



**FEASIBILITY STUDY OF A COMMUNITY MALL DEVELOPMENT
IN UBON RATCHATHANI PROVINCE**

BY

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FACULTY OF COMMERCE AND ACCOUNTANCY

INDEPENDENT STUDY

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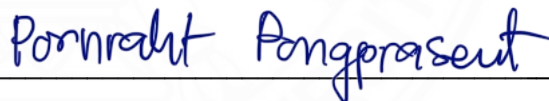
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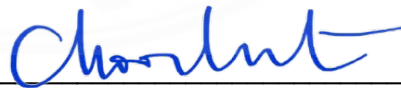
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EXECUTIVE SUMMARY

PJ Mall is a forthcoming commercial development situated strategically on Chayangkun Road within Mueang Ubon Ratchathani District, Ubon Ratchathani Province. The project is meticulously designed to serve as a versatile hub accommodating diverse demographics, encompassing dining facilities, educational opportunities for children, beauty services, and fitness amenities. Its architectural blueprint embodies contemporary aesthetics that seamlessly blend with the local environment, emphasizing both functionality and aesthetic minimalism.

Financially, PJ Mall is supported by a balanced funding structure comprising 50% owner equity and 50% external financing from financial institutions. Comprehensive financial analysis indicates a robust net present value of 178,723,786 baht and an internal rate of return of 10.37% annually under baseline assumptions. Sensitivity analyses demonstrate resilient performance across optimistic and conservative scenarios, affirming the project's economic feasibility and attractiveness for prospective investors.

In conclusion, PJ Mall represents a promising venture poised to enhance the commercial landscape of Ubon Ratchathani while offering compelling investment prospects backed by rigorous financial analysis and strategic planning.

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This Independent Study, conducted as a feasibility study for project development, has been successfully completed thanks to the support and guidance received at each step of the process.

I would like to extend my sincere gratitude to Assistant Prof. Dr. Choochart Taeshapotiwarakun, my advisor for this Independent Study, for his dedication and valuable time in providing consultations, information, guidance, and problem-solving advice, which were instrumental in ensuring the completeness and thoroughness of this study.

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Thanawan Ratnapradipa

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CHAPTER 1

INTRODUCTION

1.1 Project Background

The contemporary lifestyle has faced significant transformations compared to historical norms, accompanied by corresponding shifts in economic circumstances. Concurrently, alterations in societal behavior have manifested in response to these changes since Individuals have undergone alterations in their lifestyles, demonstrating a shift towards localized shopping practices as opposed to engaging in travel-related consumer behaviors. The evolution in consumer behavior is manifest, with a departure from the conventional practice of patronizing large-scale shopping malls. Contemporary trends indicate a proclivity towards retail venues situated in close proximity to residential areas, characterized by convenient parking facilities or within walking distance. This shift in consumer preference facilitates recurrent visits to local shopping centers, thereby fostering a heightened sense of convenience for the customer base. Consequent to the aforementioned statement, retail complex whether designated as a community mall or a neighborhood mall, has exhibited a pronounced and vigorous expansion trajectory in a past few years.

The establishment of a community mall presents itself as an intriguing investment opportunity, contingent upon the land's sufficient potential. Additionally, a community mall is a business venture that yields a higher return on investment per unit area compared to alternative forms of land development. Evidently, there is a continuous trend of opening community malls, including shopping centers, within communities characterized by a high density of consumers. In essence, locations demonstrating potential for convenient accessibility exhibit a notable propensity for commercial development.

The shifting behavior of the younger generation is evolving from a focus solely on large-scale shopping centers to seeking proximity in purchasing goods. Factors such as convenient parking, ease of travel, and proximity to residential areas have become significant considerations in selecting areas for project development. These factors contribute to increased customer accessibility, allowing them to avail services more frequently, thereby saving time and seeking convenience for essential daily

activities. This shift aims to reduce the time spent, in contrast to the experience of utilizing services in large-scale shopping malls. The purchasing behavior focused on local proximity reveals a market gap upon closer examination. Presently, the construction of large-scale shopping centers is no longer as easily permitted as it was in the past, given the numerous legal restrictions and regulations. Moreover, prime locations are associated with high land prices. Consequently, the construction of small-sized shopping centers within community areas presents itself as another viable investment opportunity in the current economic landscape.

The study site is located in close proximity to Ubonratchathani Airport, along the main road named Chayangkun. The area is surrounded by retail activities and a considerable number of residential estates. The Points of Interest (POI) analysis reveals the presence of numerous schools, factories, villages, and a substantial population within the expected catchment area. This configuration presents a viable potential for a small-sized neighborhood mall, constituting an opportune prospect for a community mall to cater to the needs of both business-to-consumer (B2C) and business-to-business (B2B) customers.

According to legal analysis, it is found that the land is in pink zone which allow to develop commercial building. In tandem with population growth, ongoing housing development, and its close proximity to the airport, the location demonstrates noteworthy potential and opportunities for the establishment of a community mall. This prospect is particularly intriguing, as it holds the promise of serving the needs of residents within the adjacent villages, the local community, and also catering to commuters and passing customers.

1.2 Research Objective

1. To systematically examine the historical trajectory, conceptual foundations, theoretical frameworks, prevailing conditions, and legal aspects associated with community malls.

