

PROCESS, SCENARIO, AND RISK OF PROPERTY DEVELOPMENT WITH CASE STUDY OF LRT CITY CIRACAS

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Submitted: 04-03-2023, Revised: 06-03-2023, Accepted: 07-03-2023

ABSTRACT

The primary aim of this Paper is to outline results and to summarize research findings on property development strategies and processes that increase the chances of successful Real Estate development starting by using the eight stages of Cadman and Topping to anticipating possible risks and looking at alternative development scenarios under the influence of a pandemic, and developments' digital technology. The case study that will be taken in this paper is the LRT CITY Ciracas Project in Jakarta, which is an Apartment and Retail complex project developed with the TOD concept or Transit Oriented Development, where the project complex is directly connected to the LRT CITY Ciracas station. The property development process is complex and high risk. Land value-oriented developers will create development scenarios that seek to analyze the best land value to be developed in accordance with the regulations and market needs at that time by presenting innovative designs or superior designs that meet feasibility studies and are presented with development stages that can also maximize land value. The Evaluation stage is the deciding point where the developer can make a decision to move forward until the development is complete, even though there are difficulties and risks that might hinder the development process that must be faced or the developer can decide to back off and change his development plan. In addition to risk, developers need to take into account the development steps so that unexpected things do not arise.

Keywords: *Process, Risk, Strategi, Property Development Strategies, Digital Marketing*

1. INTRODUCTION

This paper is made as a result of the learning that the author has gained during the postgraduate study of the region and the city with the help of good guidance by the lecturers. The study will take the case study of LRT CITY Ciracas in Jakarta, Indonesia, with the main source of theory from the book "Property Development" 4th edition by David Cadman and Rosalyn Topping, published in 1991 [1]. In addition, the discussion of the paper will also be enriched from the book "Urban Planning and Real Estate Development" 2nd edition by John Ratcliffe, Michael Stubbs, and Mark Shepherd published in 2004; the book "*Risiko Pengembangan Properti*" by I Wayan Muka which takes the Indonesian context and was published in 2021; and lecture presentation notes (Year 2021) that have been delivered during the author's study period by Dr. Ing. Jo Santoso. [1] [4][2] [5] [3] [6]

The case study that will be taken in this paper is the LRT CITY Ciracas Project in Jakarta, which is an apartment and retail complex project developed with the TOD or Transit Oriented Development concept, where the project complex is directly connected to the LRT CITY Ciracas

station. So that even though it is located on the outskirts of Jakarta, residents of the LRT CITY Ciracas Apartment can easily reach the downtown area of Jakarta. In addition, the LRT CITY Ciracas project is a project developed by PT Adhi Commuter property with the PT Adhi Persada building contractor team which is still in a group relationship with PT Adhi Karya Properti which is also the contractor appointed to build the LRT Station. This shows that the developer of LRT CITY Ciracas has a very close relationship with the LRT Project Developer. Therefore, in addition to Ciracas, apartment development under the LRT CITY brand is also carried out in other places such as Cibubur, Tebet, Jatibening, etc. However, each place has different characteristics and context conditions for its development even though it is carried out by the same developer group. [7][8] [9]

2. METHODOLOGY

The data obtained by the author to study the LRT CITY Ciracas Project is by searching for existing literature on the internet and interview. The author had the opportunity to meet directly with the developer to conduct interviews and listen directly about the project development process until the construction stage. Data analysis was conducted using a deductive approach to provide more comprehensive conclusions with regard to various theory that were studied.

3. LITERATURE REVIEW

Property development according to Cadman and Topping, is the process of changing and improving the use of land. The property development process is a complex and sometimes frustrating process with high risk conditions because it involves many different actors with different agendas and also requires various resources such as building materials, infrastructure, workers, and funds that are tied up during the development process which can occur over a long period of time, etc. The property development process is a unique process as it has different contextual characteristics such as location, etc. Despite having different characteristics, Cadman and Topping attempted to describe the development process in 8 stages, namely: [1]

- Initiation
- Evaluation
- Acquisition
- Design and Costing
- Permission
- Commitment
- Implementation
- Let/Manage/Dispose

