

Capital Budgeting Analysis to Assess Feasibility of Investing in Rental Car L-Trans in Surabaya

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Abstract: This study aims to assess the feasibility of investment in CV L-TRANS in Surabaya using budgeting capital. In this research, using qualitative methods and the type of research is quantitative descriptive, population in this study is the L-trans car rental in Surabaya. teknik analysis in this study using the calculation of capital budgeting and data collection techniques used in this Penetian is interviewing techniques. The results of this study in terms of NPV value as feasible, in terms of IRR as feasible, in terms of PP to be eligible, and in terms of PI also declared eligible. So of all the calculations have been done on the CV. L-TRANS all declared eligible investment made.

Keywords: Capital Budgeting; Internal Rate of Return (IRR); Net Present Value (NPV); Payback Period (PP); Profitability Index (PI)



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1. Introduction

Indonesia is currently experiencing very rapid economic development. It is characterized by the emergence of many new businesses, ranging from small businesses to large scale. Enterprises in the service is a business that is in demand by the public. Companies engaged in the service will always be faced with the decision to invest in fixed assets, with increasing time the assets will experience performance degradation resulting in maximal performance fixed assets, requiring repair, replacement or addition of fixed assets. Investai fixed asset is the amount of the largest expenses in service companies. Substantial funds and uncertainty in the period of return of the things that need to be considered in deciding the investment anyway.

Some things to consider before making an investment business owner remains namely, investment decisions, planning, pngembangan effort, and risk-taking investments (Mubaraq et al., 2021). Investment decision process is a decision process that runs continuously to achieve the best investment decisions (Tandelilin, 2010).

Car rental business is a business that offers car rental services to those in need, both individuals and companies (Gierczak-Korzeniowska, 2020). Car rental business these days is growing rapidly, especially in big cities such as Surabaya. Developments in the world of business and industry cause businesses improve

mobility. So the role of the car rental to have great influence, especially based on the fact that for some or groups of people, using a hire car is considered efficient than buying. Means of transportation is the movement of people or goods from one place to another by use of a vehicle.

The demands of activities and activity causes people to have to use the means of transportation to reach the goal (Litman, 2003). Means of transport is easy, convenient, and most widely used one of them is a car. Seeing the community needs for vehicles, especially cars, the car rental business is a promising business profits (Cohen & Kietzmann, 2014). Because there are several factors that make a car rental is still in demand.

That's because the car is very suitable for traveling. Whether it's travel for short distances up to much though. One of the advantages in using the cars will certainly be more flexible and not have to worry about the heat or the rain. Even using a car also can carry far more passengers. So do not be surprised if a car is chosen to travel with your family or closest relatives.

During this time car rental booking transactions made by customers via telephone or come directly to the rental place. Sometimes there are problems with the car rental reservations using the telephone because the customer can not see directly the physical condition of the car to be leased. Recording of reports at a car rental is still using the data processing is recording in the books. All the evidence collected and recorded transactions to the general ledger. Each car is rented and returned recorded in a car with the aim of facilitating car owners search the data when there are customers who will be hired.

Competition is already commonplace in the business world, there terkecualli for car rental businesses are growing in number. While competing, car rental is also linked to each other in one thing, that meet customer needs. The existence of a competitor can be utilized when demand rental car from the customer, while car rental can not fulfill the request because of a shortage of the fleet, the company asked for help from the car rental another so that customer demand can be met Number of requests rental car, demanding rental owner to increase the number of fleet units cars owned. The decision increasing the number of vehicles requires proper consideration, especially concerning the issue of costs, from purchasing, operations, and maintenance.

The fixed assets is the wealth of a company that has a form, economic has benefits of more than one year and obtained by the company to carry out activities of the company and not for sale (Mulyadi, 2012, p. 593). The decision regarding the replacement or addition of fixed assets must be carefully considered, since it requires resources or significant capital. One method used to calculate the capital needed is a method of capital budgeting or capital budgeting. Measurement of capital budgeting usually using methods Bet Present Value (NPV), Payback Period (PBP), Profitability Index (PI), Internal Rate of Return (IRR).

Based on the background of the problem described above, this study focuses on analyzing the feasibility of fixed asset investment in the car rental business "L-Trans" in Surabaya using a capital budgeting approach. The main problem addressed in this research is how to assess the investment feasibility through appropriate capital budgeting methods. Accordingly, the purpose of this study is to evaluate the feasibility of investment in fixed assets at CV. L-Trans in Surabaya by applying capital budgeting techniques. This research is expected to provide both theoretical and practical benefits. Theoretically, it contributes to the development of knowledge related to financial feasibility analysis and supports future research in similar fields. Practically, the results of this study are expected to assist business owners in making informed investment decisions. The scope of this research is limited to the analysis of fixed asset investment feasibility based on the company's financial statements from 2017 to 2018, focusing on a service-sector business, namely L-Trans car rental in Surabaya. The feasibility assessment is conducted using several capital budgeting methods, including Net Present Value (NPV), Payback Period (PP), Internal Rate of Return (IRR), and Profitability Index (PI), which are used to evaluate the profitability and viability of the proposed investment.

