

Analysis of Business Innovation Strategies of Light Rail Transit (LRT)

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KEYWORD

LRT, SWOT, Innovation, Strategy, Business.

A B S T R A C T

This research aimed to formulate the business innovation strategy of LRT in Palembang. The type of this research was qualitative descriptive. The population used in this study was all users of the LRT. The sampling technique was accidental sampling with a total number of 200 respondents consisting of the LRT's users and the local communities. This sample also included 5 informants who served as employees of LRT Palembang. The data were collected from both primary and secondary sources. The data were then processed using a SWOT analysis. The results showed that the analytical value of the internal factors was 2.80, and the analytical value of the external factors was 2.3, meaning that the right business innovation strategies for the LRT were strategies with the nature of Strength Threat (ST). The forms of innovation strategies that can be developed include conducting service promotion, establishing cooperation with other companies, building connectivity with other modes of transportation through government support, and maximizing infrastructure and facilities to create support services or other business units.



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INTRODUCTION

One of the fastest growing cities in Indonesia is Palembang. The development of the city is closely adherent to a number of national and international events held there, including Sea Games 2011 and Asian Games 2018.

However, after the international occasions took place, the literature related to the construction of its facilities began to emerge. One of them which eventually raises questions is the development of Light Rail Transit (LRT) along the roads in the city of Palembang.

The LRT, which was originally built for the public to avoid congestion and facilitate the athletes of the Asian Games 2018 from Sultan Mahmud Badaruddin II Airport to the sports complex Gelora Sriwijaya Jakabaring, has lately posed problems not only for the local communities, but also for the central and provincial governments because of its ongoing operational activities.

The data from Train Indonesia (KAI) Regional Division (Divre) II Palembang in 2019 showed that the operational costs of LRT Palembang required an estimate of around IDR 10 billion per month. The revenue from ticket sales was not more than IDR 1.1 billion per month. This means that LRT Palembang has suffered a net

loss worth IDR 8.9 billion each month since its operation, where the loss is covered by the central government through subsidized funds.

The loss incurred by the LRT is complained not only by the central government that is currently planning to revoke the subsidies, but also by the provincial government of South Sumatera which refuses to be charged for the loss. Besides, complaints are also made by the local communities in Palembang which consider that a monthly spending of IDR 8 billion for subsidizing the operation of the LRT is not optimal and does not give real benefits to them.

The loss that occurs constantly as a result from the LRT's operation indicates that there are errors in the the LRT's business plans. The lack of public interest in using the facility is considered as the most influential factor for the loss suffered by the LRT. This is compounded by the presence of online transportation services that are regarded more effective and efficient, since they can reach the areas that are neither covered nor traversed by the LRT. Consequently, the transportation business offered by LRT Palembang is less desirable by the transportation users or communities in the city.

To improve the business implementation of LRT Palembang that continues to sustain a heavy loss, new business development strategies are badly needed. One of the ways to formulate new strategies is by analyzing its strengths, weaknesses, opportunities, and threats (SWOT). SWOT analysis is an analysis that systematically identifies various factors of a company to formulate strategies which include both internal and external factors of the company (David, 2011). SWOT analysis is also commonly interpreted as an analysis that classifies the problem into several groups of strengths, weaknesses, threats, and opportunities. These classifications are commonly used for business strategy planning and development (Helms, et al., 2011). SWOT analysis is based on the assumption that an effective strategy will maximize strengths and opportunities as well as minimize weaknesses and threats (Noor, 2014). It is expected that by using SWOT analysis to identify the strengths, weaknesses, threats, and opportunities of LRT Palembang, its business innovation strategies can be formulated, which eventually become the solution to overcome the loss experienced by the LRT.

Some studies related to Palembang LRT have been done by Putri et al. (2019), Dwitasari and Priyanto (2017), and Noprizal (2019). These studies focused on the factors that influence the interest, quality of service, and satisfaction of people using the LRT. Additionally, Aji (2019) and Muktaf (2018) conducted research into the perception of consumers of LRT Palembang). Nevertheless, there has been no existing research carried out into the innovation strategies of LRT Palembang to overcome the loss of the business.

