An urban governance approach in the development of commercial brownfield: A case study of Iskandar Malaysia

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ABSTRACT

Brownfield development has become one of the sectors to be emphasised imperatively due to emerging greenfield scarcity throughout Malaysia. A brownfield site may have real or perceived contamination issues that require intervention to revive for beneficial use. As of to-date, there is still a number of brownfield sites in Iskandar Malaysia, albeit brownfield revival projects, via planning and policy measures, have been carried out over the years. In this light, a mode of governance is suggested to be a significant factor in the stagnation and success of brownfield development. Therefore, this paper aims to revisit the urban governance modes of brownfield development in Iskandar Malaysia, with a focus on commercial brownfield development. Specifically, two objectives are highlighted in this paper: (i) to assess the site-level success of completed brownfield developments, namely the Paradigm Mall, Skudai and the Danga City Mall, Johor Bahru; and based on the assessment outcomes, it is then (ii) to identify an efficient and suitable mode of governance for commercial use brownfield development. A measuring tool and an indexing scheme to screen brownfield sites were employed alternately. Results show that the Paradigm Mall achieved a higher site-level success compared to the Danga City Mall. Under this light, compared to the corporatist mode of governance, the clientelistic mode of governance with a material objective is highly in relation to a better success of commercial use brownfield development in the background of Iskandar Malaysia. These findings offer valuable messages and insights to practitioners, particularly local policy-makers, that an often-neglected governance mode approach is essential in determining the brownfield development outcome.

1. Introduction

According to various national and regional official documents, such as the National Physical Plan-3, the National Urbanisation Policy-2, the Iskandar Malaysia Comprehensive Development Plan ii 2014-2025 (CDPii 2014-2025), and the Low Carbon Society Blueprint for Iskandar Malaysia 2025, brownfield development has become one of the sectors to be emphasised imperatively due to emerging greenfield scarcity throughout Malaysia. Brownfield development is an enabler to promoting a compact city design, which could contribute to carbon emission reduction by mitigating greenfield encroachment (Majid et al., 2013).

A brownfield site is defined as a derelict or underused site that has been affected by former uses of the site or surrounding land and is predominantly located in fully or partly developed urban areas. A brownfield site may have real or perceived contamination issues posing detrimental environmental and public health risk that require intervention to revive to beneficial use (IRDA, 2014; Pizzol et al., 2016; Liu et al., 2017). At the same time, brownfield stands in contrast to greenfield sites or green open spaces (Ling, 2014), such as undeveloped parcels of forest, farm, or wetlands on the urban fringes (Wedding & Crawford-Brown, 2007; see Onwuayi & Ndinwa, 2017). Brownfield development is usually very complex due to the network of economic, political, administrative and legal apprehension, physical restrictions and

diverging social influences (Blokhuis & Schaefer, 2007). As of now, an institutional regime has been exerted within the process of brownfield development due to the changed positions of market parties and their more significant influence on land exploitation. Under this light, brownfield development is not only restricted to be a top-down approach. Instead, it substantially depends on the behaviours and interests of other parties. Therefore, Whitman (2006) suggested that the urban governance of brownfield development has to set on the basis of associating various interests from respective parties, public interest and integration of these considerations with planning based on firm social conscious (see participatory governance). In relation to interdependency between various parties in brownfield developments, an effective and suitable mode of governance is necessary to ensure its efficient process and to achieve a specific objective. Governance could ensure a decision making process to be coordinated within the boundaries of laws and legislation.

With various considerations of brownfield development's requirements and objectives, Blokhuis et al. (2008) defined the urban governance of brownfield development as "the way municipalities lead and direct various approaches within the process based on the interests of all public and private parties involved and the common interest". Moreover, urban governance aims at ensuring a specific result along the brownfield development process. There are several aspects which

are aimed to be achieved, while the most significant ones are as follows: (1) quality of the project, in relation to other policy fields, (2) relation with the programmes and the market, (3) financial dimension and feasibility, and (4) time dimension (Blokhuis et al., 2008). Note that, prior to stating the objective of this paper, authors provide an overview and some background issues of brownfield development in Malaysia.

During the economic crisis in the late 1990s, a large number of abandoned developments (commercial, residential, and industrial) had led to brownfield sites (Ali et al., 2014). To execute brownfield revival, a list of abandoned projects in Iskandar Malaysia was presented by the IRDA (2014) in the CDPii 2014-2025. Moreover, 57 hectares of abandoned buildings and development project sites are demarcated as land suitable for development. The magnitude of benefits from these site developments could be significant. Plans, strategies and policies have also been proposed and implemented to revive brownfield sites.