Initiation is the process of initiating the development process due to changing conditions (such as demographics, economic conditions, etc.) and can be initiated by several actors who play a role in the development process, such as developers, property/land agents, landowners, and local governments. In this initiation process, the actor who initiates the development defines the development objectives and strategy and searches for a suitable location (or can also start from a location that is adapted to the development objectives and strategy/idea). In essence, these emerging initiatives are processed into Concepts and preliminary considerations that include objectives, development strategies, and site choices that already take into account site-specific criteria such as market studies (Supply, demand, market conditions), physical, legal and administrative conditions, even down to initial design ideas, and other constraints. [1]

The initial concepts and considerations generated at the Initiation stage are then evaluated as to whether they are feasible and viable in all aspects, both in terms of cost/funding/resource procurement for the development, but also time, and other development process factors (in terms of physical land conditions, regulations, etc.) which can be internal or external to the context of the development itself. The evaluation stage is the most important process. It is the deciding point where the developer can either decide to move forward with the development despite the difficulties and risks that may hinder the development process or the developer can decide to backtrack and change the development plan due to factors such as high uncertainty, disproportionate returns, lack of resources to implement the development plan to completion, etc. When the developer decides to backtrack, then it is the developer's decision to backtrack. When a developer decides to back out, it may result in changes to the concept, objectives, development strategy, and even land options. The changes made will be reorganized into a new development plan and then re-evaluated until it meets the feasibility criteria and is feasible. Once the evaluation results are in and if the developer decides to proceed with the development process, there is limited flexibility or change to the basic development concept. [1]

The decision and evaluation process of the developer must be thorough, because during the development process many risks can arise unexpectedly and can tempt the developer to retreat or hinder the development process. Developers need to evaluate and project how the development realization process can occur. In the projected implementation of the development project, the developer needs to identify how vulnerable the development is to risks? How likely is the loss? How likely is the risk to occur? Risk identification can be seen from social, technological, economic, environmental, political/legal sources. All development risks need to be considered and mitigated such as what are the calculations for losses and gains, is the development feasible after calculating the possible risks and gains? These risk calculations need to be evaluated before the developer commits to the development. [1]

In the development risk book by I Wayan Muka, there are 6 stages for risk management, namely: [2] [9]

- Risk Management Planning Stage, at this stage the developer defines the risk in terms of method, developer role, cost, time, and how much is the risk level.
- Risk Identification Stage, at this stage the developer identifies the sources of risk that might threaten the development process.
- Qualitative Assessment Stage, at this stage developers assess what the impact will be and how to respond to the risk.
- Quantitative Assessment Stage, at this stage the developer assesses quantitatively how much is the risk value.
- Risk Response Planning stage, at this stage the developer responds to the risks that arise and how risk mitigation will be:
 - Accepting the risk. Accept the risk if the risk is considered small or the cost of transferring the risk is too great or if the likelihood of the risk occurring is small.
 - Mitigating/Treating the risk. Reducing the risk and its impact,
 - Avoiding the risk. Transferring the risk to a 3rd party
 - Sharing the risk. Share the risk with the parties in the development.
 - Taking the opportunity risk. Accepting risk and turning it into opportunity

- Monitor and control stage, at this stage the developer monitors and controls to reduce the occurrence of risks.

If the risk is not taken into account from the beginning, then if something goes wrong, it may cause the development to stop the implementation process and all the efforts that have been spent by the developer at the beginning are in vain and may cause losses to the developer. Unfortunately in Indonesia, this development risk has not been sufficiently accounted for. Developers in Indonesia tend to deal with risk with the approach of: [1] [2] [10]

- The Umbrella Approach: Providing funds and feeling that the funds are sufficient for any risks that may occur.
- The Ostrich Approach: does not take risk into account because it does not see risk as a problem.
- The Intuitive Approach: trusting intuition feelings over analysis.
- The Brute Force Approach: not focusing on risk and believing that every risk can be controlled.