The existence of public facilities such as LRT should be able to support mobility, community satisfaction (Cao, 2013), development of regional connectivity (Billings, 2011) and become profitable as a regional investment (Topalovic et al, 2012) (Chang-Fu and Yuan, 2011). Nonetheless, in reality, the interest of people to use an LRT as a mode of transport is relatively low. Hence, to reduce the risk of loss and increase the public interest to use the facility, it is necessary to analyze the existing business innovation strategies of LRT Palembang. The purpose of this research is to develop innovation strategies for the LRT in question. Therefore, this research intends to finding out effective business innovation models to reduce its business' loss.

METHOD

This research used a mixed method that is intended to describe clearly the research object which is the business implementation of LRT Palembang in this regard and explore several types of innovation strategies for it in an attempt to reduce the risk of loss.

The population of this study was all users of LRT Palembang. According to the data provided by Train Indonesia (KAI) Regional Division (Divre) II Palembang, the average number of LRT Palembang users for one trip was approximately 404 people. The sampling technique used in this research was accidental sampling, with the number of samples based on calculations using the slovin formula being 200 respondents. This research also included 5 informants who were also employees of LRT Palembang.

The data of this study were collected from primary and secondary sources. The primary source was obtained from the observation of the LRT's operation, the dissemination of questionnaires, and the interviews with the key informants, namely the LRT's users, service management, and the local communities. On the other hand, the secondary source was sourced from the supporting data and research results related to the LRT.

The data of this research were then analyzed both qualitatively and quantitatively. The qualitative analysis was conducted by comparing the results of questionnaires and interviews, and the interpretation was made to explain all the results of the data examined, particularly that directly related to the business of the LRT. In the meantime, the quantitative analysis was carried out and expressed in the form of numbers, starting from identifying the internal and external factors which were then expressed in the matrices of the internal factors and external factors. Subsequently, these matrices were given weights according to the level of importance, and the multiplication results of weights and ratings were interpreted into the model of SWOT analysis, in order to formulate a policy of innovation strategies that can be implemented by LRT Palembang.

RESULTS AND DISCUSSION

Research Object Descriptions

LRT Palembang is the first transit operating system in Palembang that connects Sultan Mahmud Badarudin II Airport with the Jakabaring Sports Center area. It was built in 2015 to facilitate the implementation of the Asian Games 2018 and was completed in 2018, just a few months before the regional event. The construction of the LRT spent an estimated sum of around IDR 10.9 trillion, with the operation commencing on 1 August 2018. In relation to the number of stations and passengers, the LRT has 13 stations and can load up to 5,000 people in a single trip, with the longest mileage of around 23.4 km. To get a clearer picture of the research objects in terms of business strategies, direct observation and questionnaire dissemination were conducted by containing a list of internal and external factors that had to be filled out by 200 users as well as 5 informants of LRT Palembang. The results of the questionnaires were then converted into scores as given in Tables 2 and 3. The details of the research objects from internal and external factors are as follows.

Analysis of Internal Factors of LRT Palembang

One important aspect for a company to win the business competition with its competitors is the company's internal potential. The internal potential is the potential that can be maximized by the company itself, and it will be an advantage for the company before dealing with the external factors that it cannot control. One of the internal assessments lies in the strengths owned by the company. Below are a number of the strengths possessed by LRT Palembang.

(1) Infrastructure and facilities. LRT Palembang has excellent infrastructure and facilities to support its business. The infrastructure and facilities include a new fleet with complete amenities such as air conditioning, toilets, terminals, and a comfortable passenger lounge, aside from several supporting facilities such as toilets and canteens in some terminals. The existence of the infrastructure and facilities serves as one of the strengths of LRT Palembang compared to similar modes of transportation.

(2) Affordable rates. The tariffs imposed by LRT Palembang is relatively affordable compared to those of other modes of transportation throughout the city. The rate charged for the farthest route from Sultan Mahmud Badaruddin II Airport to Jakabaring LRT terminal within a distance of 23.4 km is only IDR 10,000, while the rate for shorter routes costs half-priced, IDR 5,000. These prices are undoubtedly affordable for a mode of transportation with such complete facilities and even cheaper than online transportation services that operate in the city. This is in line with Aji (2019), stating that LRT Palembang's travel tariffs are quite affordable.