In view of brownfield development in Malaysia, there are various policies and guidelines which support this approach. The National Urbanisation Policy (NUP) specifies brownfield development as a thrust to mitigate the encroaching urban sprawl upon environmentally sensitive areas. To enable brownfield development, the Federal Department of Town and Country Planning (JPBD) of Peninsular Malaysia has implemented an action plan to realise brownfield development. The authorities take account in identifying and preparing an inventory of brownfield areas, planning and preparing the re-development programmes for brownfield areas, and providing incentives for the re-development of brownfield areas as commercial and special industrial zone. Other than that, the Brownfield Development Guideline by the JPBD (2012) suggested that brownfield developments are based on several principles, namely the sustainable use of natural resources and compliance to law and existing guidelines. The JPBD (2012) also proposed general guidelines in directing brownfield development for government officials, such as identifying criteria of brownfield areas, specifying types and acquisitions land ownership, identifying heritage value sites or buildings, implementing site assessments and designing elements for rebuilding a brownfield area. In the CDPii 2014-2025, brownfield development needs to be emphasised as it is a potential environmental resource to contribute to economic growth and environmental preservation. In light of urban governance, it is proposed that the IRDA and local authorities shall identify and prepare a development guide plan to facilitate brownfield development progress. Next, the IRDA and local authorities shall provide technical advisory and development incentives for redevelopment on brownfield and greyfield sites. Other than that, the IRDA suggested that each local authority has to undertake a detailed study and a development strategy plan for abandoned projects in Iskandar Malaysia, and this is the step prior to preparing a development guide plan for brownfield development. The NUP, the Brownfield Development Guideline, and the CDPii 2014-2025 share consensus, in terms of the directions and policies of brownfield development. Local authorities/governments are recognised as the enabler for brownfield development as they have to identify adequate and suitable brownfields for development. Moreover, government officials are to provide incentives to boost brownfield development. These approaches indicate the importance of substantial and active participation of government officials in brownfield development during an initial planning stage.

A number of brownfield sites remain undeveloped in Iskandar Malaysia, despite brownfield revival projects via related action plans, strategies, and planning policies, have been carried out over the years (IRDA, 2014). In addition, the list of abandoned projects in Iskandar Malaysia is found to be unaligned with the current circumstances as several statuses of abandoned buildings which are indicated as "revived" remain undeveloped. For instance, the Pacific Mall, which was announced as purchased by a new owner, namely Mahabuilders in 2013, is classified as "revived", but in reality, it remains abandoned without any development works on-site. Such stagnant brownfield development projects have caused a discrepancy on the list of abandoned projects in Iskandar Malaysia.

This matter could be due to various reasons, such as financial difficulties faced by the owner, unexpected bad economic conditions, inadequate project feasibility studies, unfavourable policy and lack of cooperation from local authorities (Yap, 2010). Nonetheless, a mode of governance is suggested to be a significant factor in the stagnation of brownfield development (Blokhuis, 2008; Liu et al., 2017). Irrespective of the above claim, research related to application and understanding of governance modes in brownfield development is still limited (Zielke & Waibel, 2016; Liu et al., 2017); thus, more studies are required, and this empirical paper can be deemed timely towards contributing to environmental politics discussions. According to DiGaetano & Strom (2003), the modes of governance is defined as a political system, which is the linkage of political institutions and informal arrangements of each city. To distinguish the mode of governance in a particular city, informal political relationships are required to be identified. Firstly, governing relations are to be considered. They are the modes of interaction and interdependency between public and private sector (economic and social) interests. Secondly, governing logic is about an approach or method in arriving at political decisions (e.g., via consensus building and reciprocity). Thirdly, the key decision makers play crucial roles. Politicians, bureaucrats, and agents of various civic (economic or community) could be considered as decision makers based on their relative interests. Lastly, political objectives, covering material (selective tangible benefits), purposive (nonselective tangible benefits), and symbolic (nontangible benefits), can be influential as well. Based on the above governance characteristics and criteria, among others, two modes of governance have been identified, namely clientelism and corporatism (see more in DiGaetano & Strom, 2003). The modes above are not necessarily in a pure singular form; mixed/ hybrid governance modes (e.g., both clientelism/corporatism) with different degrees may coexist in an institutional system.