2. To conduct an examination of real estate development by employing the Site-Looking-for-Use method, with the aim of determining the Highest and Best Use for a retail project within the Ubonratchathani province, seeking to optimize its potential and achieve the highest possible utility.

3. to examine the physical feasibility as well as investigate the legal and economic limitations that exert influence on the development of the project.

4. To study the feasibility, encompassing the determination of the project format, and formulate suitable marketing strategies for the development of the project.

5. To comprehend the opportunities within the realm of commercial real estate, specifically encompassing retail development, apartments, and hotels.

6. To conduct an examination of the financial feasibility, involving the analysis of profits and rate of return, with the overarching goal of furnishing pertinent information essential for decision-making regarding investments in the development of such projects.

1.3 Research Framework

1.3.1 Timeline Framework

The feasibility study for developing a project on the specified land is scheduled to take place over a period of seven months, commencing from September 2023 and concluding in March 2024. This timeframe will allow for a comprehensive examination of various aspects related to the project

1.3.2 Scope Framework

The research will center on an examination of the optimal highest and best use, specifically applicable to commercial real estate encompassing retail malls, apartments, and hotels. This focus arises from the owner's ongoing housing project development in close proximity. The intention is to ascertain a development strategy that

aligns seamlessly with the under-construction housing project, thereby ensuring optimal support and synergy between the two ventures.

1.3.3 Content Outline

The content scope of this study involves evaluating the feasibility of developing a project on a vacant land parcel measuring 5-1-73 rai, situated adjacent to Chayangkun Road in Muang Ubon Ratchathani District, Ubonratchathani Province. The primary objective is to explore alternatives for developing the most optimal and advantageous real estate in this location. The analysis will focus on four key areas, delving into possibilities related to the listed factors below;

1. **Legal possibilities**, the study will delve into the laws and regulations influencing real estate development. This includes a comprehensive analysis of building control laws and town planning regulations that govern land use. Additionally, the study will scrutinize laws related to land allocation, aiming to gain insights into their impact on the proposed development.

2. **Physical feasibility**, the study will encompass an examination of the project area's location, accessibility, and proximity to surrounding facilities. Additionally, a thorough analysis will be conducted on the size and shape of the land plot intended for the project. This comprehensive assessment aims to provide insights into the physical aspects essential for determining the viability and practicality of the proposed development.

3. **Marketing possibilities**, the study will analyze factors influencing demand and market supply, examining both micro and macro-level dynamics. This analysis will extend to a thorough examination of competitors within the project's scope. The project will define target customer groups and establish the project format, culminating in the creation of strategies designed to enhance competitiveness in the market. This comprehensive approach aims to provide a well-rounded understanding of the marketing landscape, facilitating informed decision-making for effective project positioning and market engagement.

4. **Financial possibilities**, the study will conduct a thorough analysis of financial projections, project development costs, revenues, expenses, and profits, incorporating the examination of financial ratios and other pertinent financial indicators. This comprehensive assessment aims to analyze the project's capacity for successful

implementation and to evaluate potential risks that may impact the business. Ultimately, the study could be useful to facilitate well-informed investment decision-making.

1.4 Research Benefit

1. To comprehend the operational intricacies of engaging in real estate business with an emphasis on maximizing favorable outcomes, this study aims to explore the concept of optimal benefits. The research will focus on identifying the highest and best use of properties, considering various factors to determine the most advantageous utilization and the research endeavors to pinpoint optimal investment options within the real estate domain.

2. To comprehend the multifaceted factors influencing the progression of real estate projects and their applicability in both project development and strategic business planning.

3. To serve as a comprehensive guideline for individuals with an interest in real estate project development. Its purpose is to facilitate the creation of a robust business development plan that can be further refined and practically applied in real project development scenarios. The content is planned and adheres to fundamental principles to ensure accuracy and effectiveness in its application.

CHAPTER 2

ANALYZING LOCATION

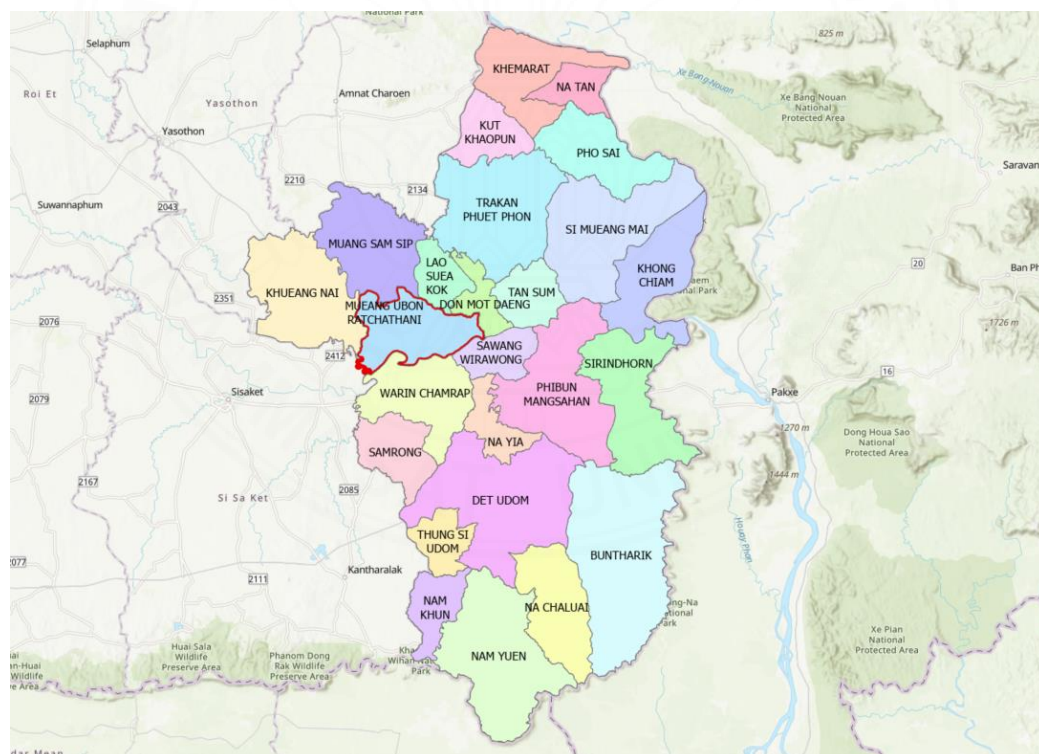
The analysis of the project location is conducted based on three main factors, namely, physical factors, locational factors, and environmental factors. The details are as follows:

