TIRTONADI BUS TERMINAL SERVICES: AN INNOVATION DERAILED?

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Received: 29 August 2019; Accepted: 20 September 2019; Published online: 8 November 2019

DOI: 10.21787/jbp.11.2019.171-183

Abstract
Bus Terminal, as a revenue-producing service entity in the regional government jurisdiction, is expected to contribute to the independence of the region in the form of the Regional Government’s Own-Source Revenue (Pendapatan Asli Daerah/PAD). However, the performance of the bus terminal’s levy was less than desirable. Furthermore, due to the change of authority over some type of bus terminals, it no longer able to produce revenue for the Regional Government. The authority to raise levies from the bus terminals motivated the regional government to introduce service innovations for the bus terminals under their jurisdiction. One example of such service innovation was Tirtonadi Bus Terminal in Surakarta, Central Java. This study objective was to understand the impact of the terminal services innovations on the improvement of PAD in Surakarta, Central Java. The study used descriptive methods with a qualitative approach equipped by in depth interviews and document reviews. The study showed that the innovation in Tirtonadi Bus Terminal services was limited and should be enailed rightfully. Especially, in the form of modernization of the bus terminal’s facilities. The impact of terminal services innovations on the increase of levy collections was not significant. The impact of the innovations on the improvement of services was mainly on the physical aspect. The innovations increase customer satisfaction; however, the number of passengers tend to be stagnant and even slightly decrease. Some problems also appear in relation to the change of authority over the bus terminal, in the form of transfer of personnel, funding, infrastructures, and documents (personil, pendanaan, sarana/prasarana dan dokumen/P3D). The change of the authority has a positive impact on the management of the bus terminal. To reap the benefit, the bus terminal management should be directed to utilize a Public Private Partnership cooperation (PPP), with build operate transfer arrangement, change the revenue base and adopt the transit-oriented development (TOD) approach.

Keywords: Transit-oriented Development, Regional Government’s Own-Source Revenue, Levies.

I. INTRODUCTION
As the third wave in the big bang constellation of the regional autonomy in Indonesia, Law No. 23 of 2014 on Regional Government regulates the transition of authority to various government affairs. Due to this law, some of the relatively new affairs are placed under the authority of the central, province and district government. Five new affairs are placed under the authority of the central government, five are placed under the authority of the provincial governments, and two are placed under the district government, while some affairs are removed completely.

The transfer of authority attracting the attention of regional government observer in Indonesia are those that have both service and income-oriented matters (Djambar, Nahar, & Tavip, 2017). One of them is the bus terminal management. The Law No 23 of 2014 on Regional Government, shifted the management authority of the bus terminal (Fauzi, 2014). The provincial government, which never oversee a bus terminal management, currently receive a mandate to manage the type B bus terminal. The district government/city which previously overseeing the management of the type A and B terminal is currently only overseeing the management of type C terminal, while type A terminal management is transferred to the central government. Refer to the PP No 43 1993 on Road Infrastructure and Traffic, there are three types of passenger terminals: passenger terminal type A, serving public transportations for transportation across different provinces and cities, cross-border...
transportation, across cities within the same province, within a city and in rural area; type B, serving the public transportation for transportation across cities within the province, within a city and in rural area; and passenger terminal type C, serving the for rural transportation.

The mandate to transfer the bus terminal authority is set and cannot be changed. The regional government must continue to focus on efforts to explore its own revenues to achieve the region’s independence in accordance with the principle of regional autonomy. One of the important criteria for the independence of the region is the ability to financially ‘self-support’ the region (Sijabat & Yosephen, 2014, p. 237), indicated by the contribution of its own-source revenue to its total revenue. In principle the greater the contribution of the own-source revenue (Pendapatan Asli Daerah/PAD) to the total revenue, the less dependence the region is to the central government (Dewi & Suputra, 2017, p. 1753).

With increased contribution, it is expected that regional governments can finance its own objectives. The portrait of the region’s financial independence can be seen from its ability to fund its public services. However, the question is how much the PAD contributes to the overall region’s revenue to be able to increase its financial capability. (compare with Rani, Syahbandir, & Purnama, 2010). Since the PAD is the largest source of finance for the region, the regional government must be able to develop and improve its PAD sources.