The clientelistic modes of governance develop exclusive, personalised exchange relationships between politicians (patrons) and favoured interests and clients (e.g., private sectors and the general public) (Stokes, 2007). The governing logic relies on a pragmatic reciprocal exchange, whose primary purpose/objective is material, that is, selective benefits or goods and services (e.g., financial resources, facilities and assistance in the forms of economic security and protection, political votes and supports, city image and reputation) are involved during the exchange between the politicians and clients. For instance, when governments provide certain benefits and services to their clients, certain return of political votes or supports are expected from the beneficiary. Under the reciprocity nature of an exchange (i.e., mutual agreement), both politicians and clients are considered as key decision-makers. While, for the corporatist mode, it forms programmatic, instead of pragmatic, public-private governing relations, in which modes of interaction between politicians and powerful civic elites are based on exclusionary negotiation and compromise (DiGaetano & Strom, 2003). The key corporatist governing logic is to build and obtain a consensus on governing tasks and tends to result in the formation of ruling coalitions of economic and community interests. The objective of this corporatist mode is mainly purposive (i.e., nonselective tangible benefits). The benefits gained under this urban corporatism may not as specific (personalised) as the clientelism,

whereby the former purpose generally associates with the wellbeing and interest of a city or a country involving revitalisation of a degraded city and recovery of a country's economic downturn (see more in DiGaetano & Strom, 2003).

Therefore, based on the above considerations plausibly associating urban governance with success and sustainability of brownfield development, this paper aims to revisit the urban governance modes of brownfield development in Iskandar Malaysia, Johor Malaysia, with a particular focus on commercial use brownfield development. The Paradigm Mall, Skudai and the Danga City Mall, Johor Bahru were selected as case studies due to their commercial use after redevelopment. The objective of this paper is (i) to assess site-level success of completed brownfield developments and thus (ii) to identify an efficient and suitable mode of governance for commercial use brownfield development in Iskandar Malaysia.

The paper is structured as follows. Section 2 begins with methods, in which it provides descriptions and background of two study areas (cases: the Paradigm Mall and the Danga City Mall) within Iskandar Malaysia. It then continues with the measurement of site-level success in brownfield developments, in which a methodology or tool of assessing the sustainable brownfield redevelopment by Wedding & Crawford-Brown (2007) and an indexing scheme by Chrysochoou et al., (2012) covering measurement dimensions are explained. While a detailed set of results and findings is presented in section 3, discussions of the results are shown in section 4. Finally, section 5 presents the conclusions, implications and recommendations of the research.

2. Methodology

2.1 Description of study area

2.1.1 Paradigm Mall

The Paradigm Mall is a shopping mall with a commercial use that has just opened to the public since 28 November 2017. It was developed by WCT Hartanah Jaya Sdn. Bhd., a subsidiary of WCT Holdings Bhd. According to WCT Hartanah Jaya Sdn Bhd. (2017), the Paradigm Mall is 7-storey high with 1.3 million sq. ft (13 acres) in net retail space. Situating along Jalan Skudai, the mall is a part of a carefully-crafted 13-acre, integrated development. This integrated development will later include a proposed 296-room hotel and a 24-storey serviced apartment.

This site was previously located with the Kemayan City. It was a commercial use development which was abandoned before its completion of construction since 1998 until the construction works of the Paradigm Mall started. The original plan of the Kemayan City established in 1993 stated it would be the largest single integrated shopping complex in Johor Bahru and was estimated to worth RM400 million (Ali et al., 2014). Since its abandonment, the site of the Kemayan City was categorised as "Brownfield Category D", i.e. an abandoned development project that is not completed within the implemented construction period and is abandoned from construction for more than ten years (JPBD, 2012).

According to the JPBD (2012), main factors causing this type of abandoned development are due to financial issues and failures to acquire approval from a politically dominant party. With respect to the Kemayan City, its condition reflected what was mentioned by the JPBD, which it was abandoned due to economic the crisis in 1998 (Ali et al., 2014). When the Kemayan City was abandoned, its construction works were 90 percent completed, and loans from the finance company (Idaman Usahamas Sdn. Bhd.) for this development were not settled.

The following presents a brief interlude to the history of the chosen case study.

"Interlude": The B8 Mall Shopping Centre.