2.1 Physical Factors

2.1.1 Town Boundaries

Figure 2.1

District in Ubonratchathani



Source: ARCGIS database

Ubon Ratchathani Province is divided into 25 districts and 219 sub-districts. It shares borders with the following area.

- North: Adjacent to Amphoe Muang Sam Sip and Lao Suea Kok in Ubon Ratchathani
- East: Adjacent to Amphoe Don Mot Daeng and Sawang Wirawong in Ubon Ratchathani
- West: Khueang Nai in Ubon Ratchathani
- South: Kanthararom in Si Sa Ket Province and Warin Chamrap in Ubon Ratchathani

Figure 2.2

Mueang Ubon Ratchathani District Adjacent



Source: ARCGIS database

2.1.2 Transportation Infrastructure

1. Main Roads and Secondary Roads

The road network consists of two main roads, namely Chayangkun Road and Chaeng Sanit Road

2. Expressways and Elevated Highways

Highway 231 is a national highway that connects the provinces of Ubon Ratchathani and Khon Kaen in the northeastern region of Thailand. This highway has a considerable length and serves as a public transportation route linking various districts in both provinces.

3. Public Transportation

Railway/ Train

The railway system includes various types of trains such as express, rapid, ordinary, local, and special express trains during the New Year and Songkran festivals. Originating from Bangkok, these trains pass through the provinces of Nakhon Ratchasima, Buri Ram, Surin, and Sisaket, reaching their final destination at Ubon Ratchathani Railway Station in Warin Chamrap District. In Ubon Ratchathani Province, there are two additional small railway stations: Bueng Wai Station and Huai Khayung Station.

Buses

As of now, transportation within Ubon Ratchathani city and its surrounding areas is facilitated by small-sized private minibuses, with a total of 11 routes provided by private operators. The details of these routes are as follows:

Route 1: Ban That - Three-Way Intersection to Nong Kae Village

Route 2: Ubon Ratchathani Railway Station - Sripatum Wittaya School

Route 3: Ban Kao - Ubon Ratchathani College of Agriculture and Technology

Route 6: Kham Saen Sap Sakhon - Waterworks

Route 7: Khao Chao Kam Chan - Wat Phutthanicom Kitiyaram

Route 8: Ban Pla Duk - Ubon Ratchathani Telecommunication Office

Route 9: Warin Chamrap Market - Kudea Beach

Route 10: Sala Ban Du - Immigration Center

Route 11: Ban Bung Ka Saeo - Ban Dam Phra

Route 12: Institute for Skill Development in the Northeastern Region - Ban Dong

Route 14 Ubon Ratchathani University - Ubon Passenger Transport Terminal

Route 15: Ubon City Bus - Ubon Ratchathani Passenger Transport Terminal - CentralPlaza Ubon Ratchathani

Figure 2.3

Amphoe Muang Ubon Ratchathani – Warin Chamrab Bus Map



Source: <https://ubonratchathani.mol.go.th>

4. Airport

Ubon Ratchathani International Airport, also known as Ubon Ratchathani Airport (IATA: UBP, ICAO: VTUU). Information from Department of Airports, 2021 stated that The passenger terminal building, comprising one structure, provides services for both domestic and international passengers. With two floors and a floor area exceeding 18,000 square meters, it can accommodate up to 1,000 passengers per hour or approximately 2,880,000 passengers per year. The recent interior design of the

passenger accommodation area focuses on creating a spacious, modern, and culturally enriched environment, incorporating the traditional customs of Ubon Ratchathani Province. Additionally, traditional silk patterns from Ubon Ratchathani Province are showcased as wall decorations in various areas, such as check-in counters and interior walkways. The airport features a spacious airfield with dimensions of 120 meters in width and 270 meters in length, constructed with concrete. It can simultaneously accommodate the parking of up to 5 aircraft and handle a maximum of 40 flight operations per day. Statistics from Department of Airports website indicated that in 202 there is a total of 1,063,161 passengers who flew in and out of Ubon Ratchathani Airport. This was facilitated by a total of 8,704 flights during that period.