In the context of the bus terminal management, the regional government’s effort to improve the financial ability is by collecting levies from the bus terminal (see also Basri, 2002). In general, the bus terminal function is to provide parking (for both passenger vehicles and public bus), other business activities, and other facilities which are provided, owned or managed by the regional government.

However, generally, the levies collected are not in line with the quality of services provided. For example, the Rp 1548 million/year levies produced from Pakupatan terminal in the City of Serang does not improve the service in the bus terminal. In fact, the service is even worse. The bus terminal users raise various complaints, such as the damage in its access road, toilet and passenger waiting room, and even the presence of thugs (titiknol.co.id, 2016).

On the other hand, the levies collected from the bus terminal has not reached the target. Some examples are the Bantaeng District South Sulawesi and East Lampung Regency. East Lampung only reached 80.65% of its target. In 2009 it merely reaches 0.93% and 2010 only 1.69% (Subekti, 2011, p. 25).

Malang City is not much different. The highest collection of levies is 92.29% while the lowest is 80.48% (Hasugian, 2012, p. 259). In Boyolali district, although the collection of the bus terminal’s levies tend to increase every year, its contribution to the Boyolali district’s PAD tends to decline. (Sumiyanto, 2009, p. 4).

The regional government must be innovative and effective to be able to provide public services and collected revenue at the same time. The regional government must strive to maximize the collection of each source revenue to be able to finance its administrative expenses and its regional development. In this context, the bus terminal, of course, is required to maximize its capacity to collect the levy with various services innovation (Fakhziatuddin, Syahbandir, & Mujibussalim, 2018, pp. 132–151).

Meanwhile, there were abundant alternatives to finance public affairs as bus terminal services. One of which is public private partnerships. PPP could spring an upfront engineering of design solution and advance financing structure. The private sector in PPP produce a more efficient management of project delivery and revenue stream with several types of arrangements such as Build Operate Transfer, Design Build Operate, and Build Operate Own. It were also able to empower innovative atmosphere within the operation. (Grimsey & Lewis, 2004, p. 6)

In addition, innovation is needed to increase the quality of service of the bus terminal. Innovation presented as a new product and by nature, it replaces the old way (Llewellyn, 2009, p. 10). This means that every public service in principle must contain innovations to provide better customer satisfaction to the community. The concept of innovation as the cornerstone of competitive advantage is more familiar in the business sector. The study on innovation is conducted along with efforts to maintain and develop the competitive advantage of an organization (Muluk, 2008, p. 37). The ability to innovate is important for the survival of the organization. Therefore, the regional government as the bus terminal management must innovate its services to satisfy the need of the community, and every renewed terminal service out of its innovation were fascinated to elaborate.

The bus terminal as a center of activity or a center of land transportation needs to innovate to provide better customer satisfaction to the people (compare with Mirnasari, 2013). Some innovations of the bus terminal services are implementation of electronic parking and door control application; installation of closed-circuit television (CCTV); implementation of boarding pass and check-in system; provision of comfortable transit area,
waiting room and lactation room; bus departure schedule display; smart card; vending machine; e-ticketing system and others. The innovations on the bus terminal services are expected to increase the quality of service to the people, which in turn will increase the collection of the bus terminal’s levies and of course the PAD (Putra, 2014).

As mentioned earlier, the management of the bus terminal must deal with the transfer of authority which caused the redirection of personnel, equipment, financing, and documents related to the management of the bus terminal. But on the other hand, the change of authority has a good impact on the management of the terminal itself, both for state and the regional finance (republika.co.id, 2016).

It is interesting to study more deeply to understand how the bus terminal management can generate its revenue, provides the public services and facilities, the applicable services innovation, as well as the impact of the transfer of authority on the bus terminal management. The previous studies did not discuss it much. There were several studies on the bus terminal services, however, none of them discussed specifically on its impact on the increase of the PAD. For example, a study by Qiu et al (2016). Qiu et al. revealed the impact of the bus terminal in Xi’an China on the air quality in the city. They suggested a policy to re-design a more environment-friendly bus terminal with more vehicles using natural gas fuel.