After more than ten years of abandonment, the Kemayan City was acquired by Blackstone Group Eight Sdn. Bhd., a subsidiary company of Allstonesgroup. According to the ex-Johor State Chief Minister, the Kemayan City would be restored under the management of Blackstone Group Eight Sdn. Bhd. Various parties including the local authority, Johor Bahru City Council (MBJB) assisted in the procedure to restore this abandoned building. Based on the redevelopment plan, it was planned to start the site works in the mid-2011 and was envisioned to develop it into a contemporary shopping centre and a hotel, namely the B8 Mall Shopping Centre. The construction works were expected to be completed by the end of 2013 (Suratman & Ali, 2012). During that time, Black Stone Eight Sdn. Bhd. was up to the stage of Sale and Purchase Agreement to purchase this development project in 2010. However, the later part of the planning permission process stagnated, particularly on the matter of the alteration of the height and types of development to deem fit the planning requirement of new development. Moreover, this redevelopment plan was not realised due to financial issues. After that, the Kemayan City remained as an abandoned building with deteriorating conditions.

2.1.2 Danga City Mall

The Danga City Mall is a revived development project listed by the HBA (National House Buyers Association) as of 2009. It occupies a gross built-up area of 1 million sq. ft and 500,000 sq. ft nett lettable space with 7 storeys high. Located along Jalan Tun Razak, this site was previously situated by the Plaza Best World. It was built in the mid of 1980s with a cost of RM240 million, and its construction operation was commenced in 1996. However, the Plaza Best World stopped operating after two years due to the 1997 financial crisis (HBA, 2009). After the abandonment of the Plaza Best World, the site was categorised as "Brownfield Category C" as it was abandoned after the completion of construction works and operation (JPBD, 2012).

2.2 Measurement of Site-Level Success in Brownfield Developments

To evaluate site-level success in brownfield developments of the Paradigm Mall and the Danga City Mall, a measuring tool proposed by Wedding & Crawford-Brown (2007) and an indexing scheme to screen brownfield sites by Chrysochoou et al. (2012) were utilised alternately. There are various tools and schemes to measure achievement of brownfield development proposed by a number of authors (Bacot & O'Dell, 2006, Wedding & Crawford-Brown, 2007; Chrysochoou et al., 2012; Pizzol et al., 2016; Zhu et al., 2015). However, the elements used in these tools and indexing schemes could be varying to a different extent due to different viewpoints from stakeholders.

Nevertheless, variables of these brownfield development indexing schemes comprise four dimensions generally, namely socio-economic, environmental, liveability, and financial (Chrysochoou et al., 2012). Therefore, one crucial reason to employ the two indexing schemes by Wedding & Crawford-Brown (2007) and Chrysochoou et al., (2012) is due to their high consensus in addressing variables according to these four dimensions.

Based on literature review, the former measurement scheme by Wedding & Crawford-Brown (2007) corresponds to this paper more than the latter (i.e., Chrysochoou's et al., 2012 tool) in terms of dimensions and variables. The assessed variables of the former indexing scheme are also more comprehensive than the latter. However, the

indexing scheme by Chrysochoou et al., (2012) posited the need for a methodology to assess the variables quantitatively, which is deemed lacking in the former scheme. As a result, this paper adopted the two indexing schemes to assess the site-level success of brownfield developments quantitatively and comprehensively.

2.2.1 Sustainable Brownfields Redevelopment (SBR) Tool

In the paper by Wedding & Crawford-Brown (2007), the authors developed the Sustainable Brownfields Redevelopment (SBR) Tool with selected indicators. Hence, indicators that developed the SBR Tool are crucial as they affect the success level of brownfield developments. In light of determining indicators to formulate the SBR Tool, the authors surveyed with a sample size of 13 various experts to seek their professional views in relation to variables of a brownfield indexing scheme. As a result, the variables could be categorised into four groups, namely environment-health, finance, liveability, and social-economic.

2.2.2 Indexing Scheme to Screen Brownfields

Chrysochoou et al., (2012) proposed this indexing scheme to screen a large number of brownfields with regard to their abilities in creating revenue after redevelopment. This indexing scheme is mostly useful to detect the suitability of brownfields for redevelopment, and it partly adopted the variables of the Sustainable Brownfields Redevelopment (SBR) Tool by Wedding & Crawford-Brown (2007). This scheme implies three dimensions which are socioeconomic, smart growth and environmental. Each of the three dimensions is indexed based on the location-specific variables regardless of the target end use (Chrysochoou et al., 2012). Therefore, population density, property values and unemployment represent socioeconomic variables due to their potential in contributing economic growth to brownfield development. On the other hand, the smart growth or liveability index was developed by the LEED for Neighbourhood Development (LEED-ND), which is a rating system that integrates the principles of smart growth, urbanism and green building into a national system for neighbourhood design by the U.S. Green Building Council. Lastly, an environmental dimension is associated with variables such as the potential source of contamination (past use), a pathway of exposure (soil permeability) and receptors (zoning, open spaces, etc.).