(3) Competent human resources. Another advantage of LRT Palembang compared to other modes of transportation is linked to the sector of human resources. In this regard, it has highly competent human resources who typically have certificates of training and feasibility to operate the LRT. As an example, the administration and ticketing departments are occupied by officers who have mastered IT and had good educational backgrounds. According to Mayasari et al (2019), competent human resources are one of the key strengths of a business.

(4) Service convenience. Service convenience is an additional strength of LRT Palembang compared to other modes of transportation in the city. Adequate facilities such as air conditioning, departure lounge, and other facilities for people with special needs apparently make the LRT convenient for all people. As stated by Aji (2019), the quality of LRT Palembang service is very good.

On the other hand, the weaknesses of LRT Palembang include the following: (1) High operational costs, LRT is a city transportation mode that has the highest operational costs among any other modes of transportation. Based on the 2019 financial report of Train Indonesia (KAI), the operational costs of LRT Palembang stood was recorded to sit at around IDR 10 billion per month due to the luxury infrastructure, facilities, and other supporting facilities. The high operating costs are considered as one of the weak points of the LRT which has to be overcome immediately as part of the solution to the company's internal issue. (2) Limited transit stations. The number of transit stations or terminals of the LRT (only 13 stations/ terminals) becomes another drawback of the LRT. As a result, it is regarded as a mode of transportation that is less mobile and capable of reaching areas of passengers' destinations. When compared to other transports such as Trans Musi which has more terminal points or online transportation services which can reach almost every place, this limitation bears an obstacle for the LRT's business. This is in line with a study conducted by Dell'Olio et al (2012) which stated that the level of preference for the use of transportation services depends heavily on the access of these transportation stations. (3) Restricted access to comprehensive information technologies, LRT Palembang is a mode of transportation based on its own operational activities. Because of restricted access to the latest information technologies, it has yet to provide satisfaction to consumers. For instance, customers do not know exactly the arrival and departure hours of the LRT in its terminals, the payment system, or the ticket booking, following that all of these have not been fully connected to the cutting-edge information technologies. This condition, in turn, drives away consumers who frequently utilize IT. The presence of IT to provide real-time information facilities about the arrival and departure times and the availability of the fleet will improve the performance and services of transportation modes (Wu, et al., 2012).

After the strengths and weaknesses of LRT Palembang were identified, the factors influencing those strengths and weaknesses were then incorporated into the table of internal factors for further analysis. The table of analysis of internal factors of LRT Palembang is presented below.

Table 1. Analysis of Internal Factors of LRT Palembang

No	Strengths and weaknesses	Weights	Score	Weighted Score
1	Infrastructure and facilities	0,15	4	0,60
2	Affordable rates	0,25	3	0,75
3	Competent human resources	0,10	3	0,30
4	Service convenience	0,15	4	0,60
5	High operating costs	0,15	1	0,15
6	Limited terminals or stations	0,15	2	0,30
7	Restricted access to information technologies	0,05	2	0,10
Total		1		2,80

Source: Observation Results (2020)

Based on the analysis of the internal factors above, the results showed that the internal value of LRT Palembang is 2.8 point, meaning that the internal factors between the strengths and weaknesses of LRT Palembang is quite balanced. LRT Palembang has several strengths in terms of infrastructure, facilities, and competent human resources, which function as advantages over other modes of transportation. However, the internal factors also witness weaknesses due to its high operating costs, limited terminals/ stations, restricted access to the latest information technologies, allowing the strengths and weaknesses within the internal factors of LRT Palembang to look slightly balanced. Apart from this, the strengths have the potential to be explored further to cover its weaknesses.