5. Infrastructure Development Plan

Under the operational plan for the year 2021, the comprehensive analysis and finalization of the Master Plan for the MR- MAP network have been successfully undertaken. The Committee for the Management of Land Traffic Systems (CLT) has formally endorsed this strategic blueprint. As we transitioned into 2022, the entrusted authorities, namely the Department of Highways and the State Railway of Thailand, are poised to initiate surveys and design processes for upcoming projects. Among the proposed routes slated to traverse the province of Ubon Ratchathani is MR5, establishing a crucial connection between Kanchanaburi (Three Pagodas Pass) and Ubon Ratchathani (Thai-Laos Friendship Bridge 6).

Figure 2.4

MR5 Kanchanaburi (Three Pagodas Pass) and Ubon Ratchathani (Thai-Laos Friendship Bridge 6)



Source: Bangkokbiz News

Development of the National Highway Network

1. Project to Expand Traffic Lanes at Ban Chan Intersection - Detch Udom District, completed and finished
2. Project to Expand Traffic Lanes at Trakan Phuet Phon - Kham Rattanakharin District and Part of Ban Saen Sabai - Kham Rattanakharin District, completed and finished
3. Project to Construct and Expand Traffic Lanes at the Intersection of Highway 2085 - Ubon Ratchathani, completed and finished
4. Project to Improve the National Highway in Phibun Mangsahan District - Dok Mai Med, completed and finished
5. Project for the Grade-Separated Intersection at the Intersection of TL.231 and TL.23 (Dong U Pheng Intersection) (including parallel roads), completed and finished

Figure 2.5

National Highway Development Plan data from Department of Highways

Source: <https://ubonratchathani.mol.go.th>

6. Projects currently in progress, a total of 8 projects, including

- Ban Suan - Khueang Nai
- Ban Nong Phue - Kham Rattanakharin
- Huai Yang - Song Khon
- Nong Phue - Na Hai, Ban Khok
- That Klang
- Muang Sam Sip – Phana
- Ubon Ratchathani Ring Road (Highway Development Activities)
- Ubon Ratchathani Ring Road (Bridge and Drainage System Development Activities).

Rural Road Infrastructure Development

1. Project: Bridge across Rong Khum in Trakarn Phuetphol District. Currently under construction, with completion progress at 91.81%.

2. Project: Road Route OB.3007, Intersection TL.212 - Ban Lao Suea Gok, Muang Sam Sip District. Currently under construction, with completion progress at 80.10%

3. Project: Sloped Road and Bridge across the Lam Moon Noi , Muang Ubonratchathani District. Currently under construction, with completion progress at 57.04% and Awaiting approval for a construction time extension

4. Project: Mae Nam Lam Se Bok Bridge, Don Mot Daeng District. Currently under construction, with completion progress at 50.84%. Expected to be completed within the year 2023

5. Project: Bridge across the Lam Huai Luang, Na Cha Luay District. Currently in the procurement and contracting process

2.1.3 Population

Ubon Ratchathani Province has the third- highest population in Thailand, with a total population of 1,868,052 people (data from the Department of Land Administration, Ministry of Interior, 2022). Among its districts, Mueang Ubon Ratchathani is the most populous, hosting 224,850 residents, covering a total area of 406 square kilometers.

The population density in Mueang Ubon Ratchathani is 553 people per square kilometer, significantly higher than the provincial average of 66 people per square kilometer. This makes Ubon Ratchathani the province with the highest population density in the region.

Table 2.1

Top 10 district with highest population in Ubon Rachathani, NSO2022

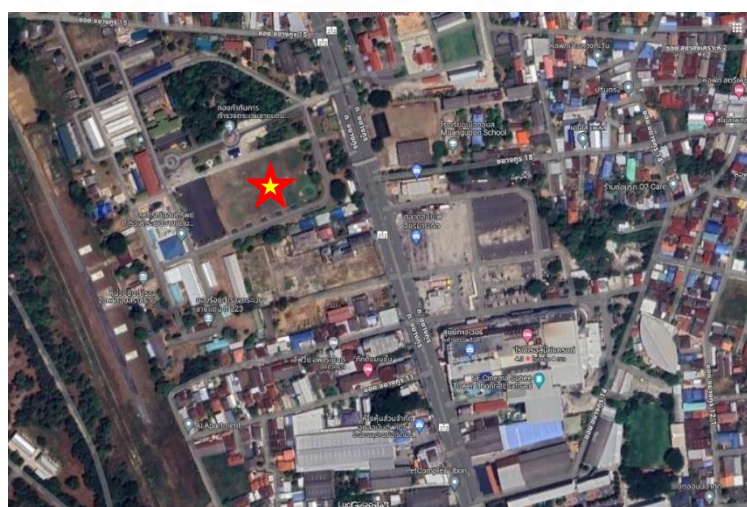
No.	District	Total Population	Area (square kilometer)	Total Population/Area (square kilometer)
1	Muang Ubonratchathai	224,850	406.39	553.29
2	Det Udom	177,763	1,416.00	125.54
3	Warin Chamrap	160,641	584.00	275.07
4	Trakarn Puetphol	131,058	1,306.00	100.35
5	Piboonmangсахarn	129,508	1,277.95	101.34
6	Khueng Nai	106,737	772.82	138.11
7	Buntrix	95,736	1,402.00	68.29
8	Muang Sam Sip	84,447	917.54	92.04
9	Khemmarat	73,181	522.16	140.15
10	Sri Muang Mai	71,043	1,310.00	54.23

Source: NSO

2.2 Location Factor

Figure 2.6

Site Location



Source: Google Maps

2.2.1 The location of the project.

The land, as per the title deed, is situated along Chayangkun road in Nai Muang Sub-district, Muang Ubun Ratchathani District Ubon Ratchathani province.