2.2.3 Dimensions of Measurement

Reposed on the basis of the two selected indexing schemes, the site-level success of brownfield developments was measured based on the four dimensions, namely socio-economic, environmental, liveability, and financial. The measurement of these dimensions was mainly based on secondary (statistical) data, which were then triangulated and supplemented with primary data (i.e., brief semi-structured interviews with government officials, property developers, and tenants). The methods of index assessment are also presented as follows.

The socio-economic index consists of an increase in population, an increase in mean household income and an increase in surrounding property values (houses). These variables are assessed with secondary data, such as the Draf Rancangan Tempatan Daerah Johor Bahru & Kulai 2025, the CDPii 2014 − 2025, the Property Market Report First Half 2017. In order to determine the increase of variables quantitatively, relevant data of before and after brownfield development were collected, and they were assessed to show a particular variable's increment in percentage.

Taking increase in mean household income as an example, the mean household income surrounding the Paradigm Mall was RM 4,463 as of 2012 according to the Draf Rancangan Tempatan Daerah Johor Bahru & Kulai 2025. While, the mean household income was RM7,539 as of

2017, and this was the latest data after the erection of brownfield development at this particular site. Based on these figures, the increase of mean household income is 68.92%. According to the assessment method proposed by Chrysochoou et al. (2012), the percentage of increment of each variable is classified based on the range of percentage.

Next, the environmental index consists of the past use of a site and the percentage of decrease in green space on the site. These variables were assessed with literature review and the MODIS Collection 6 Land Products Global Subsetting and Visualization Tool, respectively. The past uses of selected sites were identified by various literature review. Besides, in order to determine the percentage of decrease in green spaces quantitatively, the Enhanced Vegetation Index (EVI) of the site before and after brownfield development was collected with the MODIS, and they were assessed to obtain its percentage of decrease.

For instance, the EVI of the site before the Danga City Mall erected was 0.42, and this index was recorded in 2002. While, the EVI at the site upon completion of the Danga City Mall was 0.30 in 2008. Based on these figures, the decrease in green space of the site was 28.57%. Based on this result, it could be classified under the group of 26 − 50%, in which a score for this variable dedicated to the Danga City Mall could be assigned.

The liveability index comprises the proximity to a restaurant/grocery store, proximity to green space, and proximity to a transit station. These variables were assessed using the Google Earth application. After obtaining the spatial data of proximity to a restaurant/grocery store, green space and a transit station, they were classified and scored according to the classifications and scores as shown in Table 1. For example, proximity to a green space from the Paradigm Mall is detected to be 427.58m. Based on this result, it could be classified into the group of 400 − 800m radius. After classification, the score of this particular variable could be assigned as 2.

Lastly, the financial index comprises the percentage of an increase in site property value, the length of time (from purchase to occupancy), and the rent premium of redevelopment. These variables figures were sourced from various primary and secondary data. Firstly, the method to assess the increase in site property value is similar to the assessment of an increase in mean household income as discussed previously. Next, the length of time (from purchase to occupancy of a property) is assessed using various literature review, and they were then classified according to the classification as shown in Table 1.

For example, the length of time (from purchase to occupancy) for the Paradigm Mall was detected as five years (2013-2017). Based on this result, it could be classified into the group of 5 − 6 years. After classification, the score of this particular variable could be detected as 1. Lastly, the rent premium of redevelopment was identified with various sources, and the result is presented as an amount of value per unit (square feet). As the unit remains unchanged, the figures of this variable were encoded as a scalar.

Each of the index/dimension classifications is dedicated to a respective score. Table 1 shows all the four indexes composing respective variables and their classifications in relation to scores.