When the developer's decision for the development process is finalized, the next stage is the preparation stage to acquire the land and resources (funding) needed to start the development process. The process at this stage is referred to as the acquisition stage. According to Cadman & Topping, the Initiation, Evaluation and Acquisition processes may occur in parallel. This is because all three stages conduct a thorough investigation of the land and functions to be developed in accordance with the development vision decision, although the end results of the stages vary and each stage tends to be completed only when the previous stage is complete. The thorough investigation involves all legal matters including legal documents, ownership, local regulations, etc.; all physical matters such as the carrying capacity of the land, whether the land is polluted and a health hazard, whether the land has a network of infrastructure to support the development, etc.; and how all aspects investigated are assessed in terms of their cost to the developer for acquisition. In addition, at this stage, it is important that the process is linked to actors outside the developer. This process can only be carried out if: [1]

- Landowners are willing to sell their land on terms and at a price that allows the developer to carry out the development process;
- The developer's development plan is in accordance with local spatial planning permits or regulations;
- The development process has funding for the project that takes into account both the funding needs of the project plus its infrastructure if needed (in the case of the UK described by Cadman & Topping, Funding and cooperation in the funding process can come from a variety of actors, it can be from landowners who cooperate with developers, or from certain banks / institutions that want to invest according to their company's criteria, or from the government that can play an active role by providing support to increase development and economic activity in certain areas if market conditions in the area are very low and the development plan of the developer does not meet feasibility standards) and;
- Finally, developers factor into their development plans any specific requests from potential building users/end-users for development plans.

If the entire process of investigation and negotiation between actors at the initiation stage, evaluation stage, and acquisition stage has met the standards and feasibility requirements, then the results of negotiations regarding regulations, risks, and cooperation agreements between actors will be the basis for confidence that the entire development process will be in accordance with the results of negotiations and agreements that have been obtained (such as the Contract

Negotiation stage according to Miles) before the written commitment / Contract (such as the formal commitment stage according to miles). [1] [5]

The 4th stage is the Design & Costing stage or the design and cost calculation stage which involves the services of various professional consultants. This Design & Costing process actually occurs from the first stage until the development process is completed, but at the beginning of the Design & Costing work process it will be made as minimal as possible to reduce costs during the concept development period by the developer until the developer has decided / committed to carrying out a development plan. Once that commitment is in place, the Design & Costing process will become more intensive. The Design & Costing process starts with the appointment of a team of consultants who will prepare the basic concepts for the proposed development plan and its costs. If the developer decides to commit to the development plan, then the consultant will proceed with preliminary drawings for the development permit application and more detailed costing (the more detailed drawings can be used for the contractor selection tender process). After that, the Consultant will play a role to maintain the implementation of the design during the implementation/construction process. [1]

Stage 5 is the Permission stage where the developer submits a request to the government for a construction permit or implementation of the development process. There are several types of permits that can be submitted by developers, ranging from principle permits (such as IPPR and KRK), permits submitted with detailed drawings (such as the TABG hearing process which involves a team of experts in deciding the permit), permits related to environmental impacts (such as AMDAL and ANDAL Lalin), and other permits. The process of obtaining these permits itself requires time, expert assistance, a socialization process, and even money to obtain the permits. Therefore, in the early stages (Initiation and Evaluation), the resources expended and the likelihood of obtaining these permits need to be taken into account before making development decisions and commitments. [1]

The 6th stage is the Commitment stage. When all the evaluation stages have been carried out and the preparation process for the acquisition of all resources for the development has been negotiated (Contract Negotiation with all parties completed) with satisfactory results, the Formal commitment stage / signing of the written contract can be carried out. Once this commitment is made, there is less flexibility to change the development plan and the developer enters the next stage, the implementation stage. [1]

The 7th stage is the Implementation stage, which is the stage to implement the development process with time, cost, and quality that is equivalent / in accordance with the initial plan that has been determined. In this implementation process there is cooperation between developers, consultants, construction workers, project managers, etc., which is regulated regarding their rights and obligations as well as the roles and ways of working that will occur in a contract document. Development plans with varying contexts and levels of complexity need to be planned for according to the qualification background, credibility of the contractor, and the contract model that influences the way of working. If the aforementioned are appropriate, it can help to make the implementation/construction process meet the time, cost and quality targets planned at the start of the development. If the implementation process goes smoothly, the process will continue until the building is completed and ready to be handed over to the building users. [1]

The last stage is the Let/Manage/Dispose stage, which is the stage of handing over the building from the actors in the development process to the end user of the building/building manager. Although this process seems to only exist at the end, Cadman & Topping actually suggest that the marketing strategy process needs to be considered from the beginning. A marketing team involved in the early stages of the development would be like a public relations department that could also strategize on pricing and regulations for the purchase or sale of the development. [1]

Interestingly, John Ratcliffe's book cites Cadman & Topping's book and divides the development process (8 stages in Cadman & Topping's book) into 4 stages, namely *Evaluation*, *Preparation*, *Implementation*, and *Disposal*. See the figure below. [1] [4]



Figure 1. Stages of the Development Process.