Another study was by Noor, Nasrudin, and Foo (2014), they examined user satisfaction toward the bus terminal services in Kinabalu, Malaysia. They found that the bus company was not concerned with the passengers’ comfort especially night buses that travel longer (Noor et al., 2014) recommended an alternative public transportation mode such as light rail transit (LRT). They stated the government has an obligation to build future-proof public transportation. While Zhao, Zhao, Zhou, & Ma (2018) examined the comfort of an underground terminal, the Macau Barrier Gate. According to their study, many underground terminals is not properly managed the air circulation resulting in air pollution. They suggested an underground terminal design with an effective ventilation system to reduce air temperature and air pollution.

In the meantime, Chae et al. (2015) suggested the need for an emergency medical team in a bus terminal. According to their study, a fire that occurred in the Goyang Bus Terminal, South Korea in 2014 showed the inadequacy of the medical team in the face of an emergency. Their study found that the medical assistance team was slow in the handling of the casualties. They suggested the need of a medical emergency team in the bus terminal, and the need to train their emergency response capabilities.

Bus transportation management innovation was also examined by Hidalgo and Munos (2014). The innovation of the bus terminal system was pioneered in Europe by implementing the bus rapid transit (BRT) system, paralleled to the Transjakarta bus system in Indonesia, which since then was adopted by almost 160 cities in the world. BRT is a breakthrough in the evolution of the bus system. Based on the result of the study, BRT became the integrated transport solutions that not only improve the passenger’s experience but also to improve the technical, economic and environmental performance. Nonetheless, in the inception period of Transjakarta, the bus system was unable to provide the total quality of public service, more apparently in the tangible facilities (Fitriati, 2012).

In Indonesia, a study about the bus terminal was conducted by Chikita, Djakfar, and Anwar (2017). It examines the performance of Batu Ampar terminal in Balikpapan in East Kalimantan. The study concluded that there is a need to repair or improve the performance of the bus terminal to increase user satisfaction. However, this study did not analyze the economic side or the revenue from the levy collection in the bus terminal. Amiruddin (2017) analyzed Purabaya terminal management conflict between the Government of Surabaya and Sidoarjo. His research focused only on the conflict and the dynamics of the different political interests to change the percentage of the revenue share.

This study is aimed to fill the void from the previous study, the bus terminal management and its relationship with the increase of the PAD. As such, the objective of this study is to understand the impact of the innovation of the bus terminal services to the increase of PAD. Thus, this study focuses in discussing some of the innovations which are the modernization of the Tirtonadi bus terminal, the innovation impacts, the collection of the terminal’s levy and the concept of the future bus terminal management.

II. Method

This study used a descriptive method with a qualitative approach. This is a suitable approach since the bus terminal management is multidimensional, and it has interconnected variables which exact nature of their connection is not known (Alwasilah, 2003, p. 103). Data collection was conducted by field observation and in-depth interviews. The secondary data in the form of electronic documents and physical documents were collected from the location of the data collection. Data was also obtained through Focus Group Discussion.
A. The Modernization of the Bus Terminal Services

One of the Innovations of Tirtonadi bus terminal by the Government of the City of Surakarta was revamping it to a modern terminal equipped with modern facilities. Tirtonadi Bus Terminal was transformed into a comfortable bus terminal and equipped with modern devices. It gives the impression of a modern and comfortable bus terminal. A bus terminal equipped with AC is still very rare in Indonesia and Tirtonadi is one of them (Saryanto & Avesta, 2015).

III. Results and Discussion

The term “bus terminal” in Indonesia has negative connotations such as bad smell, bad quality, unprofessional, and overrun by thugs. The former authority of the Tirtonadi Bus Terminal, the government of the City of Surakarta, has tried to revamp the bus terminal. Various mass media often publish good news on Tirtonadi bus terminal. According to the Head of the Tirtonadi bus terminal, its location, which serves as an important part of Java’s transportation connectivity, is one of the reasons for its success.