3. Results and findings

After understanding the variables involved and methodology with respect to classifications and scores assignation, site-level success in brownfield developments of the Paradigm Mall and the Danga City Mall were assessed with the four dimensions, i.e., socio-economic, environmental, liveability, financial indexes as mentioned by Wedding

Socio-economic Index Variables	Classifications	Scores
Increase in population	> 100%	5
	76 – 100%	4
	51 – 75%	3
	26 – 50%	2
	0 – 25%	1
Increase in mean household income	76 – 100%	4
	51 – 75%	3
	26 – 50%	2
	0 – 25%	1
Increase in surrounding property values (houses)	> 100%	5
	76 – 100%	4
	51 – 75%	3
	26 – 50%	2
	0 – 25%	1
Environmental Index Variables	**Classifications**	**Scores**
Decrease in green space on site	0 – 25%	4
	26 – 50%	3
	51 – 75%	2
	76 – 100%	1
Past use of site	Industrial	3
	Commercial	2
	Residential	1
Liveability Index Variables	**Classifications**	**Scores**
Proximity to restaurant/grocery store (meter)	Below 400m radius	3
	400 – 800m radius	2
	Above 800m radius	1
Proximity to green space (meter)	Below 400m radius	3
	400 – 800m radius	2
	Above 800m radius	1
Proximity to transit station (meter)	Below 400m radius	3
	400 – 800m radius	2
	Above 800m radius	1
Financial Index Variables	**Classifications**	**Scores**
Increase in site property value	751 – 1000%	4
	501 – 750%	3
	251 – 500%	2
	0 – 250%	1
Length of time (from purchase to occupancy)	1 – 2 years	3
	3 – 4 years	2
	5 – 6 years	1
Rent premium of redevelopment	Scalar (Mean Value)	Scalar

Source: adapted from Wedding & Crawford-Brown (2007) and Chrysochoou et al., (2012)

& Crawford-Brown (2007) and Chrysochoou et al., (2012). The overall results of the site-level success are presented in Table 2 below.

Based on the assessment of the site-level success of brownfield developments, the brownfield development of the Paradigm Mall is identified to be more successful than the Danga City Mall. Their scores are 31.5 and 29.5 respectively (as shown in Table 2). Compared to other variables that the Paradigm Mall and the Danga City Mall have similar results (scores), e.g., under the financial index of rent premium with about RM1 difference/sf between the two malls, the most prominent difference observed is the socio-economic index variable that covers population increase (with the scores 5:1) and the increase of mean household income (with the scores 3:1), respectively. To make the above result more inferentially meaningful, this paper subsequently shows a relationship between the site-level success and their modes of governance. In view of determining a mode of governance of selected case studies for both the Paradigm Mall and the Danga City Mall, the terminologies of modes of governance posited by DiGaetano and Strom (2003) above were embedded to serve as a precept. Table 3 shows different governance modes adopted by the malls.

After the unsuccessful development plan of the B8 Mall Shopping Centre, in 2013, WCT Hartanah Jaya Sdn Bhd entered into a conditional sale and purchase agreement with Idaman Usahamas Sdn Bhd (a subsidiary of Malaysia Building Society Bhd., MBSB) for the acquisition of the idle building. Finally, WCT Hartanah Jaya Sdn Bhd purchased this abandoned building with RM180 million after a competitive tender process. As of to-date, this brownfield development project initiated by WCT Hartanah Jaya Sdn. Bhd. is successful with the operation of the Paradigm Mall as an indicator

In this development project, the state and local authorities (e.g., the Department of Environment, DOE, the Town and Country Planning Department, JBPD, state and local authorities) and the developer acted as crucial parties during the initial stage. The DOE was to categorise and identify the brownfield site. Subsequently, the developer planned for the development project, and the approval of planning permission was subject to the state and local authorities. However, after the approval of planning permission was granted, the developer became the key party to implement this development plan. Moreover, the daily management of the Paradigm Mall is taken charged by various division of departments. For instance, the developer has appointed Kuala Lumpur Pavilion Sdn. Bhd. as the retail manager of the Paradigm Mall (WCT, 2017). Consequently, this development has been an entrepreneurial project initiated by an investor, and the decisions are made by various state and local authorities. Apparently, the objective of this development project is materialistic-oriented. Local authorities and the investors have a reciprocity relationship. Therefore, such clientelistic mode of governance with a material objective was observed, and this governance mode is based on a pragmatic exchange/agreement between the local authorities (for political support and the city's image making) and investors (for maximising commercial success and profits).

Next, for the case of the Danga City Mall, due to the development launching of Iskandar Malaysia, the local council (MBJB) is envisioned to mitigate abandoned buildings and encourage brownfield development to promote the city image. Hence, the local council offered incentives to developers who were interested in reviving existing abandoned buildings. Under this premise, the Plaza Best World was purchased by MFI Equity Sdn. Bhd. which was a vehicle used by Ekovest Bhd to purchase the complex for RM50 million from Pengurusan Danaharta Nasional Bhd in 2004. Limbongan Ekovest Management Sdn Bhd (LEM), which is 49 percent owned by Ekovest Bhd. was appointed to be the project manager for the Danga City Mall development (Musa, 2004).

