Spatial impact of the Semarang old town revitalization: the emergence of formal and informal space

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Abstract. Old Town is a historic area and also a highly prospective tourism destination in Semarang city. Beforehand, this area faced some problems such as tidal flood, costly building maintenance, and high building taxes. As a result, many historic buildings are abandoned by their owners and become unkempt. Responding to this, the government decided to revitalize the Old Town areas, focusing on physical improvements like fixing roads, drainage, and adding infrastructure. This revitalization transforms the area's spatial use, allowing more activities convened on the site. However, this transformation also triggers irregular space usage and informal space. In this study, we emphasize the emergence of formal and informal areas due to revitalization. It is essential to find out the emergence of these spaces as part of spatial management. We start by identifying elements in the revitalization process, comparing the land and space utilization before and after revitalization, and analyze its impact on the emergence of formal and informal spaces. We will collect the data through field observations, interviews, and literature review, and we utilize descriptive analysis and geographic information systems as a method of analysis. The results show that revitalization is indeed changing space utilization. Informal activities such as illegal dwellings, cockfights, prostitution, illegal street vendors, and unlawful parking are no longer present in the Old Town area. Informal activities have changed into formal activities as Semarang City Government provides avenues for service providers, pedestrians, and traders to utilize the space.

1. Background
The heritage sites in developing countries suffer various urban problems due to the rapidly increasing population and the impact of economic development stimulated by globalization [1]. In dealing with globalization's impacts, revitalization has grown to be the most effective approach in managing heritage areas [2]. The heritage areas hold a historical value that becomes a legacy in the future. The concept of heritage area represents a connection between a city's present and past. Furthermore, it gives an insight into what defines a town's identity by recognizing its social, political, and cultural context [3]. Lastly, historic buildings and environments are huge city investments, and they are part of the city's infrastructure [4].

Revitalization concentrates on the value of history, local economic and tourism potential, political power, and others. Revitalization involves the government, local communities, and private parties. These are essential key players in designing policies to prevent urban space degeneration and promote qualitative changes through developed socio-economic activities, life quality improvement, and protection of reserves culture [5]. Despite being the embryo of Semarang City's identity formation, the
Old Town area has deteriorated mainly due to abandonment and environmental problems, such as tidal flood and land subsidence. The Old Town is a historical area with high tourism potential in Semarang, given the number of historic buildings with Dutch architecture. However, these landmark buildings are abandoned due to the astronomical cost of building maintenance and taxes. Furthermore, unregulated street vendors hinder further development of the Old Town, diminishing the region's vitality. As a response, the Semarang City Government revitalized the Old Town area to revive the site to grow into attractive tourist destinations. One of the revitalization activities is the establishment of tourism activities [6], [7]. Heritage tourism can positively improve the community economically and socially [8]. The revitalization process started with the physical intervention [9]. Carried out by the Semarang City Government, it focused on the site's physical improvement, such as repairing roads, drainage, and adding infrastructure to the Old Town area streets. This effort is an approach to attract investors to sponsor activities in the Old Town area.

The Old Town area was a visual image of the City of Semarang, which retained architectural grandeur in the colonial era. As time went by, the Old Town experienced various changes in spatial use. Before independence, it served as the Dutch society settlement that thrived in trade businesses, known as De Oude Stad. At that time, the concept of land use adopted Europe's structure and architecture of the building. After the independence period, however, the Old Town area management was taken over by the Indonesian government. The sudden transition creates an absence of trade management and economic activities, leading building owners to abandon their buildings [10]. Furthermore, the city's relocation shifted the center of economy and business activity from the Old Town to other regions. This relocation was diminishing the Old Town's vitality since it experiences a function shift; from a city center to a tourism area.

The Old Town area was predominantly used for service trade, equipped with residential offices and cultural recreation spots. Bearing that in mind, the government realized that trade and services could be a significant driving force for boosting tourism [11]- [13]. As a result, the government actively develop preservation efforts, leading to the Old Town area being nominated as one of UNESCO's World Heritage Site in 2016. They are starting with devising the Old Town Building and Environmental Planning Plan (RTBL) listed in Semarang City Regional Regulation No. 8 of 2003. The regulation was used as a guideline for developing the Old Town area and as a legal basis for implementing the Old Town area building and environmental management program. It aims to develop the Old Town area as a vibrant historical area that allows for new economic, social, cultural, and tourism activities in the historical, architectural, and environmental settings of Semarang City. Following up on the regulation, the government commenced revitalization in 2017 by the Ministry of Public Works and the City Government of Semarang.