Previous studies have widely discussed the application of capital budgeting in assessing investment feasibility across various business sectors. Several studies have similarities with this research because they both analyze fixed asset investment feasibility using capital budgeting methods such as Net Present Value (NPV), Payback Period (PP), Internal Rate of Return (IRR), and Profitability Index (PI). Studies conducted by Irma Rustini Aju et al. (2018), Wahyu Maulana and Devi Lestari Pramita Putri (2019), Fidiandri Putra Muhammad Ridwan Usman and Rimsa Rusmiland (2017), Daryono Setiadi and Surianti (2018), Retno Fuji Oktaviani (2024), and Rizky Dwi Prawoto et al. (2019) similarly focused on evaluating investment feasibility through financial analysis using capital budgeting techniques. These studies concluded that

capital budgeting methods are effective tools for determining whether an investment project is financially feasible. The similarity with the present study lies in the use of capital budgeting as the primary analytical approach to support investment decision-making for fixed assets.

However, there are several differences between previous studies and the current research. Most prior studies focused on manufacturing industries, machinery replacement, infrastructure projects, or industrial equipment investments, while this study specifically examines the service sector, namely the car rental business “L-Trans” in Surabaya. In addition, some previous studies emphasized broader organizational and strategic aspects of capital budgeting rather than purely financial feasibility analysis. For example, the study by Heny Triastuti Kurnia Ning and Sonia Fara Diba (2018) analyzed the role of capital budgeting in improving investment decision-making, while Leonard Ouma Mrongo et al. (2016) and Kamwine Norah Mushaho et al. (2015) examined the influence of capital budgeting strategies on organizational and project performance. Meanwhile, Isnawati Hidayah and Lisa Rahayu Ningsih (2015) focused more on the implementation of capital budgeting learning for MSMEs through an andragogical approach. Another difference is found in the research by Rizky Dwi Prawoto et al. (2019), which incorporated Monte Carlo simulation as an additional analytical method, whereas the current study applies conventional capital budgeting methods without simulation techniques.

Therefore, the novelty of this study lies in its focus on the financial feasibility analysis of fixed asset investment in a car rental service business using capital budgeting methods. Unlike previous studies that mainly concentrated on manufacturing, infrastructure, or organizational performance, this research provides empirical evidence regarding investment feasibility in the transportation service sector, particularly car rental businesses in Surabaya.

2. Literature Review

2.1. Theoretical Overview

The theoretical framework is the ability of a researcher to apply the pattern of thinking in developing a systematic theories theories that support research problems. According Kerlinger (1973), a theory is a set of constructs (concepts), definitions, and propositions put forward a systematic view about the symptoms to describe relationships between variables, to explain and predict these symptoms. Useful theory is the starting point or foundation of thinking in solving problems or highlight.

2.1.1. Investation

Investment is the attribution of the sources in the long term to get the profit in the future (Daulay et al., 2024). Meaning investment by Jogiyanto (2022) in his book Portfolio Theory and Investment Analysis is a postponement of consumption now to put into earning assets during the specified time period.

While the definition of investment by Martalena and Malinda (2011) is a form of postponement of consumption in the present to aid in consumption in the future, in which the element of risk the uncertainty that required compensation for the delay.

1. Investment Objective

According Tandelilin (2010, p. 8), including investment objectives, namely:

- To get a better life in the future.
- To reduce inflation pressures
- To encourage saving taxes

2. Forms of Investment

There are several forms of investment that can be used as a means of investment, each with its own characteristics with the content of risk and return yangberbeda widely. Investors just choose which form of investment they think can fulfill the desire to invest.

According to Hadi and Fahmi (2009) in general there are two forms of investment, namely:

a. Real Investment

Real investment (real investment) generally involve intangible assets, such as land, machinery or plant.

b. Financial Investment

Financial investment (financial investment) generally involve a written contract asset, such as common shares (common stock), bonds (bond).

The difference between real investment with a financial investment is the second level of liquidity of the investment.

2.1.2. Investment Feasibility Studies

The feasibility study to analyze how successful a project to be run by taking into account factors such as factors that affect the economic, technological, legal and scheduling. Project managers use the feasibility study is to determine the positive and negative impacts of a project before investing a lot of time and money into it.