[1] [4]

In brief, we can see that the development process begins with the *Evaluation* stage. This stage is the first stage that becomes the initial decision on the initiation and calculation of evaluating the feasibility of running the project on all aspects of cost, energy, time, risk, etc. By looking at all the calculations, it will be decided whether the developer will run the project or not. If the developer decides to run the project, then the development process will enter the next stage, namely the Preparation stage or the preparation process to obtain all the resources needed for the development implementation process. The entry of the development process into the next stage means less flexibility to change, and more realization of the project. The culmination of all preparation stages is that all resources have been secured with the results of verbal negotiations written down in a written contract that states the roles, obligations and rights of each development actor. After the preparation process is complete, the next step is the Implementation process or the construction process until the development plan is completed. The last process is the Disposal process, which is the process of handing over the development results to the user/manager of the building. [1]

Although the development process described looks simple, during the process, the developer's analytical and negotiation skills are tested in terms of what can be done effectively and efficiently in achieving the development objectives. Developers can also create development scenarios or stages of development implementation in realizing their plans. These stages are also tailored to how the 'work culture' of the developer. A land value-oriented developer will create a development scenario that seeks to analyze the best land value to be developed in accordance with regulations and market needs at that time by presenting innovative designs or superior designs that meet feasibility studies and are presented with development stages that can also maximize land value. The stages of development in the development scenario, which Jo Santoso describes, are divided into 3 stages namely the Penetration, Growth, and Mature stages that need to be taken into account on an optimistic and pessimistic view. In the Penetration stage, land values are still low and the stage that makes a breakthrough for the start of development. Then at

the Growth stage where the land value rises due to the development at the penetration stage, until the development value starts to stabilize, then at that time it is the mature stage. But not all developers execute the development scenario. The size of the project, the objectives of the project, the 'work culture' of the developer, the context of the development site, and other factors can influence the development plan including the stages of implementation and the scenario. A land value-oriented developer may consider the development scenario, while a project-oriented developer will consider the project implementation program (the phasing plan, what kind and how much phasing of the implementation process will be carried out). Since the 'work culture' of developers and the development context of a development are unique and different, the development processes, scenarios and risks faced and incurred by developers may also vary. [1] [3]

4. DISCUSSION

If you look at the case example of the LRT CITY Ciracas development, it was also carried out with very limited initial developer capital derived from the results of joint operations from several parties. Due to limited capital, calculations for development must be made with caution and are very risky. [7] [11]

Sales of the LRT CITY project are also carried out early with pre-selling / pre-sales after the master plan is completed and sales when the permit has been issued. Sales are carried out in stages, namely according to the development of LRT CITY Ciracas, which is carried out by division per building, which is divided into 5 stages. (See Figure 2) [7] [11]