2.2.2 Land Adjacent

North: Commercial building

East: Chayangkun road

West: Metro CAT office

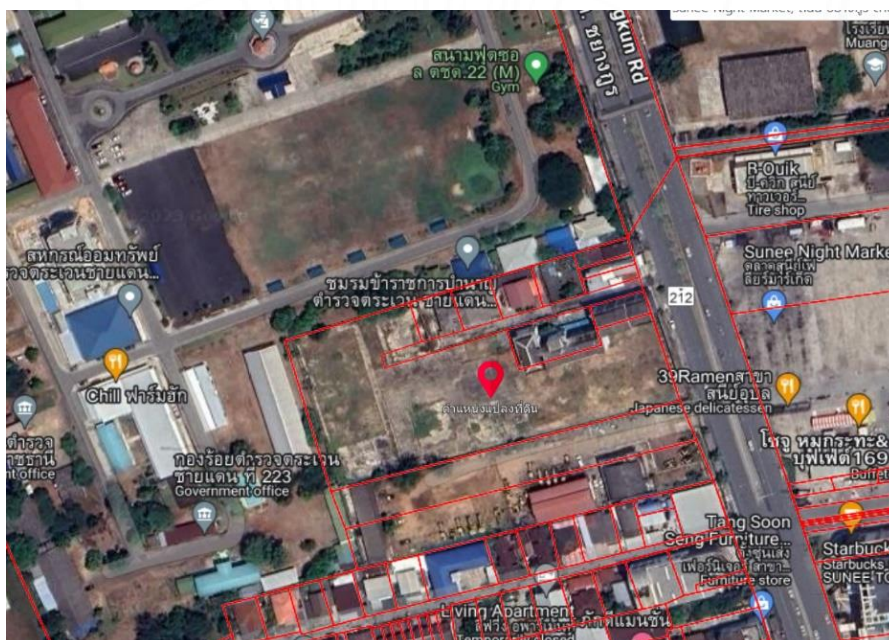
South: Resident estates

2.2.3 Land size and land shape

The property exhibits an L-shaped configuration, featuring a frontage width along Chayangkun Road of approximately 38 meters and a depth of about 200 meters on each side. The comprehensive land area, as indicated by the title deed, encompasses 5 rai, 1 ngan, and 73 square wah which is 2,473 square wah in total. The precise coordinates of the land parcel are recorded as 15. 257217575895409, 104.84689910200852.

Figure 2.7

depicts the topography of the land



Sourced: The Land Technology Bureau, Department of Land (Landmaps).

2.2.4 Land Levelling

The land has been leveled to be at the same level as the road surface. Currently, the specified area is planted with agricultural trees while awaiting further development.

Figure 2.8

In front of studied site condition



Sourced: Google Maps

Figure 2.9

In front of studied site condition



Sourced: Google Maps

CHAPTER 3

REFINING IDEAS

3.1 Legal Analysis

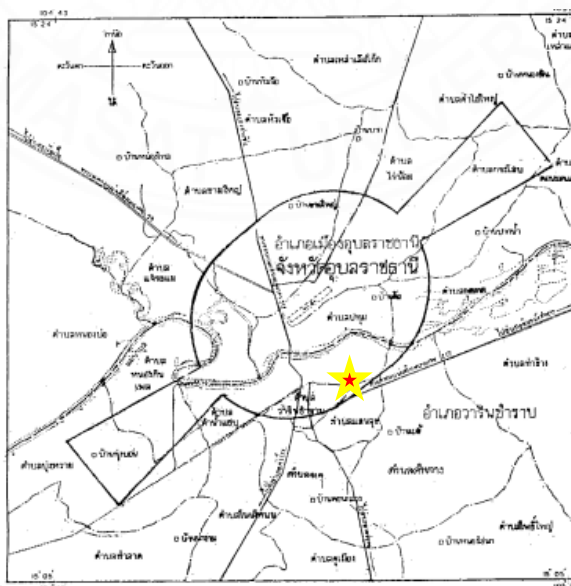
In the analysis of legal feasibility, numerous legal considerations are to be meticulously examined, encompassing aspects pertinent to the development of diverse real estate projects. The aim is to establish a structured guideline for the selection of projects earmarked for development, outlined as follows;

3.1.1 Air Navigation Safety Zone on Area of Aerodrome Publication

Due to the location is nearby Ubonratchathani airport, it is necessary to check if the land is in airport safety zone that are designated areas around airports where special rules and regulations apply to ensure the safe takeoff, landing, and taxiing of aircraft. These zones help prevent conflicts between departing and arriving aircraft. It is found that the studied site is located in the safety zone area so there is regulation for air navigation safety zone on area of aerodrome publication as follow;

Figure 3.1

Safety zone for Aerodrome Publication



Sourced: Civil Aviation Authority of Thailand

Announcement from the Civil Aviation Authority of Thailand on the subject of Restriction on Construction or Alteration of Structures within Air Navigation Safety Zone stated that in accordance with Section 59 of the Air Navigation Act, B. E. 2497, the Civil Aviation Authority of Thailand hereby announces an amendment specifying the regulations governing the air navigation safety zone outlined in Section 58 as per the amended provision, no individual shall be permitted to undertake the construction or alteration of buildings, structures, or standing trees within the air navigation safety zone, unless express written permission has been obtained from a duly authorized official. This official, deemed competent by the Civil Aviation Authority of Thailand, is mandated to clearly outline the conditions under which permission is granted.