To start with, the Mayor of Surakarta refused to move Tirtonadi bus terminal to the north of the city, although it was already agreed upon earlier. The Mayor keeps Tirtonadi’s location in the heart of the city. Tirtonadi is in the City of Surakarta, Banjarsari sub-district. Tirtonadi is one of the bus terminals that is located at the urban epicenter of the city. It cannot be denied that the intensity of crowded urban areas that are full of economic potential is the inspiration for the innovation of the Tirtonadi bus terminal. By keeping the location in the middle of the City of Surakarta, Tirtonadi enjoyed various innovations in services (jpp.go.id, 2016).

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The Most Vulnerable Period for the Bus Terminal's Security During the Idul Fitri Days

The most vulnerable period for the bus terminal's security during the Idul Fitri days where passengers crowd the Tirtonadi Terminal (compare with Sukania, 2013). Based on the Head of the Tirtonadi Bus Terminal, the CCTVs are very helpful for the security officers in monitoring the bus terminal. Through the provision of the CCTV units, Tirtonadi Terminal strives to provide a safe and comfortable transportation means.

The use of boarding pass for bus transportation is also the first to be implemented in this terminal. Usually, there is a prevailing problem with bus transportation, where the bus companies jostle to get their passengers. This problem happens because the passengers purchase the ticket on
the bus. To resolve the issue, Tirtonadi Terminal implemented a boarding pass system. Other than the bus, the boarding pass system is commonly applied in various transport sectors. With the boarding pass system, the passengers purchase a ticket and then waiting in a waiting room (NACTO, 2017). This kind of solution is the first of its kind in an Indonesian bus terminal. Tirtonadi Terminal officially introduces the boarding pass system on April 2013. The boarding pass system recorded the average of 7,000 passengers per day. The Tirtonadi Terminal is the pioneer for the emergence of other modern facilities. Since there was no Indonesia bus terminal ever committed, it’s fair to consider The boarding pass system as one of its innovation (tribunnews.com, 2017). Tirtonadi terminal also rearranges the location designated for the micro, small, and medium scale (MSM) business to support the boarding pass system.

The MSM businesses are placed on an ideal location in the bus terminal, they no longer occupying the bus lanes. This is important since the boarding pass system requires management of the terminal to provide a parking space for the buses while waiting for their departure time. To provide the parking area the terminal requires a space free of any kind of activities including the trading activities of the MSM businesses. Consequently, the MSM business and the hawkers are not allowed to be in the location. They are forced to occupy the designated place that has been provided (Compare also with the study Sidik, 2012). There is quite a resistance to this innovation where many of the MSM owners protested and demonstrated against it. There are still many potential passengers outside the bus terminal that cause the low number of visitors in the terminal. This condition causes the decline of the MSM’s revenue (tempo.co, 2014).

Tirtonadi Bus Terminal is also going to be equipped with a shopping center, something that was started in 2013 (jawapos.com, 2018). The shopping center was going to be run by a third party. The overall cost for the construction of the two floors to prepare the ‘commercial terminal’ was approximately Rp 30 billion. The Government of the City of Surakarta planned to finance the construction cost from the City Government’s budget and from the Central Government’s fund. The construction of the second floor was suspended at the time of this study. The suspension is due to the lack of a legal umbrella on the Non-Tax State Revenues for Type A terminal. Law No. 23 of 2014 on Regional Government has mandated that the change of the P3D must be done for a transition of authority between different levels of government.

The weakness of the urban transportation system is the lack of interconnection to link various transportation modes (Jinca, 2009). Tirtonadi understands this and attempts to resolve it by constructed an interconnection pedestrian sky bridge, connecting the Tirtonadi Bus Terminal with the Balapan Kota Railways Station. Interconnectivity between the bus terminal and the train station provides comfort to travel for the passengers and open an opportunity for economic growth for the City and the Terminal. However, now, the Tirtonadi Bus Terminal innovation plan to construct the interconnection bridge is suspended. It is still waiting for the regulation in the central level due to the transfer of authority over the Tirtonadi Terminal from the Surakarta City Government to the Central Government.