The revitalization process starting in 2017, significantly impact the Old Town area. Before the revitalization, the main problem plagued the Old Town area was the low level of urban activity, especially at night, which decreased the region's vitality. That resulted from insufficient maintenance efforts, starting from the abandonment of historical buildings, tidal problems, land subsidence, and crime. Ever since the Ministry of Public Works and Housing has revitalized this area, regional activities, especially tourism, has improved. This activity has triggered a land-use transformation for the past three years. The most prominent indication of land-use change is in the service trade function. Some abandoned old buildings are now commercial buildings, and 105 buildings are to be conserved. At several locations in the Old Town, tourism activities positively impacted the surrounding area, correlated by land-use changes.

2. Literature Review

2.1. Revitalization definition

Revitalization has various definitions depending on the context. The interpretation can be based on social, cultural, economic, and physical dimensions. Nevertheless, the revitalization concept aims to
balance the ongoing development process, especially in urban areas, by conserving the city's identity, culture, and tradition [14]. The approach to revitalizing the region has emerged from generalization due to globalization in the millennium's early decades [2]. One of the approaches is conservation, a practical approach that is frequently used to develop historic areas.

In the early 1970s, urban revitalization was first cited as a public effort to revitalize an old city center responding to the decrease of its vitality. Between the 1950s and 1970s, city revitalization was carried out as a process related to repairing damaged parts of the city and replacing them with new buildings [15]. Revitalization strives to preserve historic buildings and or districts by utilizing them in a new way. More broadly, this approach aims to restore buildings and areas' vitality by reconnecting them with people's lives now [16].

Revitalization is a concept involving three dimensions of interests: government interest, public interest, and economic interests. Its implementation must balance each interest to ensure its usefulness to all social strata. Revitalization is needed to restore the city's visibility, maintain, and enhance economic, social, and cultural development to keep up with ever-improving life situations [17]. Modern and historical aspects of a city can be beneficial in urban revitalization. The historic region needs to present both its temporal and spatial value - historical or modern - to be acceptable for the community and tourists to flourish the tourism industry [17].

2.2. Revitalization implications

There are three main functions of historic areas in a city: cultural, socio-political, and economical. The historic area's economic function also incorporates the direct economic function, such as the profit of buying and selling transactions in tourism activities, the benefits of the owner of the historic building, the entrance fee of the area [18]. There are five socio-economic impacts on the revitalization of historic areas [18], namely:

- Influence on the welfare of local communities
- Influence in business
- Influence in the tourism sector
- Influence in price land
- Influence in natural resource conditions

Revitalization for improving people's welfare is one of the significant results of the historic built environment's sustainable development. Household income and employment are indicators to measure
the results. Business sectors are influenced locally and globally due to the historic area's revitalization [18]. The business itself will also impact the process of preserving historic environments. Especially if talking about the tourism sector, the revitalization impact can be seen through a growth in the local community's welfare.

Furthermore, the values of historic architectural heritage play a vital role in the tourism industry. The surge of activities in the revitalized historic area is equivalent to the increase in land prices. Returning an old building's function and maintaining its historical value prompt raise in buildings and land prices. Lastly, the impact of the revitalization of historic areas in natural resources is measured through the effectiveness of local communities' rational use of resources. Since one of the main goals of sustainable development is to use resources efficiently and reduce energy consumption, the reuse of abandoned historic buildings can substantially reduce construction materials required and energy resources.

2.3. Revitalization and its relation to formal and informal spaces

Informality is often associated with procedures and phenomena outside formal processes or zones planned and regulated [19]. In this context, we are talking about informal settlements that develop sporadically outside the plan. Thus, informal settlements are not planned and developed outside the country's legal framework and planning. Hence, informality is referred to as a standard of metropolitan urbanization [19]. Informality is caused by several reasons, starting from spontaneous population processes, rapid urbanization (resulting in illegal residents problem), and illegal settlements [20]. Revitalization is the approach to solving informality and developing formal spaces through local communities' involvement and economic potential development. Revitalization can develop abandoned areas by rehabilitating historic areas, improving local communities' living conditions, rebuilding public spaces, and modernizing urban infrastructure (water networks, road networks, gas, electricity, and transportation) [21]. It can be achieved through collaboration between institutions, government, academics, local communities, and the private sector.