Authorized officers are empowered to set conditions at their discretion when issuing permission letters, ensuring adherence to a standardized form that distinctly delineates the terms and limitations associated with such permissions.

This announcement serves to reinforce the commitment of the Civil Aviation Authority of Thailand to uphold the highest standards of air navigation safety. All concerned parties are urged to comply with the aforementioned legal provisions to maintain the integrity of the air navigation safety zone and mitigate potential risks to aviation operations.

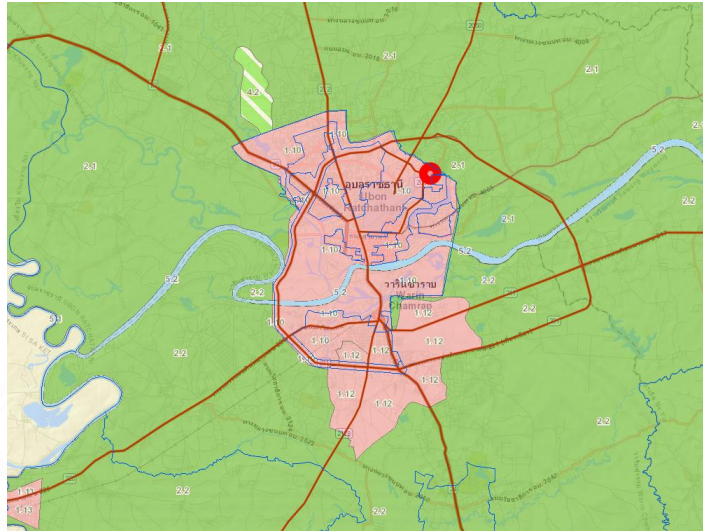
3.1.2 General City Plan (Ubon Ratchathani 2015)

The term “General or principal city plan” conveys a confluence of plans, policies, and projects, accompanied by regulatory measures, designed to serve as a guiding framework for the urban development and maintenance of municipalities, associated regions, or rural locales. Embracing a broad spectrum, these plans encompass considerations related to property utilization, transportation infrastructure, public utilities, services, and environmental factors. The overarching aim is to realize the objectives outlined in city planning initiatives.

In accordance with ministerial regulations, the enforcement of the city plan of Ubon Ratchathani Province for the year 2015 shall be duly effectuated.

Clause 6, Land Utilization According to the Classified Land Use Plan stated that land within the area marked from No. 1.1 to No. 1.22, designated in pink, shall be classified as community land.

Figure 3.2
Land Zoning,



Source: Landmaps

Clause 7, General City Plan: The utilization of said land is expressly directed towards residential and commercial endeavors, inclusive of agricultural activities, educational institutions, religious establishments, government facilities, public utilities, and utilities intended for public benefit. Any employment of the land for activities beyond those delineated herein shall be expressly regulated in accordance with the subsequent specifications.

(1) Pursuant to this provision, a business may be conducted or operated within a structure that is not classified as a large or high-rise building, excluding, however, structures specifically designated for the transmission of radio signals, television signals, or any form of communication signals.

The meanings of high-rise buildings, large-sized buildings, and large-sized special buildings are as follows:

- High-rise building refers to a structure with a height of 23 meters or more.
- Large-sized building is one that has a total floor area on each floor, or on any single floor, of 2,000 square meters or more. It can also include buildings with a height exceeding 15 meters and a combined floor area on each or any single floor exceeding 1,000 square meters.

(2) The application for permission requires the existence of unoccupied space constituting no less than fifty percent of the designated land plot.

3.1.3 Department of Public Works and Town Planning Announcement (2015)

Regarding the establishment of criteria for land use in real estate for the benefit of urban planning and the preparation of comprehensive city plans in the territory of Ubon Ratchathani Province, in view of the promulgation of the Royal Decree, which delineates the land areas to undergo surveying for the formulation and preparation of the General City Plan for 47 provinces in the year 2015, an enactment that is equally applicable to Ubon Ratchathani Province, and serves the purpose of facilitating planning and preparation in accordance with the stipulations of the aforementioned Royal Decree. This course of action is undertaken with reference to the authority vested in accordance with Section 15 (3) of the Town Planning Act, B.E. 2518.

Clause 1 “Retail and wholesale commercial building” refers to a structure designated for commercial purposes within one or more edifices, possessing a cumulative usable area intended for the conduct of retail and wholesale business operations involving diverse consumer products utilized in daily life, spanning 300 square meters or more. This definition explicitly excludes markets in accordance with the regulations stipulated in the law on public health, as well as buildings utilized for operations geared towards the promotion or sale of community-produced products.