A. Definition of Feasibility Study

According to Kashmir and Jafar (2012, p. 7) feasibility study is an activity to learn in depth about an activity or effort that will be run to determine whether or not a business is run.

Kashmir and Jafar (2012) in his book titled "Business Feasibility Study" using the theory of William FS Investment interpreted as sacrificing dollars now for the dollar in the future. From this sense contained two (2) important attribute in an investment that is risk averse and grace. Uan means sacrificing invest some funds in an attempt present or when the investment began. Then expect a return on investment with expected profit rate in the future. Sacrifices now contains an assurance that the money used for investment is definitely excluded. While the results in the future is uncertain.

B. Feasibility Study Objectives

1. To Avoid the Risk of Loss

To address the risk of loss in the future there is a kind of certainty conditions. These conditions exist that can be predicted will occur or that itself occurs without predictable. In this case the function of the feasibility study is to minimize the risk that we do not want, either risks we can control and that can not be controlled.

2. Easier Planning

If we are able to predict what will happen in the future, it will be easier for us to do the planning and the things that need to be planned.

3. Facilitate The Implementation of the Work

With the various plans that have been developed will greatly facilitate the implementation effort. Organizers are working on the business has established guidelines that must be followed. These guidelines have been arranged systematically, so that businesses can be precisely targeted and implemented in accordance with plans already drawn up.

4. Facilitate Supervision

With the implementation of a business in accordance with the plan that has been prepared, it will be easier for us to supervise the business operation. Supervision is necessary in order not to deviate from the plan that has been drawn up.

5. Facilitate Control

If in the implementation of the supervision work has been done, then if the deviation will be easily detected, so that it can be done over the control of such deviations. The purpose of control is to control the execution order not to deviate from the actual rail, so that ultimately the company's objectives will be achieved.

2.1.3. Fixed Assets

A. Definition of Fixed Assets

Companies generally in carrying out its activities always require fixed assets to support the attainment of the objectives of the company. Fixed assets are assets owned by the company with the intent to be used in company operations. Assets must be stated so that when associated with other balance sheet components will be reflected adequately the company's financial position either at the beginning or end of a certain period.

According Riyanto (2011, p. 115) states that fixed assets are assets that are not durable or gradually depleted participate in the production process. And in terms of the length of fixed asset turnover is undergoing the process of turnaround assets in the long term.

The fixed assets is the wealth of a company that has a form, has economic benefits of more than one year and obtained by the company to carry out activities of the company and not for sale (Mulyadi & Dumairy, 2001, p. 593).

According Munawir (2010, p. 139), fixed assets are tangible assets that have a permanent relative age (give benefits to the company for many years owned and used for daily operations in the framework of normal activities and are not intended for resale (not goods) as well as the relative value of the material.

From some of the above it can be concluded that basically fixed assets of an investment made by the company in the long term (over one year), which it is hoped will provide benefits for the company and for the long term aim is not for resale but to be used in operations company.

B. Criteria of Fixed Assets

In order to be grouped as a fixed asset, an asset itself must have certain criteria. According Rudianto (2012, p. 256) criteria, namely:

1. Tangible

This means that the assets are in the form of goods owned by the physical form and not something that has no physical form such as goodwill, patents, and so forth.

2. She's more than One Year

These assets must be used in the operation of more than a sat-year or one accounting period. Despite having a physical form, but if its useful life is less than one year such as paper, ink, pencil, eraser and so it can not be diketagorikan as fixed assets.

3. Used in Operations

The goods must be used in the normal operation of the company, which is used to generate revenue for the operation.

4. Not be Traded

an intangible asset of the company and more than one year old, but purchased the company with the intent to be sold, can not be categorized as fixed asset and should be grouped into inventory.

5. Material

Goods belonging to the company that is older than one year and are used in the company's operations and the value or price per unit or total price is relatively not too large compared to the total assets of the company, does not need to be included as fixed assets. Such as spoons, plates, stapler, table clocks and so on.

6. Owned Companies

High-value tangible assets used in the operation and lasts longer than one out, but hired the company of others, should not be classified as fixed assets. Rental vehicles, for example, should not be recognized as a company's fixed assets.

2.1.4. Depreciation

A. Understanding Depreciation

All kinds of fixed assets, except land, if used continuously will be impaired, due to the useful life and reduced use value held from time to time. The decline in the value of the tangible fixed assets is called depreciation. Shrinkage can also be called depreciation. A variety of depreciation methods can be used to allocate the depreciable amount of an asset systematically over their useful life. The residual value of assets is the amount expected to be obtained by the current entity from disposal of assets after deducting the estimated costs of disposal.

B. Depreciation Calculation Method

According Adi et al., (2018, pp. 309–314), there are several methods that can be used to calculate depreciation (depreciation) to periodically. In order to spot errors, the method must take into account the circumstances affecting those assets.