Before the Danga City Mall opened to the public, the anchor tenant of this mall, i.e., Metrojaya Sdn. Bhd. announced to invest in this mall with RM10 million. This announcement and the signature of the agreement were witnessed by the ex-Johor State Chief Minister. Yet, the state government does not seem to manage the daily operations of the mall. A dedicated department, namely the Danga City Mall Management is responsible for it. In this case, the state government was witnessed to participate in this development substantially, specifically from the uptake of the previously abandoned building by a new owner until the facilitation of tenants. The high participation of the state government could be due to its good relationship with the new owner of the Danga City Mall, Ekovest Bhd (urban elites). In this instance, the primary corporatist mode of governance, with a slight degree of clientelism (secondary mode), could be observed. The governing relation of "exclusionary negotiation and compromise" is heavily and solely driven by the state government's agenda and purpose on the development of Iskandar Malaysia via the revival project of the Danga City Mall.

Table 2 The Site-Level Success Measurement and Results of Brownfield Developments for the Paradigm Mall and the Danga City Mall

Variables	Paradigm Mall, Skudai				Danga City Mall, Johor Bahru			
	Data	Increment	Classifications	Scores	Data	Increment	Classifications	Score
Socio-economic Index								
Increase in population	390,888 (2000) 868,739 (2015)	122%	> 100%	5	433,624 (2000) 541,508 (2010)	24.88%	0 − 25%	1
Increase in mean household income	RM 7,539 (2017) RM 4,463 (2012)	68.92%	51 − 75%	3	RM 5,197 (2012) RM 4,463 (2012)	16.45%	0 − 25%	1
Increase in surrounding property values (houses)	RM324.68/sf (2017) RM188.31/sf (2000) *Taman Munsyi Ibrahim*	108.02%	51 − 75%	3	RM438.46/sf (2017) RM219.23/sf (2000) *Taman Century*	100%	76 − 100%	4
Environmental Index								
Decrease in green space on site (EVI)	0.63 (2001) 0.19 (2017)	69.84%	51 − 75%	2	0.42 (2002) 0.30 (2008)	28.57%	26 − 50%	3
Past use of site	Commercial	-	Commercial	2	Commercial	-	Commercial	2

(cont.) Variables	Paradigm Mall, Skudai				Danga City Mall, Johor Bahru			
	Data	Increment	Classification	Score	Data	Increment	Classification	Score
Liveability Index								
Proximity to restaurant/grocery store (meter)	300 (nearest grocery store)	-	Below 400m radius	3	486.3 (nearest grocery store)	-	400 − 800m radius	2
Proximity to green space (meter)	427.58	-	400 − 800m radius	2	689.49	-	400 − 800m radius	2
Proximity to transit station (meter)	848.83	-	Above 800m radius	1	305.17	-	Below 400m radius	3
Financial Index								
Increase in site property value	RM180 mil (purchase) RM1.5 bil (development)	733%	501 − 750%	3	RM50 mil (purchase) RM455 mil (development)	810%	751 − 1000%	4
Length of time (from purchase to occupancy)	5 years (2013 − 2017)	-	5 − 6 years	1	4 years (2005 − 2008)	-	3 − 4 years	2
Rent premium of redevelopment	RM6-7/sf	-	6.5	6.5	RM5-6/sf	-	5.5	5.5
TOTAL				31.5				29.5

Table 3 Comparison of Brownfield Developments Governance between the Paradigm Mall and the Danga City Mall

	Paradigm Mall, Skudai	Danga City Mall, Johor Bahru
Size (sq. ft)	1.3 mil	1 mil
Name of previous project	Kemayan City	Plaza Best World
Beginning status of abandonment	1998	1998
Purchased by new developer (End status of abandonment)	2010, 2013	2004
Operations since	2017	2008
Land use	Commercial	Commercial
Developer	WCT Hartanah Jaya Sdn. Bhd.	MFI Equity Sdn. Bhd. (subsidiary of Ekovest Bhd.)
Price to purchase	RM180 mil	RM50 mil
Governance consideration/mode	Clientelistic	Corporatist (primary)
Governing logic	Reciprocity	Consensus building (majority-based)
Objective	Material	Purposive (1st), Material (2nd)
Measurement of Site-Level Success of Brownfield Developments	31.5	29.5