Tirtonadi Terminal has also put forward the e-ticketing system where the passengers can order a ticket without going to the usual ticket box location. E-ticketing can help the passenger to buy a ticket anytime and anywhere (Surniandari & Haryani, 2017). The e-ticketing system was introduced in 2015.

Unfortunately, the implementation of e-ticketing system still faces some obstacles, one of them is the vagueness of the legal umbrella from the Ministry of Transportation. Also, the lack of synergy with the bus companies since the e-ticketing system is not fully electronic yet, there was still some business processes which must be conducted manually. Next, there is a lack of adequate human resources to handle the online system.

B. The Impact of the Terminal Services Innovation

In this study, the impact of the innovation to the bus terminal services was reviewed from the level of satisfaction of the terminal user and the changes in the number of users (Mentari, 2015). The Innovation of the bus terminal services improves the user satisfaction of the Tirtonadi Bus Terminal. The improvement can be seen in some aspects: physical aspect of the available facilities in the terminal; the clarity and certainty aspect of the service procedure, time and cost; information openness aspect of the availability of information in the terminal; and the security aspect of the sense of security when the user is in the terminal (Sedayu, 2015).

From the physical aspect, the construction and use of existing facilities in the terminal made it easier for the user. The provision of various facilities such as the waiting room, the bus path, the driver rest area, health facilities, lactation room, and
other supporting means satisfies the user of the bus terminal. The cleanliness of the terminal, the organized, clean and green area around the terminal made the user feel more comfortable.

From the aspect of the clarity and certainty, the clear procedure for the bus terminal’s services, starting from the entrance to the exit of the terminal, the certainty of the tariff and bus departure time, already satisfied the user (Nurmana, 2017). Similarly, other services are implemented in accordance with the set procedures such as the recording of the bus arrival and departure; complete documents and physical vehicle check to ensure the feasibility of the bus and ensuring the health of the bus driver creates user’s confidence to use the bus.

From the aspect of information openness, the installation of an electronic information board provided the user with a complete bus departure schedule. It eases the user of the terminal to do their travel. Passengers no longer need to worry with a damaged or inaccurate schedule. The electronic board displays any changes quickly and more easily accessible by the terminal users. The accountability of the information presented is well organized, unlike the conventional bus departure schedule board that must be updated manually one by one and take times to change it if there was a mistake. This facility can provide updated departure information that continuously updated by its operator.

From the security aspect, innovation in the form of the installation of the CCTV system made the user of the terminal feel secure while in the terminal (iklansuaramerdeka.com, 2016). The presence and the importance of the CCTV are felt during the most vulnerable period for the security of the terminal, i.e. the day of national holidays, long holidays, Idul Fitri, Christmas and New Year holidays, where the number of passengers in the terminal would increase significantly. The CCTV provide immense help for the officers to monitor the situation in the terminal. With the presence of CCTV, the user feels secure while in the terminal. It provides safe and comfortable transportation for passengers.

While for the aspect of comfort, the terminal innovation services also have an impact on the user of the terminal (Mirnasari, 2013). The user of the terminal can freely use all terminal’s facilities, get the information they needed, feel secure and enjoy their time while they are in the terminal. The user’s comfort increases when the bus terminal’s officers are kind and polite to the users.

It can be concluded that the Tirtonadi bus terminal services are better due to the innovation. However, the innovation of the bus terminal services does not appear to have an impact on the increasing number of terminal users. This means that the number of users of the terminal is not determined by the innovation factor. Therefore, it is assumed that there are other factors outside of innovations that causes an increase or a decrease in the number of bus terminal users.

As an example, innovation in the form of the boarding pass. In Tirtonadi Bus Terminal the implementation of the boarding pass system has not been proven to have an impact to increase the number of the terminal’s users. The numbers of passengers show a decline from year to year. It can be seen in Table 1.

The implementation of innovation in form of boarding pass system in Tirtonadi Bus Terminal started in March 2013. In the first year, the number of users of the terminal is more than 3.1 million. But the year after, the number of users decline to only approximately 3 million, the decline continues in the following years. However, the decline of the number of bus terminal users is also felt by the other bus terminals that without any innovation program. The continual decline happens, for example, in the Bukittinggi Banto bus terminal in Sumatera and Paal Dua bus terminal in Manado.

