### **CHAPTER 1**

#### INTRODUCTION

## I. BACKGROUND

Public Private Partnership or in Indonesia known as Kerjasama Pemerintah dan Badan Usaha (KPBU) referring to Presidential Regulation Number 38 of 2015 is a cooperation between the government and Business Entities in the Provision of Infrastructure for the public interest by referring to the specifications previously determined Minister/Head by the of Institution/Regional Head/State-Owned Enterprise/Regional-Owned Enterprise, which partially or wholly uses the resources of the Business Entity by taking into account the risk sharing among parties. Indonesia started to implement PPP in 1998 through the issuance of a Presidential Decree No. 7/1998 on Cooperation of Government Private Business Entities in the Development and Management of Infrastructure. However, this Decree was considered as the government's reluctance to relinquish direct control and to introduce a selection system for determining the most reliable private investor through a competitive tendering process (Adiyanti & Fathurrahman, 2021). According to (Warren, 2001), defined PPP as businesses that owned by the public sector and then implemented by the private sector. This business is run with a long-term contract where public services will be delivered by PPP in great detail. In its form as an equity joint venture between the public and private sectors, a PPP is a business entity that has certain public sector obligations set out in its constitutional documents or in contracts with the public sector. In this case it can be seen that the function of PPP is as a way to make it easier for the government to carry out a project by collaborating with the private sector starting from planning, implementation to procurement.

As written in Article 5 Paragraph 2 of Presidential Regulation Number 38 of 2015 that the provision of infrastructure can include regional infrastructure. By referring to South Tangerang Regional Regulation number 09 of 2019 about South Tangerang City Spatial and Regional Planning (RTRW) for 2011-2031, Article 10b concerning; a) Establishing and connecting centers of activities through an integrated and tiered land transportation; b) developing activity functions that supporting activity centers; c) providing adequate and integrated transportation facilities and infrastructure that are adequate and integrated at each activity center according to the scale of service scale; and d) developing TOD areas including development of areas in and around transit nodes for added value that emphasizing on integration between mass public transportation networks and between mass public transportation network with the nonmotorized non-motorized transportation modes, as well as reducing the use of motorized vehicles accompanied by development of mixed and dense areas with medium to high intensity of space utilization. In this case, the municipality of South Tangerang initially only built the Jurang Mangu station in Bintaro, Pondok Aren sub-district as one of the targets for fulfilling transportation integration in accordance with Transit Oriented Development standards. However, of course, to meet the standards of the transit area, the area around

the transit point also requires equitable development. Therefore, the municipality of South Tangerang is collaborating with PT Jaya Real Property as the implementer of regional development to design the Bintaro Jaya City in accordance with Transit Oriented Development standards.

The South Tangerang Government collaborates with PT Jaya Real Property in developing Bintaro Jaya City into a transit-oriented area. As one of Jakarta's sub-urban areas that has a high population density, the South Tangerang government cooperates with PT Jaya Real Property in the development of the Bintaro Jaya City area because the government realizes that the development of the Bintaro Jaya City area requires large capital to overcome the problem of more efficient land use. PT Jaya Real Property has developed the Bintaro Jaya City area using the PPP concept which focuses on developing infrastructure and facilities that support the development of the area. In this collaboration, the municipality of South Tangerang acts as a support provider and PT Jaya Real Property acts as a service and investment provider. PPP assists in the development of infrastructure that supports the development of the region, such as the development of transit networks, pedestrian facilities, and others.

According to (Cervero & Kockelman, 1997), ideally a Transit Oriented Development area has three aspects, namely density, diversity and design. When adapting the concept of Transit Oriented Development according to Cervero, an area should be divided into several areas with different area uses, namely separation between transportation station areas, commercial, office, housing and open public areas. Meanwhile, according to (Calthorpe, 2022)