2.4. Definitions of formal and informal spaces

The formal-informal dichotomy summarizes various social relations, urban spatial and economic forms, and encapsulates various spectrums of situations in binary structures. Therefore, "formal" refers to the field of assimilation, particular forms, elements, or procedures that, after being translated, have become standards, norms, rules, or conventions [20]. In spatial contexts, "urban informality" has been used to describe the process of informal housing development, activities that affect land use or land value, and arbitrary physical growth in developing cities. This term indicates social and economic processes that shape or are manifested in the built environment [22]. Thus, informality persists as an agenda in international development and urban planning. Not only is there growing recognition that informal work and housing constitute significant proportions of urban economies, but there is also a flurry of high-profile policies being pursued by international agencies and Third World city governments to manage informality [19].

There are various forms of informal space, for instance, slums, sidewalks, and others. Designated as the "informal space," the slum represents the "unplannable" city that lies beyond the sphere of regulations, norms, and codes. Such informal spaces are viewed as either dismal concentrations of poverty, a tangible manifestation of economic marginality, or an alternative and autonomous urban order, reinforced together through the urban poor's improvisation and entrepreneurship. In both cases, the informal city is understood as the "other" of the planned and formal city [19].

Street trading can correlate to it because it is problematic in its legality and location since it generally takes place in publicly accessible urban spaces and partially outside the regulatory order [23]. While informal activities and spaces can contribute to the urban economy, the authorities often monopolize these. Street trading is a form of urban informality, coined by Keith Hart in the 1970s [24] to elaborate on informal/formal income opportunities.
3. **Method**

We conducted the research quantitatively by conducting field observations, interviews, and document reviews to collect the data. We use field observation to capture direct observation of land and space use, which are community activities in the Old Town area of Semarang. We also conducted interviews with Semarang Old Town Development Management Agency (BPK2L) and the community's leader in the Old Town area to determine the revitalization activities. Further interviews with the community's leader in the Old Town area are also carried out to discover the transformation of activities and spaces in the Old Town area and perceptions about revitalization carried out by the Semarang City Government. Finally, we review information to obtain more comprehensive depictions on spatial conditions before revitalization and after revitalization through previous studies, obtaining a space overview through Google Street View, and several related websites.

We utilize descriptive and analytical research of Geographic Information Systems. We conduct a descriptive analysis to explain the data collection results and support the interviews' mapping results. Simultaneously, we utilize the Geographic Information System analysis to present land and space use changes before and after revitalization. By comparing changes in land use and space, we can understand the causes of the emergence of formal and informal spaces from the Semarang City Government's revitalization's consequences.

We commence analysis by reviewing the government's revitalization to identify forms of revitalization efforts and locations of revitalization. Furthermore, we compare to land and space utilization before and after revitalization to determine land-use changes and space in the Old Town area. After knowing the Old Town area's land-use changes and space changes, we pinpoint the most significant land and space use in the Old Town area. This change in spatial use is evaluated with the interviews with BPK2L and the Old Town area community to find out changes in formal and informal spaces and activities in the Old Town area.

4. **Result and Discussion**

4.1. *Revitalization Semarang Old Town by the Semarang City Government*

Revitalization endeavors balance the urban area's current rapid development by conserving urban identity, culture, and tradition [14]. The Old Town area, used to be the center of government in the Dutch colonial era [10], has evolved to become a historical heritage of the City of Semarang. The Old Town area needs to be conserved because it has high architectural, aesthetic, scientific, and cultural values - hence the revitalization. The regulation aims to preserve the Semarang Old Town area is the Old Town Building and Environmental Planning Plan (RTBL) listed in Semarang City Regional Regulation No. 8 of 2003. The Semarang City Government uses the regulation as a guideline for developing the Old Town area and a legal basis for implementing the Old Town area building and environmental management program. The regional regulation is also used to achieve spatial use with a mixed usage pattern suitable for the conservation and revitalization of cultural and territorial areas.

Based on Semarang City Regulation No. 8 of 2003, the Old Town planning area is forty hectares - covering the Old Town area of thirty-one hectares and the Targeted Area of nine hectares. Planned spatial use plans include private functions, trade, office functions, and recreational and cultural functions (see Figure 2). The plan to utilize the Semarang Old Town area is divided into five segments, as follows.