Such methods are:

1. Straight-line method (straight line method)
This method is the simplest depreciation and widely used. In this way each period depreciation expense of the same amount (unless there are adjustments).
2. Methods Hours Services (service hours method)
This method is based on the assumption that the assets (mainly machinery) will be more easily damaged when used fully (full time) dibandingkandengan entirely inappropriate use (part-time). In this way depreciation is calculated by the basic unit of hour services.
3. Methods of production
In this method the useful life of the asset is estimated in units of the number of units of production. Depreciation is calculated on the basis of units of production. Depreciation is calculated on the basis of units of production so that the depreciation of each period will fluctuate in accordance with fluctuations in production.
4. Reduced load method (reducing charge method)
In this method depreciation the first years will be greater than the depreciation expense subsequent years. This method is based on the theory that the new assets will be used more efficiently as compared with the older assets.

2.1.5. Cost of Capital

A. Definition of Capital Cost

According to I Made Sudana (2011) notion of capital cost (Cost of Capital) as follows:

"The cost of capital is the minimum income level required by the owner of capital. From the standpoint of the company that received funds, the required income level is above the cost of funds obtained by the company. The size of the capital cost of a company depends on the source of funds used to finance investment company, in particular the source of long-term funds".

According Mamduh M.Hanafi (2016) definition of capital cost (Cost of Capital) as follows: "As the level of the expected profit or gain the required level. The capital cost is basically the cost of capital weighted average cost of capital of the individual".

Based on some of the above definition, it can be concluded that the cost of capital (cost of capital) is one yardstick to judge whether the decision taken expenditure management has an optimal decision, in addition to the value of the company or the stock price. The cost of capital is also important to assess the wealth of a proposed investment project.

B. Various Cost of Capital

1. Loan Capital costs (cost of debt)
2. Capital Cost of Preferred Stock (cost of preferred stock)
3. Ordinary Share Capital costs (cost of common equity)
4. Capital Cost of Retained Earnings
5. The cost of capital weighted average (Weighted Average Cost of Capital)

C. Component Cost of Capital

There are four components of the cost of capital by I Made Sudana (2011) as follows:

1. Common Stock
In theory the cost of ordinary share capital can be defined as the minimum income level to be obtained on the investment dibelanjai company with common shares.
2. Shares Outstanding
The nature of the preferred shares in common with the debt and common stock. The same characteristics of debt for preferred stock dividend amount remains and is expressed as a certain percentage of a nominal value, and equal to the common shares, because the preferred shares have no maturity. The capital costs for preferred stock is the level of profit required by a special shareholders from investment dibelanjai with preferred shares.
3. Retained Earning
Companies can finance their investments with funds originating from within the company, which is in the form of retained earnings. In theory, the capital cost of retained earnings equal to the

cost of ordinary share capital. The difference in the cost of emissions. If the company issuing emission costs, while for the funds derived from retained earnings, the company does not need to pay emissions.

4. Debt

Cost of debt is the required level of profit the lender dibelanjai investment company with debt. Debt capital costs to be borne by the company because the company uses to mark its investment debt, debt cost calculation is easier than the cost of ordinary share capital, because capital costs are explicit.

2.1.6. Cash Flow

A. Understanding Cash Flow

In this cash flow is an integral and very important in running financial operations work activities for planning or conducting audits as well as new investments as one of the milestones berjalannya aktivitas financial operations.

The concept of investment appraisal will answer the question how much real additional of an investment. Long-term investment decisions have a particular significance because of imprecision in the projected investment needs would result in excessive investment (overinvestment) or less investment (underinvestment).

According Sjahrial et al., (2017) there are two main tasks are the most important in the capital budgeting or capital budgeting is:

1. Annual Net cash inflows (Net Annual Inflow of cash) that the results obtained from new investment or the Proceeds.
2. Annual Net cash flow (Annual Net Outflow of cash) that the necessary funds for new investment or Outlay.

B. Interest Cash Flow

1. To provide information about cash receipts and payments company.
2. To provide information about the effects of cash from investing activities, pendanaa, and the company's operations.

2.1.7. Capital Budgeting

A. The Definition of Capital Budgeting

The Company plans to invest in fixed assets for the long term with the aim to recover the funds invested by the expected profit rate. Investments in fixed assets also requires an analysis and calculations performed by the company. Analysis of the decision-making process of planning and expenditure of funds related to fixed asset investment is done by using the techniques of capital budgeting calculations.

According Syamsudin (2009), capital budgeting is the overall process of collecting, evaluating, selecting and determining the investment alternatives that will provide income for the company for a period of more than a year.