Transit Oriented Development areas must fulfill the principles of the availability of public transportation stations, the existence of public spaces, the existence of commercial centers, residential areas and secondary areas. For the past 12 years of implementing the Transit Oriented Development concept, the architect who designed the Bintaro Jaya City, Yeri, explained that in the master plan Bintaro Jaya City currently has 3 central business district (CBD) areas which are centered in the Discovery area, Kebayoran Arcade and Bintaro Plaza Residence which has large offices in the surrounding area as well as land use for residential areas. Meanwhile, the commercial area is the area around Driving Golf Bintaro Jaya and around the Bintaro Xchange Mall area. The regional design in several areas in Bintaro Jaya City implements a pedestrian-friendly system by providing integrated pedestrian space with several public transportation services such as; commuter trains (KRL), shuttle buses and also electric bicycles. However, in this case, there has been no research that discusses further about the Public Private Partnership between municipality of South Tangerang and PT Jaya Real Property regarding how the partnership works at the planning, implementation to procurement stages in building Bintaro Jaya City in accordance to South Tangerang Regional Regulation number 09 of 2019 about South Tangerang City Spatial and Regional Planning (RTRW) for 2011-2031, Article 10b and Transit Oriented Development standards.

This research aims to assess the potential for successful partnering between municipality of South Tangerang and PT Jaya Real Property work in the planning, implementation and procurement stages in the Development of Bintaro Jaya City in accordance with South Tangerang Regional Regulation number 09 of 2019 about South Tangerang City Spatial and Regional Planning (RTRW) for 2011-2031, Article 10b and Transit Oriented Development standards.

### II. PROBLEM FORMULATION

Based on the background of the problem that has been explained, the problem formulation in this research is "How does the municipality of South Tangerang and PT Jaya Real Property implement the concept of Public Private Partnership (PPP) in developing Bintaro Jaya City according to Transit Oriented Development (TOD)?"

## III. RESEARCH PURPOSES

Based on the background and problem formulation above, this thesis aims to know how the cooperation between Municipality of South Tangerang and PT Jaya Real Property in developing Bintaro Jaya City according to Transit Oriented Development (TOD) using Public Private Partnership (PPP) concept.

## IV. BENEFITS OF RESEARCH

This research is expected to provide useful benefits for interested parties and has implications both from a theoretical and practical perspective. The following are the benefits that are expected to be obtained from this research:

### 1. Theoretical Benefits

Theoretically, this research can be used as a reference in conducting further research with the results of the data that has been developed and can help the public and students in finding related references.

## 2. Practical Benefits

In practice, it is hoped that this research can be used as material for evaluating municipality government policies in building infrastructures by maximalizing the transportation integration and the residential support facilities to increase space utilization in accordance with Transit Oriented Development standards, especially in Bintaro Jaya City.

## V. LITERATURE REVIEW

Public Private Partnership (PPP), is an infrastructure provision and financing scheme that involves cooperation between the Government and Business Entities in the provision of public service facilities bound by agreements (Noor, 2016). According to (Hamzi et al., 2020) the successes of Public-Private Partnerships (PPPs) in primary health care in Malaysia. This research showed that PPPs have been implemented in various initiatives, including Dialysis Funding Program, Methadone Maintenance Therapy, Fight HIV, Mammogram Test Subsidy Program, and Malaysia Quit program. These initiatives have demonstrated the effectiveness of PPPs in improving healthcare services, increasing access to care, and enhancing the quality of life for patients. The conclusion emphasizes that PPPs are one of the ways forward in the

healthcare industry, offering a collaborative approach to address healthcare challenges and improve patient outcomes.

While according to (Osei-Kyei & Chan, 2018) the importance of evaluating the success of public-private partnership projects in Hong Kong. This research emphasizes that achieving PPP project success is crucial for all parties involved, including the government, private sector, and stakeholders. This research aims to provide a reliable method for evaluating the success levels of PPP projects in Hong Kong, particularly focusing on the Cross Harbor Tunnel project. This research findings will enable PPP practitioners in Hong Kong to assess the success of their projects more effectively, which is essential for improving the overall performance of PPP projects.

Meanwhile the research in Indonesia according to (Utomo & Uguy, 2022), government cooperation with business entities or public private partnerships in contracts or build operate transfers has been implemented in the construction of Makassar city toll road infrastructure. The business entity, in this case PT Bosowa Margautama Nusantara, in essence the toll road construction will be built by the business entity, after completion it is given the right to use it as operator for 45 years and at the end of the concession period it will be handed over to the Government. Financing for toll road construction comes from the business entity's own capital. By using the build operate transfer concession model in public private partnership or public private partnership, it provides benefits for both parties.