Clause 2: Determination of the Usable Area for Retail and Wholesale Commercial Buildings. The calculation of the usable area for commercial buildings falling within the retail and wholesale categories shall exclusively encompass the space within structures dedicated to retail and wholesale commercial operations. This calculation excludes auxiliary areas such as storage spaces, office facilities, and any other sections within the building.

Clause 6: Utilization of Land for the Construction, Modification, Utilization, or Change of Utilization to Commercial Buildings, Specifically Retail and Wholesale Types, with a Cumulative Building Usable Space Intended for Retail and Wholesale Business of Consumer Products. Comprising Various Types Used in Daily Life, ranging more than 1,000 Square Meters, Subject to the Following Criteria:

(1) The land plot on which the building is situated is required to be adjacent to a public road featuring a minimum of four traffic lanes, or alternatively, possess

a road boundary dimension of no less than 20 meters. Furthermore, adherence to a public road with an equivalent or larger road boundary size is mandatory.

(2) The central axis of the vehicular entry and exit points must be positioned at a distance of not less than 500 meters from the intersection where the road converges with a public road possessing a road boundary size of 14 meters or more.

(3) The ratio of the building footprint area to the land plot area designated for the building's accommodation shall not exceed 0.2%

(4) There exists a ratio between the total usable area of the building and the area of the land plot designated for the building's accommodation, which shall not exceed 1.5%.

(5) There is a stipulated ratio for available space allocated for garden, tree planting, or recreational purposes per unit area of the land plot designated for building which must not be less than 20%.

(6) There requires an open space in front of the building, measuring not less than 75 meters from the outermost edge of the building to the edge of the public road boundary. This measurement is conducted from the outermost edge of the building to the boundary on the side adjacent to the land plot designated for the building's accommodation.

(7) There shall be an open area on both lateral and rear aspects of the structure, distinct and unencumbered by the land holdings of third parties or the periphery of the right-of-way pertaining to a public road. This unoccupied space shall measure no less than 20 meters, as gauged from the outermost extremity of the building to the boundary demarcating the land owned by others or the outer limit of the right-of-way on the side contiguous to the land plot earmarked for the construction of the building.

(8) Buildings with a height exceeding 10 meters must have a distance from the boundary of the land area where the building is located to the main administrative center of the province or district, religious sites, historical sites, and educational institutions of not less than 500 meters. The distance is measured from the outermost edge of the building requesting permission to the boundary of the land area of the mentioned location.

(9) There should be a parking space for at least 1 car per 20 square meters of building area for the first 1,000 square meters. For areas exceeding 1,000 square meters, calculate at a rate of 1 car per 40 square meters. Any fraction of 40 square meters should be rounded up to 40 square meters.

(10) The septic tank must maintain a distance of no less than 10 meters from the boundary of land owned by others or public roads. Additionally, there must be a separation distance of not less than 4 meters from areas where food is prepared and food storage locations. However, if the capacity of the septic tank exceeds 3 cubic meters, the distance from the aforementioned areas must be no less than 10 meters. Furthermore, the septic tank must facilitate convenient transportation for the removal of fecal sludge if its capacity exceeds 3 cubic meters.

(11) In the case of buildings constructed or modified in close proximity to public water sources such as rivers, ponds, canals, streams, or lakes, there must be an open space devoid of any buildings or structures on the side adjacent to that public water source. If the width of the public water source is less than 10 meters, the open space should be no less than 3 meters. However, if the public water source has a width of 10 meters or more, the required open space should be no less than 6 meters. For buildings constructed or modified near large public water sources such as marshes or reservoirs, the mandated open space must be no less than 12 meters.

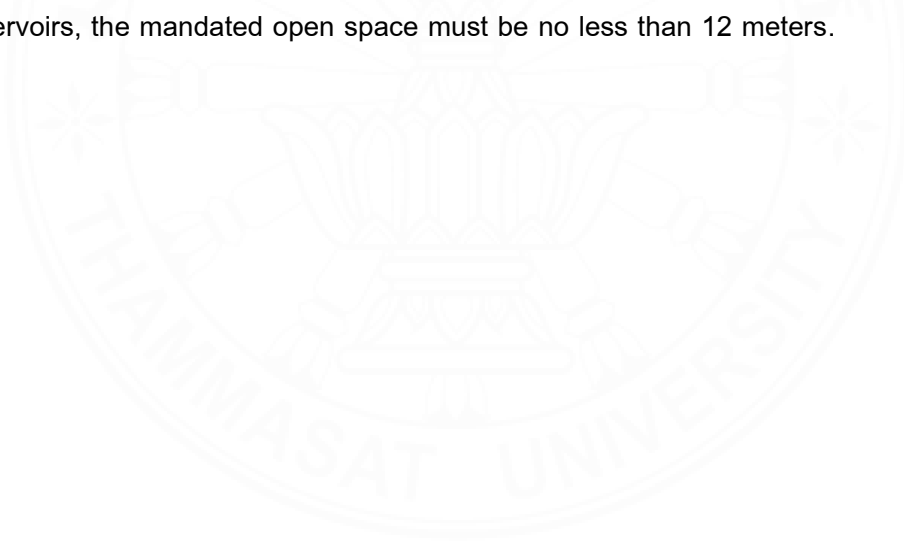


Table 3.1*Legal Analysis*

Development Possibility		
No	Type of Development	Legal Analysis
1	Single House	/
	Detached House	/
	Townhome	/
	Condominium	/
	Apartment & Dorm	/
2	Commercial Building	/
3	Office	/
4	Hotel	/

Source: The author, 2024

3.2 Physical Analysis

In analyzing the physical feasibility of the land to be studied, three key factors are considered: the physical characteristics of the land, accessibility and visibility, and the surrounding environmental conditions of the project area. These factors help create a clear framework of options for development, facilitating more informed decision-making.