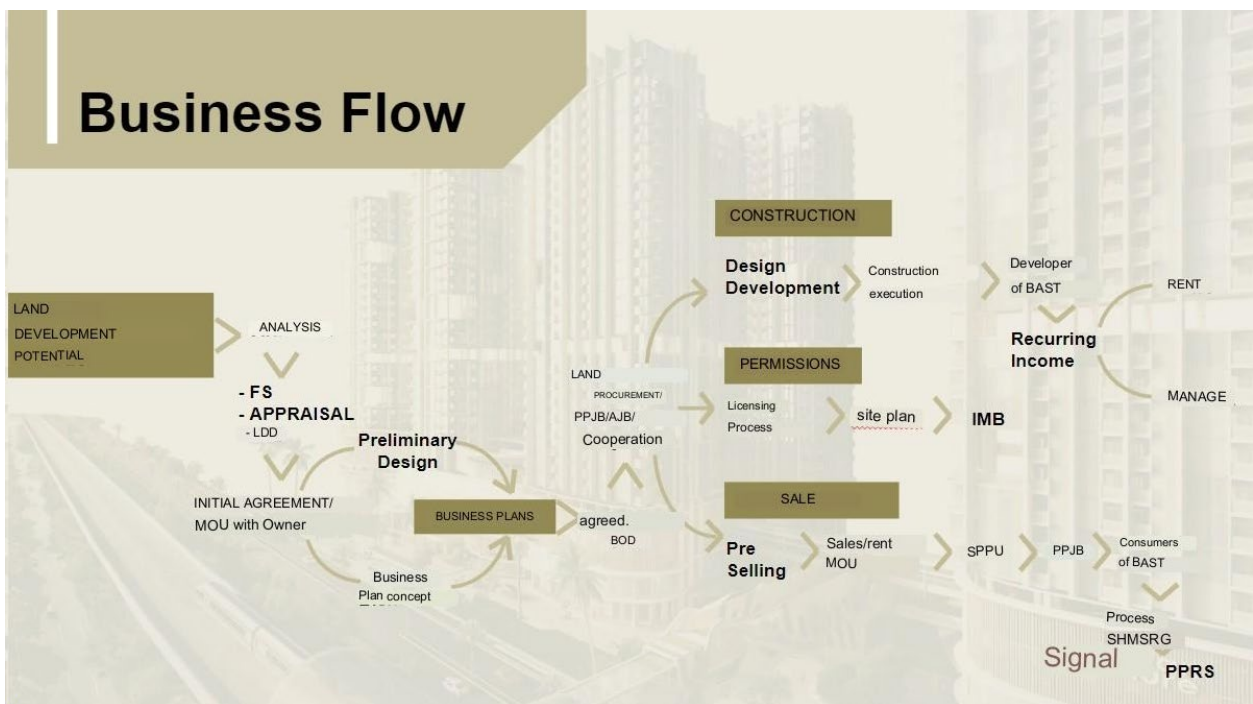


Figure 2. LRT CITY Ciracas Business Flow

[12]

In addition, the construction progress of LRT CITY Ciracas is also adjusted to the sales conditions where the foundation will be made when it has 30% sold out, the upper structure is made when it has 60% sold out and the deep finishing when it has 70% sold out. on development progress that depends on the actual sales results of LRT CITY is very vulnerable and requires a superior strategy in terms of marketing to overcome the risks that arise. LRT CITY's strategies are: [8] [9]

- An award for the design of a development with the TOD (Transit Oriented Development) concept, which is still rare in Indonesia, was given by BCI Award.
- Cooperate with other institutions such as Travellio to offer convenience for apartment rental management that brings added value or investment to the community and Grandhika Hotel by providing free lodging during vacation periods for buyers who pay booking fees, etc.
- A digital marketing strategy that even won the Golden Property Award held in October 2021 by Indonesia Property Watch.

The digital marketing strategy carried out by LRT CITY Ciracas is to introduce the project through trendy social media such as Instagram and Youtube. Through Instagram LRT CITY Ciracas introduces ongoing promos, while through Youtube LRT CITY Ciracas reports on development progress every month by attaching drone videos of development progress. All social media created are also connected to the main LRT CITY Ciracas website which explains the project in more detail such as the area master plan, area facilities, e-brochures, location with google maps coordinates, room unit plans, room unit data, and even virtual tours or 3D Show Units for all types of units such as studios, 1 bed rooms, 2 bed rooms. The website created by LRT CITY Ciracas is also connected to the main LRT CITY website so that virtual visitors are free to choose the location of Apartment LRT CITY in any location. 3D show units and Google maps with Google Street View features displayed are able to provide virtual knowledge so that consumers can see and gain experience in the show unit without having to come to the marketing gallery and experience to see the location conditions around the apartment. This digital marketing strategy is recognized by LRT CITY to even be able to attract buyers who are living abroad and make buyers to buy units at LRT CITY without seeing the units directly. This strategy is important because of the Covid-19 pandemic conditions where social restrictions are carried out so as not to cause further spread of the disease. Please note that at the time of this writing, there has just been an outbreak of the Covid-19 Pandemic which began in Wuhan, China and spread throughout the world. This outbreak brings not only health problems but also global economic crisis problems. In Indonesia itself, Covid-19 began to enter in March 2020 and resulted in lockdown events and social restrictions. 2020 is a sluggish year, where many developers with property development processes have become stagnant and the government has to reduce funds to reinvigorate property in Indonesia. [7] [9]

This pandemic condition was also felt by LRT CITY Ciracas during the development process and resulted in the realization of the development plan not being as smooth as planned at the beginning of its development. The pandemic has delayed the development of the LRT CITY Ciracas masterplan for ± 4 years. [7]