However, public-private cooperation is not always as successful as research according to (Setyawati & Purnaweni, 2014) In this research, after discussing the policy of government cooperation with the private sector in waste management at the Jatibarang TPA (case study of cooperation between the Semarang City Government and PT Narpati), it can be concluded that this cooperation is considered not yet optimal in its implementation, although in several aspects it has gone well and in accordance. There are aspects that are considered still not appropriate and not running well, resulting in less than optimal implementation of cooperation policies between the Semarang City Government and PT. Narpati in waste management at the Jatibarang TPA is about policy accuracy and process accuracy, while aspects of implementation accuracy, target accuracy and environmental accuracy have gone well and are appropriate in supporting the implementation of public private partnership policies in waste management at the TPA. Jatibarang for a case study of cooperation between the Semarang City Government and PT. Narpati.

**Tabel 1 Previous Research** 

No.	Researcher	Research Title	Research result
	Name		
1.	(Pradana, 2020)	Public-Private	Based on the research results,
		Partnership in the	the internal environment of
		Framework of	the Public-Private Partnership
		Waste	has run according to their
		Management into	respective roles and duties.
		Electrical Energy	This proves that interaction
		in Jatibarang	and coordination between
		Landfill, Semarang	stakeholders is always well
		City	established in sharing
			information in a transparent
			and accountable manner.
			Transparency and
			accountability in the
			implementation of grant
			funded projects is manifested
			in the form of a commitment
			to continue coordinating by
			reporting real data from

			stakeholders and project
			development progress.
2.	(Setiawan et al.,	Collaborative	Based on the research results,
	2022)	Governance Model	the concept of collaborative
		Of Drinking Water	governance in Public Private
		Supply And	Partnership (PPP) between
		Services In	the Government and PT
		Tangerang	AETRA in the provision and
		District: Study Of	service of drinking water in
		Public Private	Tangerang district is
		Partnership (PPP)	influenced by network
		Between	structure factors,
		Tangerang	implementing commitment to
		Regency	goals, trust between
		Government	participants , governance
		And PT. AETRA	certainty, access to power,
		Air Tangerang	distribution of accountability
			and responsibility, sharing of
			information, access to
			resources and behavior of
			policy actors.
3.	(Surachman et	Critical Success	The research results reveal
	al., 2020)	Factors on PPP	that external factors of

		Water Project in a	conducive stakeholder
		Developing	support are the key to the
		Country: Evidence	success of Drinking Water
		from Indonesia	PPP projects in Indonesia.
			Stakeholders include the
			entire community, both
			users/customers and affected
			communities. An interesting
			fact is that they are not the
			main parties in PPP, as we
			know that traditionally the
			community (the government
			as the project owner) and the
			private sector (the PPP
			Company as the project
			sponsor) are the last parties in
			the Public-Private
			Partnership. scheme.
4.	(Pradana, 2020)	Public Private	In this research, PT. Kinarya
		Partnership in the	Best Indonesia (KTI) partner
		Implementation of	with PD Parkir Kota
		Electronic Parking	Makassar in implementing the
		Terminals (TPE)	Electronic Parking Terminal
	I	I	<u> </u>

		in Makassar City	(TPE) in Makassar City. KTI
		Parking PD	manages parking in Makassar
			City through the TPE system,
			which aims to increase
			Makassar City's Original
			Regional Income (PAD).
5.	(Wilza et al.,	Potential for	Research discussing the
	2021)	Regional	potential for TOD-based area
		Development	development in Bogor
		Based on Transit	Regency shows that there are
		oriented	transit areas with high,
		development	medium and low potential.
		around the Bogor	Based on the typology of
		Regency Transit	transit areas,
		Point	recommendations for space
			utilization based on the TOD
			concept are formulated so that
			the ideal TOD prerequisites
			can be met. According to the
			author, complete facilities in
			densely populated areas that
			are easy to reach from
			housing can create a

6. (Cahya Intermod Adhianti et al., Integrati 2020) the	that mobility using private vehicles can slowly decrease.
Adhianti et al., Integrati	vehicles can slowly decrease.
Adhianti et al., Integrati	
	The application of the transit
2020) the	on with oriented development concept
	in the Old City of Semarang is
Impleme	entation of by creating transfer points
Transit-C	Oriented between public transportation
Develop	ment in with a radius of 500 meters as
the Old 0	City Area in transit oriented
of Seman	rang development according to
	Cervero, where there are
	commercial and residential
	areas, offices and green open
	spaces. Apart from
	considering the coverage
	radius of the TOD area, this
	research also considers the
	assessment of transit oriented
	development analysis.
7. (Priadmaja et Applicat	ion of the This research explains that the
al., 2017) Transit (	Oriented transit oriented development
Develop	ment area in the city of Tangerang

(TOD) Concept in	is planned with adequate
Regional Planning	facilities and infrastructure
in the City of	with the concept of transit
Tangerang	oriented development so that
	users can feel comfortable and
	easy in carrying out various
	daily activities.