Analysis of External Factors of LRT Palembang

External variables are variables outside a company that can affect its condition either directly or indirectly. These variables are divided into two groups, i.e., variables that are considered as threats and variables that are seen as opportunities. Here are some opportunities for LRT Palembang. (1) Government support, The full support given by the local government for the LRT's operation such as requiring State Civil Apparatus (ASN) in both municipal and provincial governments to use the LRT service as a transportation mode is one of the

opportunities of LRT Palembang to thrive. Besides, various efforts from the provincial government of South Sumatera to promote and change several Trans Musi routes to be connected with the LRT are another positive side for LRT Palembang. (2) Cooperation opportunities. The possibility to cooperate with Train Indonesia (PT. KAI) in setting up coffee shops in each station of the LRT appears to be a very good opportunity. In addition to that, other possibilities of cooperation with some companies in the city can possibly drive the LRT to function as a mode of mass transportation for its employees. (3) Access to airport. LRT Palembang is one of the mass transport modes that has to reach the airport besides the transportation provided by the airport itself. Access to the airport is one of the opportunities for the LRT to grab a new target market of airport passengers. This is in line with the study conducted by Ewing et. al (2014) where the construction of LRT should be able to increase air travel traffic, especially when LRT is connected to the airport. (4) Mode of tourist transportation. The existence of the LRT's stations in strategic places, namely the airport, malls, and Jakabaring Stadium, with supporting rails that allow passengers to sightsee the atmosphere of the city of Palembang from over the LRT can make it serve as a mode of tourism transport. This is supported by the observation that many passengers take the LRT only for recreation on weekends.

On the other side, the threats to the business of LRT Palembang include the following: (1) Mindset of communities. The mindset of local communities which prefer using private vehicles (both cars and motorcycles) to taking mass transportation seems to become the biggest threat to the business of LRT Palembang. As public transportation, LRT Palembang needs to be supported by both the government and the local communities as the service users. Understanding the service users' mindset is one of the general transport management policy strategies (Luong and Houston, 2015). (2) Existence of online transportation services. The existence of online transportation services (both motorcycles and cars) that have been operating in the city of Palembang turns into another threat to LRT Palembang. This is closely adherent to the fact that the LRT has the same target market of such online transportation services, and their services can reach almost all points of traveling, thus making them more desirable by the local communities. (3) Revocation of government subsidies. The dependence of LRT Palembang on subsidized funds can pose a threat to the business, particularly when the provincial government of South Sumatra decides to deprive its subsidiaries. Love, et al (2017) stated that if the public sector such as an LRT provides a cost-effective public service to respond to market demands, it should also consider funding from the private sector to ensure its business continuity. (4) Connectivity with other modes of transportation. Some stations of LRT Palembang remain unconnected with other modes of public transport, causing certain places to be out of reach by the LRT. Moreover, the LRT's parallel line (one route) with other modes of public transportation makes the competition even tougher within one-route transportation services. As said by Chang-Fu and Yuan (2011) and Dwitasari and Priyanto (2017), connectivity and interaction between modes is an important value for public transportation. The fact that LRT Palembang has not connected with other modes of transportation is seen as a threat to the business.

After the opportunities and threats of LRT Palembang were examined, the factors affecting those opportunities and threats were then inserted into the table of external factors for further analysis. The table of analysis of external factors of LRT Palembang is provided below.

Table 2. Analysis of External Factors of LRT Palembang

No	Opportunities and threats	Weights	Score	Weighted Score
1	Government support	0,15	4	0,60
2	Cooperation opportunities	0,15	3	0,45
3	Access to airport	0,10	3	0,30
4	Mode of tourism transportation	0,10	3	0,30
5	Mindset of communities	0,15	1	0,15
6	Existence of online transportation services	0,15	1	0,15
7	Revocation of government subsidies	0,10	2	0,20
8	Connectivity with other modes of transportation	0,10	2	0,20
Total		1		2,35

Sources: Observation Results (2020)

Based on the analysis of the external factors above, the results showed that the weighted average of LRT Palembang is 2.35 or 2 if rounded. This value is considered relatively low, meaning that the external factors of the business of LRT Palembang is quite weak.

Discussion

After the values of the internal factors (IF) and external factors (EF) were obtained, both IF and EF values were then combined to formulate strategies to support the business of LRT Palembang. The SWOT diagram for the formula of the LRT’s business strategies is given below.

