 2005 and completed a year later. Upon its initial inauguration, BSD Junction attracted a thriving stream of visitors, thanks in large part to its diverse selection of enticing food stalls. Positioned as a "dining, entertainment, and lifestyle" hub, BSD Junction was conceived as a popular gathering place and social hub for the city's residents.

Figure 2. Abandoned kiosks



The ambiance was meticulously designed to replicate that of an outdoor cafe, complete with Wi-Fi internet access, reminiscent of places like Cilandak Town Square (Citos) and La Piazza Kelapa Gading. It featured daily live music performances from 18:30 to 20:30. Additionally, the mall housed 1,000 specialty stores (kiosks) offering a wide variety of fashion, entertainment, electronics, and other contemporary lifestyle products.

Figure 3. A quite restaurant



Unfortunately, this vibrant atmosphere began to fade within about a year of BSD Junction's grand opening. The decline in its appeal to visitors became evident when parking fees were introduced, a seemingly premature move for a new mall or shopping center that should have been in the process of building a loyal customer base.

Case 2: Gianyar People's Market.

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Figure 4. Entrance of Gianyar People's Market



The Gianyar People's Market, situated on Jalan Ngurah Rai in Gianyar and originally constructed in 1771, underwent a revitalization in 2020. This revitalization project spanned a period of 14 months. The market's redevelopment adhered to the concept of utilizing clean and environmentally friendly energy, notably incorporating solar panels, while also imposing a prohibition on the use of plastic shopping bags. Shoppers were required to bring their own non-plastic shopping bags, aligning with Bali Governor Regulations pertaining to clean energy usage throughout the entire supply chain.

Figure 5. Busy kiosks on the ground floor



This traditional market has now evolved into a fresh shopping destination for tourists, both domestic and international, seeking to purchase essential items or acquire typical Gianyar souvenirs. It stands as Bali's most impressive people's market, public market, or traditional market.

Figure 6. Quite lobby area and escalator



However, shortly after the market was re-occupied by the original vendors, its activities began to subside. Many stalls appeared empty, devoid of traders or merchandise, and most of the transactions were concentrated on the ground floor, leaving the upper floors deserted. Prior to the Gianyar Regency government's revitalization efforts, the market had always bustled with activity, drawing buyers from various regions. Unfortunately, the traders were struggling to sell their products during this period.

Why led the abandonment of the buildings?

From the observations, both BSD Junction and Gianyar People's Market have been abandoned for the following reasons.

Accessibility

BSD Junction is positioned between two streets, making it challenging for individuals to access the building without having to navigate through traffic. A hazardous pedestrian crossing exists, posing the risk of traffic accidents. Furthermore, the building features a multi-story car park that makes people uncomfortable when driving up to it.

Adaptability.



Gianyar People's Market is a result from a renovation project from the previous traditional market. Both the local buyers and the sellers have accustomed to the life of traditional market. To change the behaviors of the buyers and sellers would take time. Buyers would not go to upstairs since it would be much convenient to buy goods on ground floor level. Sellers on the upper floors would not be able to sell their goods since people would rather shop on the ground floor.

Financial

The rental expenses for both BSD Junction and Gianyar People's Market are relatively steep, potentially leading to challenges for sellers in meeting these costs. The revenue generated from sales might not be sufficient to cover the operational expenses due to the small number of buyers. Shoppers have refrained from visiting the shops as they have felt uncomfortable entering the buildings.

CONCLUSION

The architectural design flaws led to the abandonment of these buildings, resulting in repercussions for the economy, society, and the environment. In the instances of BSD Junction

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and Gianyar People's Market, three key contributing factors have been identified: accessibility, adaptability, and financial considerations, among others. A more comprehensive investigation with robust statistical analysis would be necessary to gain a deeper insight into the persistent underlying issues.

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