The literature review above is the author's point of reference in seeing how the successful of Public Private Partnership (PPP) is used for applying Transit Oriented Development between municipality of South Tangerang and PT Jaya Real Property. Compared with existing research, this research aims to provide an in-depth understanding of the role between the municipality of South Tangerang and private development companies which PT Jaya Real Property in designing Bintaro Jaya City with a Transit Oriented Development concept based on Transit Oriented Development standards.

## VI. THEORY

This thesis uses Public Private Partnership (PPP) theory and theory regarding the concept of Transit Oriented Development which is focused on the theory of Calthrope and Cervero.

According to the (Yuksel et al., 2009) Public Private Partnership (PPP) can be defined as a long-term contract between a public party and a private party

for the development (or significant improvement or renovation) and management of a public asset (including possibly the management of related public services), where the private party assumes significant risk and management responsibilities throughout the life of the contract, provides the majority of financing at its own risk, and remuneration is significantly linked to performance and/or demand or use of assets or services so as to align the interests of both parties. PPP is divided into two forms, namely PPP as a contractual provider of infrastructure development and PPP as a contractual provider of public services. Both have the function of providing public assets as well as public services. Infrastructure PPP contracts include contracts intended to develop and manage new infrastructure and make significant improvements to existing infrastructure. Whereas contracts where the private partner only manages or operates public services are called service PPP contracts.

According to the APMG PPP Certification Guide issued by the World Bank in (Adiyanti & Fathurrahman, 2021), PPP consists of three main general stages:

### a. Planning

This stage aims to select the most appropriate project and private public partners conduct a pre-study for feasibility according to the public needs of the project. Economic feasibility studies are also conducted for affordability considerations. The study aims to consider if a project has poor economic value or a lack of government commitment to the project, then it can be renegotiated. This is done to avoid the risk of

government violations because of course the private partner has an interest in making the project affordable to the government. Therefore, in this stage, project presentation is done to reach consensus by both parties in determining the appropriate aspects of project selection as well as consensus in the commitment of the government and the private sector.

## b. Preparation

The preparation stage aims to assess PPP project feasibility to reduce the risk of project failure during the bidding process or during the project contract period. In addition, considerations if the project is stopped midway and weakened commitments in the middle of the project that become obstacles in the project work are discussed at this stage. This stage is also the basis for the division of authority and division of labor which will explain how the division of power over decision making is an important part of the project. Therefore, during the course of the project there are many changes that occur and of course will be faced with decision making.

### c. Implementation and procurement

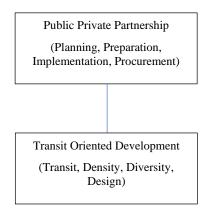
This stage aims to determine and develop a PPP contract that best fits the specific features of a project contract, so as to protect, and where possible, optimize value for money and making contract management aims to manage the process for selecting the best value proposals in a competitive and regulated environment, and executing contracts with the most suitable and reliable bidder. Referring to consensus making in project contracts, the policy and legal framework, should include several things namely; 1) transparency, 2) rights and disputes, and 3) appropriation risk. Therefore, in making consensus and management contracts, both parties must be transparent so that the project will be carried out with minimal obstacles.

In this thesis, PPP used for implementing Transit Oriented Development (TOD) which was first introduced by Peter Calthrope with the previous development of the Sprawl concept theory. In (Fatimah, 2021), Calthorpe explains the use of the TOD concept for community planning development, defining TOD as mixed, dense land uses arranged around transit stations, which together with the surrounding public space form the center of a environment. Transit stations become transportation hubs that connect environments to the rest of the region, with activities in public spaces as an important part and meeting place. It says that TOD represents mixed-use environments that encourage people to live near transit services to reduce reliance on private vehicle use. TOD's emphasis is on mixed land use development, proximity to transit services and transit development. Apart from using Calthrope's theory, this research was elaborated using Cervero's theory. According to (Cervero & Kockelman, 1997) The ideal classification of TOD areas has three aspects, namely density, diversity and design. Density is related to area density or high land use intensity, diversity is related to the diversity of land uses and types of activities in the area and design is related to area design that is friendly for pedestrians and cyclists.