This pandemic condition caused the construction process to stop for 6 months and after the construction process was able to run, there were health regulations that needed to be

implemented during the construction process which made the construction realization process more complicated/complex. Although to reinvigorate the development of this property, the government has reduced incentives such as 10% VAT exemption, and other facilities, this assistance cannot be enjoyed by developers and property buyers who are still under construction. [7]

Not only that, there are many risks that threaten the construction process of each stage. In addition to the pandemic conditions, LRT CITY Ciracas has also experienced several risks such as changes in the calculation of the master plan which resulted in an increase of 1 year for the master plan calculation. In addition, there are also risks of errors during construction, such as conditions of reinforcement installation errors, leaks, etc. For the risks that occur, developers can take into account the possibility of occurring can be taken into account from the beginning such as errors during construction and take into account the role of who is responsible for the errors that occur. [11]

As for things that cannot be predicted such as this pandemic condition which can be classified as a force majeure case, the developer must still prepare for it and calculate or simulate if it happens what to do and who is responsible. in the case of LRT CITY, for this pandemic case, the risks that occur are borne together with the negotiation process. With various emerging and even unexpected risks, it has caused delays in the project completion time and changes in the financial plan of the LRT CITY Ciracas development plan. However, overall the LRT CITY Ciracas project is still considered feasible and can continue to run and is planned to be handed over at the end of 2022. [7] [11]

The last lesson learned from the LRT CITY Ciracas case is that, as a result of the starting of construction of LRT CITY Ciracas and the imminent opening of Ciracas LRT Station, the value of land in LRT CITY Ciracas has increased threefold from a land price of around 2.5 million per square meter to a land price of around 7.5 million per square meter. Therefore, the timing and stages of development need to be carefully calculated. changing conditions will result in price changes that may result in changes in the ability of the developer to carry out its plans. [9]

5. CONCLUSIONS

Development is a complex process and cannot be done alone, so there are various actors involved in development. It is important for the developer to learn a highly specific development plan tied to the context of the site, the culture/ways of working of the developer, and the development objectives linked to the respective interests of each actor.

The Evaluation process is the most important process that determines whether the developer will carry out the development or not. In this evaluation process the developer needs to take into account the physical context of the land, market/community conditions (supply & demand, demographics, etc., project funding, Regulations & Laws, impacts and risks that may occur during the development process. If the overall calculation of the plan can be considered worth the return and feasible to implement, then the developer can commit and execute the plan.

It is important for developers to be able to know about the right phasing or process steps. Although the 'work culture' of developers, the actors involved, and the development context of a

development are unique and different; so that the development processes, scenarios and risks faced and occurring to developers can also vary; but all developers still need to take into account and mitigate possible risks that might occur and hinder the development process. In addition to risks, developers need to take into account the development steps so that unexpected things do not arise.

ACKNOWLEDGEMENT

This paper was presented at the ICASTE 2023 conference.

REFERENCES

- [1] Property development. E & FN Spon.
- [2] *Risiko Pengembangan Properti*. Qiara Media.
- [3] *Development Scenario*.
- [4] Urban Planning and real estate development. Routledge.
- [5] Real estate development: Principles and process. Urban Land Institute.
Retrieved November 10, 2021, from <https://www.lrtcity.com/id-lrt-city-ciracas>.
- [6] Tiga Tahun Berturut-turut, Adhi Commuter Properti Sandang Top 10 Awards. (n.d.).
- [7] *Analisis Faktor-Faktor Keterlambatan Pada Pembangunan Proyek Apartemen Urban Signature Ciracas*. Jakarta; Repository Politeknik Negri Jakarta.
- [8] Retrieved November 10, 2021, from <https://www.propertynbank.com/tiga-tahun-berturut-turut-adhi-commuter-properti-sandang-top-10-awards/>.
- [9] *Manajemen Proyek: Dari Konseptual Sampai Operasional*. Erlangga.
- [10] *Manajemen Risiko Investasi Pengembangan Perumahan*. Universitas Islam Indonesia.
- [11]. *Laporan Kerja Praktek Proyek Apartemen Urban Signature - LRT CITY Ciracas*. Institut Teknologi Sepuluh Nopember.
- [12]. LRT CITY Ciracas. *Studi Eskursi LRT City Ciracas*.

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