Meanwhile, according Sjahrial (2009) capital Budgeting is the process of planning and decision making on expenditure which exceeds the refund period of 1 (one) year.

Based on these opinions, basically capital budgeting is the investment planning process that will provide a level of profit expected by the company in the long term. Capital budgeting analysis illustrates the investment plan will be beneficial or not for the company, so it can be used as a basis for the company in taking the decision to invest in fixed assets.

B. Concept Capital Budgeting

According Syamsudin (2009) in the analysis of capital budgeting concept includes three things:

1. kind of project
2. Availability of funds
3. This approach to capital budgeting decisions

C. Methods for determining Capital Budgeting

According Sjahrial (2017, p. 26) there are several methods for assessing whether or not an investment or to select a wide range of investment alternatives, or can be called the method for determining capital budgeting (capital budgeting), namely:

1. *Payback Period* (PP)

This method is very simple and does not need complicated calculations. However, this method has many shortcomings including:

- a. Do not pay attention to the concept of the time value of money, because the rupiah received the first year rated the same as the rupiah in the fifth year.
- b. Do not pay attention to the net cash flow after payback period.

The advantages of this method are:

- a. easy to understand
- b. adjusting for the next cash flow uncertainty.

2. *The Net Present Value* (NPV)

NPV method is the difference between the present value (present value) Net cash flows (proceeds) in present value (present value), investment (outlay).

3. *Method Internal Rate of Return* (IRR)

This method may be the method most widely used as a technique for evaluating investment alternatives. Internal Rate of Return definition is the Internal Rate of Return (IRR) is the discount rate that equates the present value of cash inflows with the initial investment associated with a project. The acceptance criteria of investment projects using the Internal Rate of Return is generated when an IRR greater than the cost of capital, on the contrary, if less than the cost of capital projects was rejected. Basically IRR can be found by trial and error (trial and error) in the following manner:

- a. Finding the value of cash flow Net cash at the rate of return is selected arbitrarily above or below the expected investment return rate.
- b. Interpolate both the return fare to get a real return rates.

Excess IRR:

- a. Provide additional information regarding the value of the company in the form of percentage.
- b. Already considering the cost of capital
- c. Already considering the time value of money
- d. Considering all the cash flow

Disadvantages IRR:

- a. Does not provide information on the return of a project in the form of money.
- b. The cost of capital required to calculate IRR
- c. Probably not a decision that maximize the company's value when used to compare mutually exclusive projects.
- d. Probably not a decision that maximizes the company's value when used to select projects when it comes to capital rationing.
- e. Can not be used in situations where project cash flow has changed, for example from positive to negative.

4. *Profitability Index* Method

profitability index is to calculate a comparison between the present value of net cash receipts in the future with the present value of the investment.

Advantages Profitability Index method:

- Taking into account the time value of the money (time value of money)
- First determine the interest rate that will be used
- Consistent with the company's objectives, namely to maximize shareholder value.

Weaknesses Profitability Index method:

- Can provide guidance and wrong choice on projects that mutually exsclusive projects that have economic elements and a different scale.

3. Materials and Methods

3.1. Research Approach

3.1.1. Types of Research

This study used a qualitative descriptive study According Sugiyono (2019) states that the descriptive method is a method used to describe or analyze the results of the study but not used for make broader conclusions.

According to Hidayat (2010) is a descriptive study research methods used to find the widest possible knowledge of the research object at a particular time.

Qualitative research.

According Sugiyono (2019), the method of qualitative research is a research method that is based on the philosophy of post-positivism, is used to examine the condition of the object that is naturally (as the opposite of experiments) where the researcher is as an instrument of key, sampling data source is purposive and snowball, gathering with triangulation techniques (combined), data analysis is inductive / qualitative and qualitative research results further emphasize the significance of the generalization.

3.2. Object of Research

The object of research in this paper is the addition of a new fleet of rental cars on L-Trans is located at Jl. Sidosermo PDK V No. 26, Surabaya using capital budgeting strategy.

3.3. Types, Sources and Data Collection Techniques

3.3.1. Data Types

The type of data in this study using quantitative and qualitative data, understanding of qualitative data is data that has information in the form of verbal sentence is not tangible in the form of numbers or figures. To get the data through interviews, observation and discussion.

Quantitative data is data information in the form of number symbols or numbers. Based on these figures symbols, quantitative calculations can be performed to produce a generally accepted conclusion in a parameter.

3.3.2. Data Source

Sources of data in this study using secondary data. According Sugiyono (2017) is a secondary data source does not directly provide data to data collectors, for example through others or through documents. Meanwhile, according Moleong (2001, p. 112), recording data sources through interviews or observation is a combined result of viewing, listening, and asking. In qualitative activities, all kinds of activities is conscious, purposeful and always aim to obtain a required information.