## VII. CONCEPTUAL FRAMEWORK

Referring to theory above, the next elaboration of the concept definition which is then created in the form of a conceptual framework is as follows:

Figure 1 Conceptual Framework



Modified from (Adiyanti & Fathurrahman, 2021)

### VIII. CONCEPTUAL DEFINITION

This research uses the conceptual definitions needed to find variables and explain specific meanings according to the theory used. In accordance with the theory above, PPP can be defined as cooperation between the government with the private company in finding indicator for implement the Transit Oriented Development. The cooperation contains in determining the plan that will used for the project, implementation of the project until the procurement for the project.

## a. Planning

In this stage, government can chose the best bidder to avoiding misscommunication between the government and private sector and aims to chose the appropriate plan to implement the projects based on the consesus of both parties.

# b. Preparation

In this stage, government need to prepare the project with the private company for avoiding bigrisk while implementing project in accordance to the policies and to chose properly which things can be run to avoid the lack of expenses in the middle of the project.

## c. Implementing and Procurement

In this stage, the government giving authority to private sector to arrange the expenses, workers, also the time of the projects in accordance with the consensus and contract management made by both parties.

Then, transit-oriented development according to Southworth in (Padeiro et al., 2019) is one of the most popular interventions to reduce the mobility footprint, making it an essential component of smart growth and new urbanism. Relying on a compact, transit-oriented growth pattern around a train, subway or metro station, TOD aims to drive capital shifts and reduce dependence on cars, while improving the livability of the environment, which is a multidimensional and obscure concept that includes a healthy, safe, and comfortable environment, the quality and aesthetics of public spaces, and the expansion of social and economic opportunities. TOD emphasizes the development and opportunities provided by high-quality public transportation. The TOD underlines the integration and cooperation between transportation and land use, which aims to attract activities to the areas around major transit stations and contribute to

livable and walkable communities. In addition, transit oriented development according to (Huang et al., 2018) Transit-oriented development (TOD) is a promising approach to promote public transportation support and prevent residents from using private cars. TOD is commonly understood as the development of transit stations around high-density mixed-use land and environments designed for pedestrians and cyclists. Furthermore, according to (Thomas & Bertolini, 2020) transit-oriented development is a complex process and strategy that can contribute to more sustainable transportation patterns, emission reductions, and improved regional connectivity. Most households want to live in high-density housing that is close to public transportation. The behavior of pedestrian users in the Transit Oriented Development (TOD) area is influenced by many factors. Community behavior in walking is one of the supporters of pedestrian paths that must be passed by the community so that it becomes a crowded pedestrian path.

### IX. OPERATIONAL DEFINITION

The operational definition in this research includes variables and indicators derived from conceptual definitions obtained from the theory used.

**Tabel 2 Operational Definition** 

Variables	Indicators
Planning	1. Government involvement in the selection of bidders as well as
	explanation of the qualifications of suitable bidders.

	2. The involvement of the private sector in submitting
	development proposals as a bidder.
Preparation	1. Government involvement as a provider of rights and authority
	in the implementation of policies (sustainable development).
	2. The involvement of the government and PT Jaya Real Property
	in the division of the work mass and development area.
Implementation	1. The involvement of the government and PT Jaya Real Property
& Procurement	in determining the focus of development for residential areas
	and housing support areas.
	2. PT Jaya Real Property's involvement in sustainable
	development with implementation in accordance with the
	policies stated in the RPJMD.

# X. RESEARCH METHODS

## a. Research Methods

This research uses qualitative research methods using previously existing research and is supported by collective data in the field. The qualitative method aims to classify data that has been elaborated and adapted to the case study being studied. According to (M. Sobry & Prosmala Hadisaputra, 2020) Qualitative research is research that is intended to reveal symptoms contextually through collecting data from natural settings using researchers as key instruments. From the results of qualitative research new

basic theories will also be discovered. Impact in life is about addressing specific, focused problems.