### C. The Impact of Innovation on the Collection of Levies

Based on Table 2, the collection of the bus terminal’s levy shows some fluctuations. In 2012-2013 the collection is more than the target, then the next three years, there are some fluctuations in collections but it no longer able to reach the target. The underachievement of levy collection post 2012-2013 was due to disruption of the terminal’s services during its construction works. Other modes of transportation, such as railways and airlines offering faster and easier means of transportation also impacting the user’s choice. During that period, railways and airlines open new routes and add the number of flights to the City of Surakarta.

| Year | Number of Users |
|------|-----------------|
| 2013 | 3,107,044       |
| 2014 | 3,051,617       |
| 2015 | 2,566,608       |
| 2016 | 1,510,366       |

Source: The Tirtonadi Terminal Technical Implementation Unit
In the case of Tirtonadi Terminal, the impact of its innovation on the increase of PAD are quite complex. There are three types of innovation with the potential impact on the PAD improvement, which are the implementation of a boarding pass system, the construction of a shopping center, and the construction of the sky bridge. Such innovations should be able to boost economic activity in the Tirtonadi Bus Terminal. The boarding pass system was proven to be able to provide an increase of the levy collection in 2013, and it was even above its target in the first year. However, both the shopping center and the sky bridge cannot be assessed. Their construction process is being suspended, waiting for the revision of prevailing regulations in central level. Based on the available data, as has been explained earlier, the impact of the innovation to the PAD increase is still not significant. Data on the bus terminal’s levy collections, its contribution to the total regional levies, and its contribution to the PAD at the time of the introduction of the boarding pass system, the year before and the year after can be seen in Table 3 and Table 4.

The Data above shows that the boarding pass innovation can increase the PAD in terms of the number but its contribution to the PAD is minimal (1-2%), and its contribution to the total regional levies is also only 8-9%. This figure is still inadequate to push the bus terminal contribution on increasing the regional PAD.

According to the City of Surakarta’s Secretary of the Transportation Office, the less than stellar performance of the levy collection was due to the competition from other transportation modes and due to the focus of Tirtonadi innovation on providing public service rather than collecting more levy to boost the PAD. The levy collected was not adequate to finance the operational costs of such advanced terminal. Overall the cost of innovation of Tirtonadi Bus Terminal described in the 2009-2019 master plan of construction and development of Tirtonadi Bus Terminal was approximately USD 120 billion, financed by the City Government and the Central Government. The massive cost will never be able to be recouped by the levies collected from the bus terminal services.

The possible source of the increase of the levy collection in the Tirtonadi Bus Terminal is the boarding pass system, which could generate additional revenue, from the paid waiting room and rent from the MSM businesses, which continue to grow. The graphs can be seen in Figure 1.

The Data shows that the revenue from the paid waiting room contributes quite significantly to the total levies collected from the terminal. Since the launch of the boarding pass system in 2013, it can increase its contribution of approximately 1.4%, even it fluctuates in line with the decrease in the number of passengers in the last few years. The paid waiting room contributed approximately 25-30% to the total levy. It is the second largest contributor to the bus terminal. The boarding pass system is also responsible for the rent from the MSM businesses, which shows a consistent increase at 4-5 percent in the last four years.

In his capacity as Head of the Terminal, Eko adds, that another terminal services innovation...
which can give a contribution to the PAD is the smart card system. However, the Tirtonadi terminal has not had the opportunity to implement it. The MoU with a bank is signed, however, the project must be delayed, waiting for the policy at the central level.

With the status of the Terminal as a Technical Implementation Unit (Unit Pelaksana Teknis Dinas / UTPD) it should be clear that its nature is to provide public services, not to collect revenue. Therefore, a partnership with third parties is a solution for the government of the city (see also the study Rinata, 2016). Separately, the Head of Revenue and Financial and Assets Management of the City of Surakarta stated that the cooperations with third parties are often conducted between Tirtonadi Bus Terminal Management and the private sector. According to him, such cooperation was an effort to make the bus terminal as a revenue center for the region.