- **Segment 1:** Culture, located on Letjend Suprapto Street;
- **Segment 2:** Recreative, located around Tawang, Merak, Garuda, Nuri, Srigunting, and Cendrawasih Street;
- **Segment 3:** Commercial and Office Buildings are located around Mpu Tantular, Nuri and Garuda Street, north side of the Berok Bridge to the boundary plan of the translucent line parallel to Colonel Soegiono's railroad track;
- **Segment 4:** Offices, Commercial and Traditional Trade, located around Mpu Tantular on the south side, Kepodang Street and the Jurnatan area;
Segment 5: Modern Trade, Education, and Office, located around Haji Agus Salim, Bundaran Jurnatan, MT. Haryono, Ronggowarsito, Widoharjo, and part of Cendrawasih Street.

Figure 2. Map of Semarang Old Town Area Spatial Planning
(Source: Development Planning Agency of Semarang City, 2015)

The Semarang City Government's effort in revitalizing the Old Town area is regulated in Semarang City Regional Regulation No. 8 of 2013 concerning RTBL of the Old Town area. Revitalization efforts include providing public infrastructure and facilities in the Old Town area planning area, providing public roads, parking, clean water, drainage, wastewater management, waste management, and providing public open space. Revitalization can develop abandoned areas through the modernization of urban infrastructure [21]. In 2016, the Old Town area was nominated as one of UNESCO's World Heritage Site, fueling Semarang City Government to conduct Old Town revitalization activities in 2016. Revitalization carried out by the Semarang City Government is carried out in two stages: stage I in 2016 - 2018 and stage II in 2019 - 2020. The revitalization efforts carried out at stage I consist of improving drainage and roads, installing andesite stones, lighting lamps, and street furniture on the streets in the Old Town area. The phase II revitalization efforts that continue to this day are road improvements outside the Semarang Old Town area, the construction of the Berok Pump House, and the construction of the museum at Bundaran Bubakan.

In the revitalization of the Old Town area phase I, the Semarang City Government made improvements to several roads in the Old Town area. There are fifteen roads fixed, including Letjen Suprapto, Sendowo, Gelatik, Suari, and Kepodang, Tawang, Merak, Garuda, Branjangan, Nuri, Cendrawasih, Cendrawasih I, Kedasih, Srigunting, and Sleko Street. Improvements made consists of repairing roads, fixing drainage channels, making ducting (where to place cables under the ground), producing information boards, and lighting street furniture. Road improvements also include driving the street vendors (Pedagang Kaki Lima) away. After the road repair, the overall image of the Old Town area for the better. Tidal flood, road damage, and malicious social activities such as cockfights and prostitutes no longer occur in the Old Town area.
The roads' revitalization by the Semarang City Government transforms the use of space. They are now adopted as trades' and services' offices and multipurpose buildings from the mostly abandoned buildings. Additionally, informal activities that occur are also reduced by the revitalization undertaken. Therefore, we can deem the revitalization efforts carried out successfully. Based on the study results, the most significant transformation in space use occurred in the Letjend Suprapto corridor and the Kepodang corridor.

4.2. Comparison of land use before and after revitalization

Revitalization is a process to restore a city's vibrancy, bringing the city to life, expanding profitable activities, increasing land and economic value, and starting up new business ventures [17]. Revitalization programs can create economic opportunities to increase people's income, preserve natural resources, and provide suitable urban amenities and facilities for the user [14]. The study results show that not many transformations of land use occurred in the Old Town area before and after the revitalization activities. Figure 3 shows the map of transformation land-use in the Old Town area of Semarang. However, based on the map of transformation land-use in the Old Town area of Semarang, there is a transformation in land use from the building, and open space becomes a communal parking lot.

In 2020, there are two points of transformation land-use on the Old Town area land use map in the Old Town area. At point 1, before being revitalized, the land contained abandoned and unmaintained buildings. After revitalization, some of the lands are converted to a parking lot. This change is a token of support of the Old City 3D Trick Art Museum owner to support the Semarang City Government's policy. They provide parking spaces for tourists not to park on the street to prevent traffic disruption in the Old Town area. Additionally, the government also provides a parking lot on Garuda Street, behind the Old City 3D Trick Art Museum building.