### b. Research Location

The research location for this research is located in Bintaro Jaya City, South Tangerang through development of Bintaro Jaya City for builds a city based on Transit Oriented Development that are relevant to the theory used, including development around transit station areas, residential areas, diversity of residential area facilities, and area design that supports land use for pedestrians, bicycle paths, and running track.

# c. Type of Data

# i. Primary data

Primary data was obtained in real-time at the research location by utilizing identification of the Bintaro Jaya City and supported by interviews with parties related to the development of the Bintaro Jaya City. PT Jaya Real Property and the municipality of South Tangerang.

Tabel 3 Table of Data

No	Primary	Data Source	Data Collection
	Data		Techniques
1.	Choosing	Municipality of	Interview + Secondary
	bidder &	South Tangerang	data (South Tangerang
			Regional Regulation

	appropriate	number 09 of 2019
	арргорпас	number 07 of 2017
	project.	about South Tangerang
		City Spatial and
		Regional Planning
		(RTRW) for 2011-2031,
		Article 9a)
2.	Making	• Municipality Interview + Secondary
	target plan	of South Data (South Tangerang
	and division	Tangerang Regional Regulation
	of labor.	• PT Jaya Real number 09 of 2019
		Property about South Tangerang
		City Spatial and
		Regional Planning
		(RTRW) for 2011-2031,
		Article 10b)
3.	Giving	PT Jaya Real Interview
	authority to	Property
	develop the	
	area around	
	transit	
	point.	
L	I	

# ii. Secondary Data

Secondary data was obtained from journal publications, articles, online news, and previous structured research as well as using books to support the theory used. It is also supported by Memorandum of Understanding (MoU), Presidential Regulation Number 38 of 2015 concerning the *Kerja Sama Pemerintah dan Badan Usaha* (KBPU) as well as South Tangerang Regional Regulation number 09 of 2019 concerning the South Tangerang City Spatial and Regional Planning (RTRW) for 2011-2035.

### d. Data Organized Methods

This research obtained data from sources who designed the master plan for the Bintaro Jaya City and the municipality of South Tangerang using an interview system to obtain implementation concepts and valid data subjects based on data in the field. The interview was conducted by asking several questions related to the Public Private Partnership for the implementation of the Bintaro Jaya City in accordance with Transit Oriented Development standards. According to (Adhi Kusumastuti, 2019) Qualitative approaches to research are concerned with the subjective assessment of attitudes, opinions and behavior. Research in situations of subjective judgment is a function of the researcher's insights and impressions. Such research approaches produce results either in a non-quantitative form or in a form that is not subject to strict quantitative analysis. Generally, focus group interview techniques, projective techniques and in-depth interviews are

used. Furthermore, the information generated from the interviews was then added with theoretical adjustments from the Private Public Partnership (PPP) also Calthrope and Cervero's theory. In this research, the author conducted an interview with the master plan designer of Bintaro Jaya City and with the municipality of South Tangerang with intention that the data that had been sought was valid with the situation in the field according to the regional land use allocation as a resource person to answer the author's questions in accordance with research needs supported by the regional development plan for the next 10 years.

## e. Data Analysis Methods

Qualitative research according to (Adhi Kusumastuti, 2019) using inductive data analysis. This inductive analysis is used for several reasons. First, the inductive process is better able to discover several realities as found in the data. Second, inductive data analysis is better able to make the researcher-respondent-respondent relationship explicit, recognizable and accountable. Third, such analyzes are better able to fully describe the setting and can make decisions about whether to transfer to another setting. Fourth, inductive analysis is better able to find general influences that sharpen relationships. Fifth, the analysis can take account values into account explicitly as part of the analytical structure.

## 1. Data collection

At this research stage, the author collected data from primary using an interview with government side from the municipality of South

Tangerang and with the collaborator from PT Jaya Real Property and secondary data which added from South Tangerang Regional Regulation number 09 of 2019 about South Tangerang City Spatial and Regional Planning (RTRW) for 2011-2031 and then adjusted to the theory and description of implementation obtained from the interview system conducted by the resource such as journals, books and government web.

### 2. Data Presentation

The data that has been obtained from data collection, then used as a narrative to explain solutions to existing problems in form as explanations of the problem, interpretation using the methods of the data collection then making conclusions as well as the advice for the problems.

# 3. Drawing Conclusions

Then the conclusion from these results is the stage of testing the validity of the data that has been obtained and filtered and then used as a reference for analyzing research arguments.