3.3.3. Data Collection Technique

The data collection technique is the most strategic step in the research, because the main goal of the study is to get the data. Without knowing the engineering data, the researchers will not get the data that meets the standards of data set (Sugiyono, 2019, p. 224). In qualitative research, data collection is done in a natural setting (natural conditions), the source of primary data, and more data collection techniques on participant observation (participant observation), in-depth interviews (in-depth interviews), and documentation. Data collection techniques in this study is documentation and interview techniques.

Documentation according Sugiyono (2017, p. 240), the documentation may take the form of writing, pictures or monumental works of a person.

The interview is a technique of gathering data by holding a dialogue, questions and answers between researcher and respondent in earnest (Srivastava, 2024).

3.4. Operational Definition

Operational definitions are aspects of the research that informs us about how to measure variables.

1. *Capital budgeting*

Capital budgeting is the whole process of planning and decision-making regarding spending a period where the fund return exceeds the period of one year (Syamsudin & Aktaviyani, 2009, pp. 412–413).

2. *Cash flow*

Definition of cash inflows and outflows are cash inflows (cash inflow) are the sources from which the cash was obtained, while the cash outflow (cash outflow) merupakan cash needs for payments (Harjito & Martono, 2012).

3. *Cost of Capital*

The capital costs associated with the concept of profit level in Suggests (required rate of return). The cost of capital is typically used as a measure for determining acceptance or rejection of a proposed investment as the discount rate, by comparing the rate of return on the investment proposal with the cost of capital

4. Investment eligibility criteria

In measuring or assessing the existence of a project that will be or have been established, there are several criteria used, namely:

a. *Net Present Value (NPV)*

Is the difference between the present value of net cash flow or often referred to proceed with the present value of the investment.

b. *Internal Rate of Return (IRR)*

Is a method of looking for an interest rate that makes the PV of cash inflow / proceeds will be equal to the value of the outflow / value investment. IRR is the discount rate is defined as the net cash flow NPV equal the future of the project with the initial cash outlay projects.

c. *payback Period (PP)*

Retrieval period is the number of years needed to restore the first cash outlay of capital budgeting projects.

d. *Profitability Index (PI)*

Is the ratio between the current value and future free cash flows to the initial outlay.

3.5. Data Analysis Technique

Data analysis is the process of searching for and compiling a systematic data obtained from interviews, field notes, and documentation, by way of organizing data into categories, describe into the units, synthesize, organize into a pattern, choose what is important and which will be studied, and make conclusions so easily understood by oneself or others (Sugiyono, 2019).

The analysis was performed to determine the amount of costs to be incurred and benefits to be received in connection with the investments that will be executed. By analyzing:

a. Needs and sources of capital funds

Before investing, companies need to consider where the company obtained the funds to buy a new machine there are two sources for the company to plan kebutuha funds, ie a bank loan and own capital.

b. Cash flow (cash flow)

Cash or cash flow associated with a project is divided into two parts:

1. Cash inflows (cash inflow), is a cash flow arising from transactions that gave birth to gain cash (cash receipts). Cash inflows were comprised of:

- Proceeds from sales of the product / service companies
- Collection of accounts receivable and credit sales
- Sales of existing fixed assets

2. Net cash outflow (cash outflow) of cash flow is composed of transactions that resulted in loads of cash outlay. Net cash outflow (cash outflow) consists of:

- Expenditure on raw materials, direct labor
- Expenditure on administration
- Purchase of fixed assets

c. The capital costs (cost of capital)

Capital budgeting and the cost of capital (COC) are two related concepts. We can not determine the cost of capital if it does not know the cost of capital budget, and vice versa. According to I Made Sudana (2011) capital costs (cost of capital) is defined as follows:

"Capital cost is a minimum income level that signaled the owners of capital. From the perspective of companies that had received funding, the implied income level is above the cost of funds obtained by the company. The size of the capital cost of a company depends on the source of funds used to finance investment company, in particular the source of long-term funding.

d. Investment eligibility criteria

Investment eligibility criteria can be researched on the financial aspects of the assessment of an investment's cash flow. Pemilaian methods used in the cash flow of an investment are:

1. Net Present Value

Calculates the difference between the present value of net cash receipts in the future with the relevant interest rate. Under the NPV method, decision-making whether a proposed investment project is accepted or rejected by comparing the value of the NPV calculation with a value of 0, if $NPV > 0$ or a positive value, then it is not worth the investment plan is accepted or rejected.