The land-use transformation also occurs at point 2, converting land use of open space to Old Town Park. The Old Town Park was created as one of the tourist attractions and supported tourist activities in the Old Town area. The Old Town Park is located on Jalan Letjend Suprapto Street, the most vital corridor in the Old Town area. Before the revitalization activities, tourists who arrived in the Old Town area have to park their private vehicles on the street along Letjend Suprapto Street. However, now, the Semarang City Government has built a parking lot to accommodate private vehicles of tourists who will visit the Old Town area. At the Old Town Park, trade and services are available along the Letjend Suprapto corridor as tourist attractions and attractions in the Old Town area.
Based on a map of transformation space use of the Old Town area after being revitalized (see Figure 4), there are several abandoned historic buildings and not maintained are now used as trade and services. The roads revitalization here conducted by the Semarang City Government, including...
roadwork, repairs of drainage canals, ducting (place to put cables under the ground), manufacture of information boards, lighting to the installation of street furniture. This revitalization makes land values increase due to higher accessibility, making it more suitable for trade and services.

The space use transformation happens significantly in the Letjend Suprapto and the Kepodang street corridor. In the Letjend Suprapto Street corridor, there are at least eleven buildings restored to trade and services. The buildings are the Old City 3D Trick Museum building, Dream Museum Zone, Semarang Creative Gallery, Ikan Bakar Cianjur Restaurant, Marba Building, Spiegel Bar & Bistro, Indomaret, Tekodeko Koffiehuis, Gelato Matteo, Philosophy of Coffee, and Fifty Seven Coffee & Bar. Space use transformation manifests in the form of road and sidewalks improvement along the Letjend Supapto street. The Old Town area's image as a tourist area is enhanced; hence, it attracts more investors from outside the Semarang city to invest in the Old Town area. The investment supports tourism activities in the Semarang Old Town area and improves the economy of Semarang City. Like the Letjend Suprapto corridor, the Kepodang street corridor also modifies untreated buildings into trade and services. At least four buildings are restored to trade and services, including Pringsewu Restaurant, Bank Mandiri, Hero Coffee, and Monod Diephuis Building. Furthermore, the Semarang City Government has repurposed the Oudetrap Building and the Semarang Creative Industry Gallery Building. Oudetrap Building now functions as a gallery of art and culture in the City of Semarang, and the Semarang Creative Industry Gallery Building now functions as a place to sell goods produced by local industries in the form of antiques, clothing, food, and beverages.

Figure 4. Space Use of Old Town Areas After Revitalization

4.3. The impact of revitalization on the emergence of formal and informal spaces

The revitalization of Semarang Old Town area affects the formal and informal activities. Informal refers to unregulated, uncontrolled, untidy, and inefficient use of space [20]. Before the revitalization, many informal activities include illegal street vendors, illegal parking untreated buildings as a place to live, cockfighting, commercial sex workers (CSWs), and liquor sales took place in the Old Town area. Illegal street vendors (semi-permanent) and illegal parking areas are located along Letnan
Jenderal Suprapto Street, Sendowo Street, Kepodang Street, and Merak Street. Cockfighting and commercial sex workers' activities were located in Kepodang Street, whereas liquor sales were located in Sendowo Street.

However, after the revitalization of the Old Town area, the informal activities are starting to fade. The Old Town area spaces that previously used for informal activities, now transformed into formal spaces such as trade in services and museums. The informal sector activities inspire the community by enhancing their livelihood, providing employment opportunities, and increasing the local communities [25]. Therefore, revitalization has a significant influence on the survival of local communities.

The most significant transformation occurred in the Letjend Suprapto Street corridor and the Kepodang Street corridor. Figure 5 shows the transformation of space use of the Letjend Suprapto corridor. Before revitalization, along Letjend Suprapto Street, abandoned buildings were left and not maintained by their owners. That is because these historic buildings have high costs for maintenance and building tax. Migrants utilize these several vacant buildings to live illegally. Therefore, revitalization is conducted to preserve historic buildings and support tourism development of the Old Town, and the space use now is for trade and services.

The space use transformation has also transpired in Letjend Suprapto Street. Before revitalization, many illegal street vendors selling goods along this street, yet after revitalization, the historic building becomes trading and service functions, and informal sales activities (street vendors) were no longer available in that street. The government provides a particular place to accommodate the hawkers in the Creative Industry Gallery Building (see Figure 6). It is a government effort to organize the informal space and support the local community to survive. This effort was to overcome informality and develop formal spaces by developing economic potential [19], [20]. However, some traders still sell at the
Creative Industry Gallery Building, which originated from the Old Town area or newcomers based on the interview. It implies that some of the street vendors in the Old Town area did not utilize the place provided by the government.