D. The Future Bus Terminal Management

The future bus terminal management should be able to overcome its various problems. To maximize the business management of the bus terminal, the terminals located on prime locations should be managed in partnership with a private sector (in the form of public-private partnerships, or a Build Operate Transfer). A partnership may also be beneficial to develop the bus terminal and the areas around it (Bappenas, 2016). The bus terminal can be the center of the activities for its surrounding areas, which comprise of housing (apartments/affordable flats), MSM business, offices, sports center, recreation centers, and others.

As such, the revenue from the bus terminal would no longer dependent on the collection of the bus terminal’s levy, but more on the non-levy revenue from the activity centers in the bus terminal area. To optimize the bus terminal’s revenue, the levy would be replaced with rent, service charges from various services, income tax from the activity centers or from other revenue sources, which are made possible by the appropriate legislation. Ticket sales for the bus and other public transportation is conducted online (via an application) from a single ticketing office.

As such there would be no ticket scalping by unscrupulous persons (Romadhina, 2016). There will be no opportunity for the illegal levies in the bus terminal and its surrounding area. The development of the bus terminal should be conducted with the cooperation of third parties, with the right to build (development rights) and the right to develop the bus terminal’s assets (property development rights).

The bus terminal should be restructured to enable it to function maximally, both as a center of community activity and as a source of revenue for the regional government. In the future, the bus terminal area must be positioned as the center of community activities that can invite the community to use it for various activities. Therefore, the old concept that a bus terminal must be located on the edge of town, is no longer valid (Munandar & Kurniawan, 2012). The owner/management of the bus terminal must be able to develop the terminal and its surrounding areas with commercial activities, housing, offices, recreation, sport, and other activities. Cooperation with investors for the development and management (property development concept) is required to overcome the limitations of the regional government in financing the investment (Soedjito, 2004).

In this context, Tirtonadi Bus Terminal already have an advantage. Its location is in a strategic area in the City of Surakarta. To ensure that the Tirtonadi bus terminal continues to have a service and revenue orientation, a Transit Oriented Development (TOD) can be adopted. TOD is a concept of transportation development which synergized the transportation infrastructure with the spatial planning to accommodate new development, to strengthen the...
residential environment, and adding more choice and the benefits to the public, through optimization of mass public transportation network (such as bus and train), making it easier for the citizens of the city to access the city’s resources (Soedjito, 2004).

The Transit Oriented Development (TOD) concept adopt a mixed-use area of residential and commercial areas, designed to maximize the access to public transport, and often incorporate features to encourage the maximum use of public transportation (Ridhoni & Ridhani, 2018). The TOD area usually has transit or stop station (train station, metro station, tram, or bus stop) as the center of the area, surrounded by areas with high density, followed by areas of lower density, radiated out from the center. TOD area generally located in the radius of 400 to 800 meters from the transit stop, since this is considered to be a walkable distance suitable for pedestrian, this is the solution for the last stretch between the transit station to the housing area (Hutasuhut, 2018).

The development of the Tirtonadi bus terminal should be focused on the TOD using an integrated development program, integrating the public transportation mode as the center of the area with the center of economic activities and housing areas. (koran-sindo.com, 2018). By referring to the TOD concept, a shopping center can be built in the bus terminal that is integrated with the residential areas such as apartment/affordable flats, MSM businesses, office areas, sports center, recreation centers, and others.

The TOD concept can be implemented in an area that is experiencing a decline, both in its function and its physical quality and in need of a regeneration program. TOD also can be done on in-fill sites (land that is already developed) or new growth areas (new development land). The TOD concept usually creates new functions, repairs of the existing transit network systems or creates a new transit network systems (Handayeni, 2014).

The TOD concept comprised of some principles of design: a) Density, i.e. the density of development areas related to the radius of the transit points; b) Diversity, i.e. must have a variety of functions (mixed-use); and c) Design, i.e. an integrated design. In a TOD development area there are several variables that must be present, namely: a) Commercial Center area; b) Housing Area; c) Garden, public plaza and buildings; d) Transit systems; e) Mixed use; f) Road and circulation System; g) Parking needs; h) Pedestrian Path.