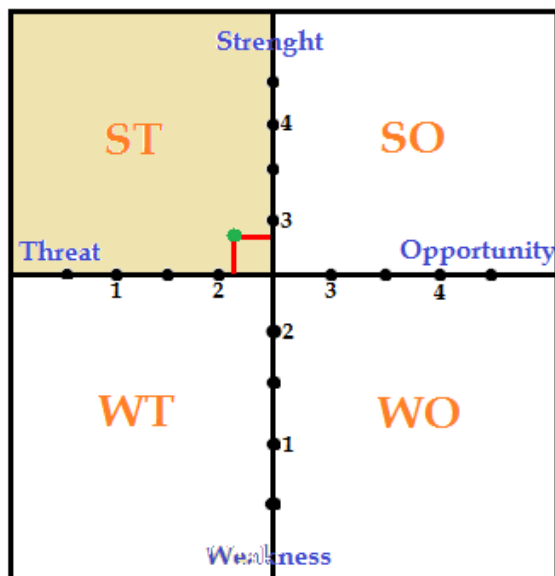


Figure 1. SWOT Diagram of Business Strategy Formulation of LRT Palembang.
Sources: Observation Results (2020)

As presented in Figure 1, the business of LRT Palembang appears in the ST quadrant (Strenght Threat). Therefore, the strategies for developing it is by using the company's internal strengths to internalize or minimize the negative impact of external threats that persist in the company. These strategies can also be applied by taking advantage of existing oppotunities and minimizing the company's weaknesses.

Some alternative strategies that can be implemented by LRT Palembang include: (1) Conducting service promotion. There are only a small number of people using LRT Palembang as a mode of transport due to the lack of promotion for the service. Based on the results of this study, not many promotional activities were conducted by LRT Palembang, especially after the international event of the Asian Games. As a result, the number of passangers declined drastically. With affordable service rates and excellent facilities, LRT Palembang should grab the target market of the general public in the city of Palembang. Currie and Delbosc (2013) said that one way to increase the number of passengers is by improving the quality of services, including service promotion. In this regard, LRT Palembang can organize and conduct promotional activities such as using advertising media to introduce the LRT as a mode of eco-friendly transportation, creating a single ticket scheme for passengers, providing traveling promos for families and companies, or providing packages for travel services to the visitors of Palembang. (2) Establishing cooperation with other companies. Cooperation with other companies is another opportunity to be grasped by the LRT. The cooperation can be established with travel parties for instance, so the LRT can be used for traveling. It is also possible to make cooperation with educational institutions by giving teachers and students special prices when commuting with the LRT. Alternatively, it can cooperate with other private parties to support the course of the business. (3) Building connectivity with other modes of transport through government support. One of the disadvantages of LRT Palembang is that its terminals or stations are not connected with other modes of transportation. Thus, the public interest in using the LRT is quite low when connectivity and accessibility are very important in the transportation

business (Cao, 2013). This weakness can be solved by connecting the LRT's stations with other transportation modes in the city with the support of the provincial government of South Sumatera. Hence, the LRT and other modes of transportation are connected with each other. Cao and Ettema (2014) stated that the policy to establish a transit station connected with other modes of transportation will increase the satisfaction, and Chang-Fu and Yuan (2011) added that it will also number of passengers and can be a value-added to public transportation. In addition, policies are necessary for passenger growth (Cao and Sechoner, 2014). (4) Maximizing infrastructure and facilities to make support services or business units. The availability of empty areas at some points of the LRT's stations can be used to establish various support services or other business units to increase the number of passengers, including establishing business outlets that sell typical products or souvenirs of Palembang or other services that support the travel services of the LRT. This is in line with Liu, et al (2016), stating that to increase the number of public passengers, a solid development needs to be done around the station where the development must be related to the improvement of service. In addition, Annisah (2019) and Intanti et.al (2019) reveal the availability of supporting facilities can increase public perception of Palembang LRT services.

CONCLUSION

Based on the SWOT analysis, the right business innovation strategies to choose from are strategies that have the nature of Strength Threat (ST), which uses the internal factors to internalize or minimize the negative impact of the external threats. The forms of innovation strategies to be implemented can include conducting service promotion, establishing cooperation with other companies, building connectivity with other modes of transportation through government support, and maximizing infrastructure and facilities to create support services or other business units.

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