There were several reasons why they did not reside in the building that provided, such as fear of losing customers if they move, lack of information about the new place, and reluctance to face the complicated bureaucracy (the traders needed some requirements confirmation from the affiliated institution before they moved and got the lots). As a result, street vendors sell by moving places and cannot reside in a fixed place. When they reside in front of a revitalized building, the owner or the renter will ask them to move due since they disturb the area's aesthetic. They move from one place to another; hence they have lost some customers. Due to that, they have to start from zero and adapt to the new situation.

Furthermore, the street vendors are very vulnerable to the risk of bankruptcy due to the decreasing number of buyers and vulnerable to the eviction of places to sell. They have to adapt to the stressors and accept the situation. They cannot survive with their business other than by moving places or utilizing carts as media for selling. They have also faced the municipal police, which always prohibits them from residing along the street. Since then, some street vendors switch jobs as industrial or construction workers since they need a regular income every month to survive.

Based on the Old Town area's land zone map by the Ministry of Agriculture and Spatial Planning / National Land Agency, the land along Letjend Suprapto Street now values approximately 5,000,000 - 10,000,000 rupiahs/m2. The revitalization of Letjend Suprapto Street also influenced the land price, which in line with the socio-economic impact on the revitalization of historical areas, the effect on land prices [18]. Location is essential for measuring tourism development in the Old Town area, where it influences the area's space use, such as residing the supporting facilities like restaurants or shops. Hence, with the high land price, the most potential space use of this location is productive (business) activities. Therefore, many abandoned buildings transform into trade and services functions. This location becomes a potential area for business because it improves physical appearance and accessibility so that land demand rises significantly. The transformation of space into trade and services also supports the revitalization efforts undertaken [18].

There is also a change in informal activity in the form of on-street vehicle parking. Semarang City Government provided the communal parking lot. Before revitalization, vehicles parked on the body road along Letjend Suprapto Street disrupted traffic on the road. However, after being revitalized, vehicles cannot park on the street along Letjend Suprapto Street. The Semarang City Government has provided a parking space in the Old Town Park that tourists can utilize. However, similar to street vendors, local communities in the Old Town area used to have a livelihood as a parking attendant are now turning to look for other livelihoods. The revitalization efforts undertaken by the Semarang City Government have not yet been able to positively impact the local community of Kota Lama. One of
the revitalization stages, economic rehabilitation [9], was not felt by the Old Town area's local community.

A significant transformation of space uses also occurred in the Kepodang Corridor. The use of Kepodang corridor space shows in Figure 7. Like what happened in Letjend Suprapto Street Corridor, many buildings were abandoned by their owners, resulting in the migrant community using them as illegal dwellings. Historic buildings have been restored to become a trade and services, including Pringsewu Restaurant, Mandiri Bank, Hero Coffee, and a multipurpose building, the Monod Diephuis Building (see Figure 8). The restoration of the buildings supports historic buildings and tourism activities in the Old Town area.

Based on the Old Town area's land zone map by the Ministry of Agriculture and Spatial Planning / National Land Agency, land along Kepodang street starts approximately 2,000,000 - 5,000,000. Spatial use transition from abandoned buildings to trade and services is needed because this corridor can be further developed. The value of land is not too expensive compared to the value of land along Letjend Suprapto Street; hence it is a good option for investors to invest in the Kepodang street corridor. The use of space in this corridor is trade and services such as banks, restaurants, cafes, museums, and multipurpose buildings (see Figure 8). This corridor is prospective be visited by tourists because many buildings to attract the interest of tourists coming.
Based on Figure 9, the use of Kepodang street corridor space before being revitalized facilitates informal activities, including cockfighting places during the day and places for commercial sex workers at night. After being revitalized, informal activity moves to another place. There are no more spaces to accommodate cockfights and commercial sex workers in the Kepodang street corridor. Revitalization is a collaborative process carried out jointly by the government, local communities, and related stakeholders to improve the quality of life and improve the socio-economy [5], [8]. Several stages were physical intervention, economic rehabilitation, and social revitalization [9]; however, this did not happen in the Old Town area. Based on interviews with the coordinator of the local community's empowerment in the Old Town area, revitalization is not followed by improving human resources living in the Old Town area. The local community's old job, who used to be a commercial sex worker, now remains a prostitute, only moving to another place. Therefore, the Semarang City Government has not paid attention to the Old Town community's social revitalization. However, the Kepodang street corridor now has a notably positive image of the region due to road improvements, pedestrians, street furniture, and lighting lights along Kepodang Street.