4. Discussion

The site-level success of brownfield developments of the Danga City Mall is identified to be lower than the Paradigm Mall although both of them are brownfield development projects and are dedicated for commercial use. This difference is resulted from various variables as stated in the assessment of success level measurement in this paper. Most importantly, the urban governance modes of these brownfield developments are different based on the case study (as shown in Table 3). The modes of governance are crucial for the way how the government (local, regional and national) and stakeholders plan, finance and manage urban areas (Avis, 2016). Hence, this paper calls for an emphasis on the mode of governance to improve the success level of brownfield development.

Based on the case study, the clientelistic mode of governance implied by the Paradigm Mall leads to a better success level. The development of the Paradigm Mall has been an entrepreneurial project of an investor, and the decisions are made by respective departments. For instance, WCT Malls Management Sdn. Bhd is a subsidiary team of WCT Land Sdn. Bhd to manage the mall and Kuala Lumpur Pavilion Sdn. Bhd is appointed to be responsible for the position of retail manager. On the whole, the Paradigm Mall's objective to maximise commercial success (i.e., profit gaining from the developer side) is apparent, which in return favours the city-image making for the ultimate purpose of the government's political reputation and support. As a result, a win-win situation is achieved. Thus, the clientelistic mode of governance with a material objective is adequately in line with its aim for commercial success maximisation, and the outcome is positive.

On the other hand, the Danga City Mall is rated lower in the measurement of site-level success of brownfield developments. As a commercial use shopping mall, its origin to revive the building was fundamentally and predominately rooted in the state government's purposive agenda on the development of Iskandar Malaysia with unspecified/general tangible benefits, which may compromise the private sector (developer) incentives in the long run for effective management. More precisely, the development objective of Iskandar Malaysia has been observed undoubtedly since the operation of the previously abandoned building (the Plaza Best World) and is continued with the current mall. However, the monotonous retail services in this mall managed by the disincentivised management group, as a result of the negotiation and compromise basis, could degrade its attractiveness to the public. Its lower success level might be due to its lacking and insufficiency of the material selective oriented mode of governance, despite the mall's secondary clientelistic governing mode (see the hybrid mode by DiGaetano & Strom, 2003). As a commercial use building, these factors (governing logic and more materialistic objective) are crucial to lead to, and more vitally, sustain commercial success maximisation.

5. Conclusion and recommendations

In conclusion, compared to corporatist governance, the clientelistic mode of governance with a material and pragmatic (profit-oriented) objective fits in, and is highly in relation to, a better success level of commercial use brownfield development in the case of Iskandar Malaysia. This paper suggests that a stagnant, low success level of brownfield development could be due to the inappropriate approach of an urban governance mode. More precisely, the paper adds interesting discussions and lessons learnt to the field of urban planning and management, specifically on commercial brownfield development, that, in the Iskandar Malaysia case, the governance mode of corporatism is seemingly effective in the short run in governing and managing the brownfield development and is more advantageous to the governments for their general purposive (community and economic interests) objective. To sustain the effective management of commercial brownfield development, where private sectors' effective, long-term management is one of the key critical success factors, their selective, specific incentives (profit-making) should not be compromised during the exchange, and wherever possible their management process should not be hindered or burdened with high transaction costs, instead it can be willingly facilitated by the government, and this is called clientelism. These empirical findings and evidence also offer valuable messages (awareness) and insights to practitioners, particularly local policy-makers and local authorities (e.g., land officers and town planners), that an often-neglected sustainable urban governance approach is a *sine qua non* in determining the brownfield development outcome.

Note that it would be premature to conclude that this paper alone can solve the entire aforesaid brownfield stagnation issues, in particular using mainly secondary data from online sources and news, and few brief semi-structured interviews above which could be deemed less comprehensive. However, this paper, via the governance concept, may provide sufficient understanding to shedding light on this abandoned brownfield issue. Therefore, for future research and better results validity, more comprehensive governance and management study covering other modes of governance (e.g., managerial, pluralist, and populist) via more extensive semi-structured interviews and questionnaire surveys that involve the identification and formulation of potential brownfield development solutions should be conducted to produce a liveable, sustainable city environment. This move is essential as not only is it in line with the New Urban Agenda, it contributes to achieving the Sustainable Development Goals (SDGs), especially SDG 11 on sustainable communities and cities.

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