The formula to calculate the Net Present Value:

$$NPV = \sum_{t=1}^T \frac{C_t}{(1+r)^t} - C_0$$

Information :

NPV	= Net Present Value (in rupiah)
Ct	= Cash Flow per year in period
t C0	= The initial investment in the year 0 (Rupiah)
r	= Interest or discount Rate (in%)

2. Internal Rate of Return

Internal Rate of Return (IRR) is a method of calculating the interest rate that equates the present value of the investment with the present value of net cash receipts in the future.

The formula to calculate IRR:

$$IRR = i_1 + \frac{NPV_1}{(NPV_1 - NPV_2)} (i_2 - i_1)$$

Information :

IRR	= Internal Rate of Return
i1	= Rate that will generate NPV (+)
i2	= Rate that will generate NPV (-)
NPV1	= Net Present Value which is positive
NPV2	= Net Present Value is worth negative

3. Payback Period

Payback Period is the period required to return the funds that have been issued or invested. The formula calculates Payback Period:

$\text{Payback Period} = (\text{initial investment}) / (\text{cash flow}) \times 1 \text{ year}$
--

Information :

- Faster payback periods: worthy
- Longer payback periods: unfit

- If the proposed project is an investment of more than one, then a faster payback period selected

4. Profitability Index

Profitability Index is to menghi6tung comparison between the present value and acceptance of the present value of the investment.

The formula to calculate Profitability Index:

$$PI = NPV / ICF$$

Information :

PI = Profitability Index (the amount of profit in the form of a percentage)

NPV = Log Cash Flow Value (the amount of the gain or excess return in the amount of money)

ICF = Initial Cashflow

Remarks feasibility of a project by the PI:

When $PI > 0$, then the project will be accepted as declared eligible.

When $PI < 0$, then the project will be rejected as declared unfit.

When $PI = 0$, indifference decision (can be accepted or rejected).

The more great value in the PI of the project say it increasingly feasible. Draw conclusions from the results generated by the measurement of capital budgeting.

4. Result and Discussion

4.1. Research Object Description

4.1.1. A brief history of the company

At the time of this all-powerful, emerging various types of new businesses in the community. Most of the businesses are completely new, while the other parts is the transformation of the old business. One new business that is transformed in this era is the car rental business. Rental car or car rental service is a company that provides cars for hire at a certain time period, ranging from hours to days. Such companies typically have multiple branches or subsidiaries located in several major cities. Most are located in some of the centers or downtown, airport, Stations and tourist attractions. Car rental service providers usually also provide chauffeur services that make it easier for customers.

In Indonesia alone, car rental services has been growing rapidly since the last ten years. We can find a car rental service provider with a wide range of fleet in big cities such as Surabaya. In addition, in the era of globalization is flourishing car rental services in the city of Surabaya and other cities already equipped with a web site, social media accounts and online rental system. As a result, business is now growing into a lease car and easily. Own car rental business is one area of business that is promising. Now many people who pursue this line of business, but not a lot of businesses grow and be developed. Indeed, the car rental business requires huge costs and require treatment should be really good. So the cost of capital owners will not run out easily but evolve and become more.

CV. L-Trans is one of the car rental business at Jl. Sidosermo PDK V No. 25, Surabaya. The problems that occur when the CV. L-Trans according to the results of an interview with Mr. Baharudin as the owner of the car rental business is to add a fleet of new units, because the number of request at certain times, whereas in rental units is very limited in number.

4.1.2. Company Profile

The place : CV. L-Trans

Address : Jl. Sidosermo PDK V No. 25, Surabaya

Phone & Fax : 081233844939

4.1.3. Vision and Mission of the Company Vision

Being a car rental service provider that puts the best service.

Mission:

- Running the car rental business and a tour guide were oriented to customer satisfaction, corporate members, and the parties concerned.
- Creating human resources in the field of quality services and build a professional company climate and religious.
- Conduct of business activities sound education, the environment, and Science and Technology (Science and Technology)
- Create jobs

4.1.4. Location Location of the company

Location CV. L-Trans is located at Jalan Sidosermo PDK V, No. 26, Surabaya designated in the image below.



Figure 1. Location

4.2. Description Data Results

To perform capital budgeting approach required financial statements such as income statements, cash flow and determine how much how much it costs to be incurred to make investments.

4.2.1. Projected Income Statement

Table 1. Projected Income Statement

Year	Income	Operating costs	Gross profit
2017	1,665,540,000	909,420,000	756,120,000
2018	2,081,936,667	1,083,900,000	998,036,667
2019	2,157,466,667	1,097,325,500	1,060,141,167
2020	2,303,838,667	1,119,325,940	1,184,512,727
2021	2,333,900,307	1,134,176,237	1,199,724,070

Table 2. Projected Cash Flow In

Year	Profit	Depreciation Costs	In Cash Flow
2017	756,120,000	290,020,000	1,046,140,000
2018	998,036,667	426,320,000	1,424,356,667
2019	1,060,141,167	426,320,000	1,486,461,167
2020	1,184,512,727	426,320,000	1,610,832,727
2021	1,199,724,070	426,320,000	1,626,044,070

4.3. Feasibility analysis

4.3.1. Net Present Value (NPV)

Level results expected by CV. L-Trans is 11% and taking into account the residual value at the end of the planning horizon, and then calculated the NPV, and the results of the NPV calculation is stated that the business of CV. L-Trans obtain a positive NPV value of Rp. 1587435766, - (NPV > 0) means that the project can be continued and the results are shown in Appendix.