Figure 8. Utilization of Formal Space on Kepodang Street a) Pringsewu Restaurant, b) Mandiri Bank, c) Hero Coffee and d) Monod Diephuis Building
The results show that changing the informal space into a formal space affects local communities' livelihoods in the Old Town area, including changes in livelihoods and changes in the location of activities. It shows a correlation to the informality idea that changes in space will prompt disturbance in informal activities' occurrences and affect the people who work in these activities [26]. The results also note that people who form informal spaces tend to be low-income or poor people [22], [26]. The reason is that the poor cannot access formal areas because of their limited income [27].

After revitalization, the use of space that is not following the Semarang City Government rules results in insecure, unpredictable, and closely related tenure with eviction [27]; for instance, street vendors who reside in a place to sell the products. With the revitalization, street vendors' activities shifted from settled to a cart with a mobile system since they do not have money to rent a building. Therefore, revitalization does not eliminate informal activities but only moves these informal activities to other places. This fact requires further attention since the development of these informal activities will harm other public spaces.

Spaces that accommodate informal activities should not be eliminated; some only need to be given inclusive space to all levels of society, especially local communities in the Old Town area and people who depend on their survival. Without giving inclusive space, several informal activities would continue and significantly influence the Old Town area's local community. These positive effects should be expanded in terms of employment opportunities, the community's economy, social conflicts reduction, and crime prevention [25].

The revitalization carried out by the Semarang City Government was not accompanied by considerations of improving the local community's economy in the Kota Lama area, leading to shifting street vendors' space-use from previously settled to now a mobile cart. It also makes improper use of public space. The displacement of informal space that occurs will only harm or even damage other public spaces. Since informal spaces can also experience growth and development through processes different from formal spaces, the government should consider the future arrangement to be different and suitable for the pursuit of development for all [28].

5. Conclusion
The analysis showed that revitalization affects the transformation of space use and formal and informal activities in the Old Town area. The revitalization carried out by the Semarang City Government focuses more on improvements in the form of road repairs, repair of drainage canals, ducting, information boards, lighting, and street furniture. This improvement was conducted to overcome environmental and social problems in the Old Town area. Tidal flood, road damage, and harmful social activities such as cockfights and prostitutes no longer existed in the Old Town area. There is also a
transformation of space use from illegal dwellings in abandoned buildings to become trade and services, offices, and multipurpose buildings.

Based on the comparison of land use in the Old Town before and after revitalization, few land-use transformations have occurred. Land-use transformations that occur are changes in built-up land and open space into communal parking lots. There is land use transformation from building into a communal parking lot located on Garuda Street, behind the Old City 3D Trick Art Museum building. The transformation of land use from open space to communal parking is located in Old Town Park, on Letjend Suprapto Street.

The most critical transformation space use occurred in the corridor of Letjend Suprapto and the Kepodang street corridor. Transformation of space use transpires along with road improvements made by the Semarang City Government. Improvement of its physical appearance has attracted many investors to invest in this area. Not only are untreated buildings restored to become trade and services, but illegal housing activity in Letjend Suprapto Street also turns into trade and services. Moreover, illegal street vendors and parking lots no longer exist. The Semarang City Government and the Creative Industries Gallery has provided parking lots and avenues for street vendors selling goods. While the change of informal space into formal space in Kepodang Street is cockpit fights and prostitute activity along Kepodang Street no longer exists, becoming road and sidewalks.

However, the revitalization efforts undertaken by the Semarang City Government have not yet been able to beget a positive impact on the local community of the Old Town area since many local people lost their livelihoods, such as parking attendants and street vendors. Many street vendors who sell at the Creative Industry Gallery come from outside the Old Town area. Additionally, the Old Town area's local communities who work as commercial sex workers still exist but move to another place. Therefore, revitalization efforts should also include improvements to human resources living in the Old Town area, not just physical improvements. The displacement of informal space that occurs will only harm or even damage other public spaces.

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