Integrated Tirtonadi Terminal should be developed with funds from the private sector; through partnership scheme of Built-Operate-Transfer (BOT) for 30 years (Grimsey & Lewis, 2004). The intention to establish a BOT operation in Tirtonadi was to pave the war for the embodiment of the TOD criteria. ITDP had formulated certain criteria such as Walk, Cycle, Connect, Transit, Mix, Densify, Compact, Shift. (ITDP, 2013, p. 7). (ITDP, 2013) The realization of TOD criteria were stagnated by the traditional funding of tirtonadi operations. The stagnant development of commercial center exemplified it. Terminal assets during the next thirty years will be managed or used by the private parties, and afterward (when they would have break-even and receive some profits), the terminal building will be handed over to be owned and managed by the Government the City of Surakarta (see also the explanation Abbas, 2018). However, although the development of the terminal was carried out and financed by the private sector, the construction design and spatial plan are determined by the Government of the City of Surakarta. The design of the integrated terminal should be put on competition and it should be designed to provide benefit for hundreds of years. Tirtonadi had only tempted for an amalgamation of TOD and PPP but to flourish. The authority transition should be an opportunity to enroll its innovative policy right on its track.

IV. Conclusion

The management of the bus terminal is enduring a transition of authority, due to Law No. 23 of 2014 on Regional Government. The law mandated that the authority over a Type A Terminal is transferred to the Central Government through the Ministry of Transportation. During its innovative programs, the Tirtonadi Bus Terminal, as a Type A Terminal in Surakarta, must deal with additional problems due to the transition of personnel, assets, budget, and documents from the City of Surakarta Government to the Ministry of Transportation.

In addition, the current innovations in the Tirtonadi Bus Terminal have not provided a significant contribution to the improvement of the City of Surakarta’s Own-source Revenue. Modernization has been implemented in the terminal services, such as the installation of AC and CCTV; introduction of boarding pass system; and construction plan of a sky bridge that will lead to the embryo a TOD concept. However, those innovations did not lead to an increase in the number of users and revenue. The number of users and revenue was also influenced by competition from other transportation modes, such as airlines and railways. There are still many factors need to be explored more deeply to understand how the number of user and revenue can be improved so Tirtonadi
could find its way back to a clear objective as an embodiment of innovative public service. It opened an opportunity for another study.

At this point, the innovations merely improve the provision of public services. Efforts to increase the revenues should be dealt with a more modern approach in the transportation infrastructure, the TOD concept. Tirtonadi Bus Terminal has the basic criteria to implement the TOD concept. Its location is in a strategic area in the City of Surakarta, and some innovative practices that have been implemented have a mark of a TOD concept.

This study provides three recommendations. First, the innovation practices must be continuously improved. With the transfer of authority over the Tirtonadi Terminal to the Central Government via the Ministry of Transportation, the Ministry must coordinate intensively with the Government of the City of Surakarta to maintain the existing innovations and planning for future innovation in the Tirtonadi Bus Terminal. This is because City Government of Surakarta is the pioneer in the Tirtonadi Bus Terminal.

Second, to maintain the pace of innovation a subsection unit of innovation should be formed in the management structure of the Tirtonadi Bus Terminal. This subsection unit should function as a work unit responsible for the development of innovation in Tirtonadi Bus Terminal. To improve the revenue performance, a suitable business plan and institutional structures that could use the TOD concept in Tirtonadi operations must be developed.

Third, to improve the revenue performance, the management should use a TOD concept to manage Tirtonadi Bus Terminal’s land and assets, instead of using the traditional levy approach from the basic terminal services. To support the implementation of the TOD concept on the terminal operations, the institutional approach that should be considered is to change the management structure from a Technical Operational Unit to that equivalent with a Public Service Agency. This is necessary to improve the flexibility of financial management of the bus terminal.

ACKNOWLEDGMENT

The author would like to thank the R&D Center of the Regional Financial and Development of the Research and Development Agency of the Ministry of Home Affairs of the Republic of Indonesia, to our sources, the government of the Province of Central Java City of Surakarta, The Regional Integrated Services Unit of Tirtonadi Terminal, and all parties involved in this research.

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