Table 3. NPV Calculation Results

Year	Cash in Flow	DF 11%	PV Rp.
0	(3.624.100.000)		(3.624.100.000)
2017	1.046.140.000	0,9010	942.572.140
2018	1.424.356.667	0,8120	1.156.577.613
2019	1.486.461.167	0,7310	1.086.603.113
2020	1.610.832.727	0,6590	1.061.538.767
2021	1.626.044.070	0,5930	964.244.133
	NPV		1.587.435.766

Source: Processed Writer

4.3.2. Payback Period (PP)

Payback Period calculation is used to measure the time it takes for an investment to be returned by entering the time value of money. Payback period is calculated by:

$$PP = 2 + \frac{-633,763,182}{-633,763,182 - 303,428,656} \times 12$$

$$= 2 \text{ years } 3 \text{ months}$$

Table 4. PP Calculation Results

Year	Cash Flow	Cumulative Cash Flow
1	1.04614 billion	1.04614 billion
2	1424356667	2470496667
3	1486461167	3956957833
4	1610832727	5567790560
5	1626044070	7193834630

Source: Processed Writer

4.3.3. Internal Rate of Return (IRR)

IRR calculation is to calculate the interest rate on the condition NPV = 0. A feasible project if the IRR > level results. Calculations done by trial and error, using the interpolation method, the IRR can be calculated by:

$$IRR = i_1 + \frac{NPV_1}{(NPV_1 - NPV_2)} (i_2 - i_1)$$

$$= 11\% + \frac{1587435766}{1587435766 - 5643211} (11\% - 14\%)$$

$$= 14.10\%$$

% IRR value is greater than the desired result, then the investment project can be continued. The IRR calculation can be found in the appendix.

Table 5. Results of IRR Calculations

Year	Cash Flow (Rp.)	DF 11%	PV Rp.	DF 14%	PV Rp.
0	(3.6241 billion)		(3.6241 billion)		(3.6241 billion)
1	1.04614 billion	.9010	942 572 140	0.88	829 463 483
2	1424356667	.8120	1156577613	0.78	902 130 538
3	1486461167	.7310	1086603113	0.68	738 890 117
4	1610832727	.6590	1061538767	0.60	636 923 260
5	1626044070	.5930	964 244 133	0.53	511 049 391
		NPV 1	1587435766	NPV 2	(5,643,211)
IRR	14.10%				

Source: Processed Writer

4.3.4. Profitability Index (PI)

This method calculates the ratio between the value of the net cash flows that will come with the current investment value. PI formula is:

$$\text{Profitability Index} = \frac{\text{Value incoming cash flow}}{\text{The value of investments}}$$

Investment feasibility according to this standard is

If $PI > 1$: then the investment is feasible.

If $PI < 1$: then the investment is not worth it.

$$PI = \frac{5211535766}{3.6241 \text{ billion}} = 1.44$$

Based on the above perhitungan car rental has a value PI of 1.44. With the results of these calculations, a car rental is eligible to run because the value of $PI > 1$.

5. Conclusions and Recommendation**5.1. Conclusion**

Based on the results of feasibility analysis done may dimbil some useful conclusions to answer the problem formulation and research objectives identified earlier. To answer the problem formulation and purpose of the study to assess the feasibility of investment assets and capital budgeting method on the CV. L-Trans in Surabaya then it was concluded that the fixed asset investment in the car rental "L-Trans" with the addition of car deserves to be continued. It can be seen from a positive NPV value of Rp. 1587435766, - ($NPV > 0$), which means that the project can proceed.

Then can also be seen through the value of the Internal Rate of Return (IRR) as big as 14.10% greater than the level of the desired result, then the investment project can be continued, It is also seen through *Payback Period (PP)* which means the time it takes for an investment to be returned for 2 years and 3 months. Judging from Analysis Profitability Index in getting the result by 1.44. Which states that the investment is viable.

5.2. Recommendation

Based on the above conclusions on the NPV, IRR, and PI value CV. L-Trans to be eligible, so in this study expect the company always conduct regular and continuous evaluation of the investment feasibility of retaining NPV, IRR, PP, and PI for the company.

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