3.2.1 Residential Estate (Landed House)

The mentioned location is an area undergoing development into a village, with some parts already having residential communities constructed. There are development plans from both local and branded developers in the vicinity. The location is close to a hospital, an airport, and various amenities such as convenience stores and fresh markets. There are several ongoing development projects that impact the potential and completeness of the location however based on the physical study of the area and its accessibility, the site exhibits characteristics conducive to residential development as a low-rise project. However, due to the constraint of a relatively small land size of only 5 acres, it may not be suitable for the development of a low-rise project to its full extent.”

3.2.2 Residential Estate (High/Low rise)

High/Low rise structures encompass condominiums, apartments, and dormitories, as previously delineated. The designated area is positioned within the core of the community hub, and its accessibility is enriched by the surrounding residential environment. Nonetheless, project development faces legal impediments due to the area's inclusion within the airspace safety regulatory radius, imposing limitations on the erection of tall structures. Should there be an aspiration to embark on real estate development in this configuration, meticulous evaluation of building height and the roadway's width traversing the land becomes imperative, given that the available width might not be conducive to the construction of high-rise projects.

3.2.3 Commercial Estate

Within a three-kilometer radius, there exist numerous commercial establishments, including shopping malls, dining establishments, and various service facilities. Notably, the closest shopping center is Lotus Ubon Ratchathani, situated at an approximate distance of 800 meters. The research site is centrally positioned in the city, enveloped by a multitude of structures, thereby signifying its potential for enhanced accessibility by virtue of its location along a primary thoroughfare and within the urban core.

Following a meticulous legal scrutiny, it has been discerned that there exists the prospect of transforming the designated area into an industrial zone spanning an area of more than 1,000 square meters, contingent upon compliance with statutory regulations. A physical examination underscores the viability of evolving the locale into an industrial zone, with the potential to yield positive ramifications for the adjacent areas.

3.2.4 Hotel

While the aforementioned area holds potential for development into a hotel, given its proximity to major roads, central location within the city, and close proximity to various amenities, the surrounding vicinity currently accommodates only a limited number of hotels. Moreover, due to legal stipulations, construction is permissible on an area spanning no more than 2,000 square meters. Consequently, considering the legal constraints, the feasible development might be limited to a small-scale hotel, which may not be competitive in terms of pricing against other hotel operators in the area.

Summary of the physical feasibility analysis reveals that the mentioned land is highly suitable to develop a commercial estate such as shopping center and

community mall. The level of suitability decreases in that order, legal limitation and physical feasibility. The next step involves market analysis to assess the feasibility of developing each type of project in this area.

Table 3.2

Development Possibility table

Development Possibility			
No	Type of Development	Legal Analysis	Physical analysis
1	Single House	/	/
	Detached House	/	/
	Townhome	/	/
	Condominium	/	/
	Apartment	/	/
2	Commercial Building	/	/
3	Office	/	X
4	Hotel	/	/

Source: The author, 2024

3.3 Market Analysis

3.3.1 Economic Overview of Thailand at the Regional Level

The economic analysis at the national level serves to deepen our understanding of market conditions, allowing for the development of projects in alignment with the overall economic landscape. Based on the study of data from CBRE, key economic considerations at the regional level are as follows:

1. Gross Domestic Product (GDP)

According to the projections by the Bank of Thailand, Thailand's Gross Domestic Product (GDP) is expected to be at 2.8%, a decrease from the earlier forecast of 3.6%. This reduction is attributed to economic vulnerabilities, particularly a downturn in domestic demand. However, a GDP rebound to 4.4% is anticipated in the upcoming year, propelled by internal factors, tourism recovery, export growth, and private

consumption (Bank of Thailand ,2023) . This presents elevated opportunities for the rise in demand and supply of real estate.

2. Population Growth:

Thailand's population has exhibited a continuous declining trend since 2019, with a slight reduction of 0.12% in the preceding year. Remarkably, the proportion of the elderly population has increased, signifying a transition into an aging society, with individuals aged over 60 accounting for 19% of the total population.

3. Unemployment Rate

The unemployment rate demonstrates a decreasing trend, reverting to figures close to those observed before the COVID-19 pandemic.

4. Household Income and Spending

Both household income and spending have shown an upward adjustment. However, it is imperative to note an accompanying increase in household debt, reaching up to 25%.

5. Loan Outstanding

Loan outstanding has experienced an upward adjustment when compared to the same period in the preceding year, but a recent decrease in the past quarter has led to outstanding debts in the system totaling 18.5 trillion baht. This includes debts of companies, followed by personal debts and debts of small and medium-sized enterprises (SMEs). Despite this, system losses have reduced from the previous year by 6.8%.

6. Inflation Rate:

The Bank of Thailand forecasts an inflation rate of 2.0% in the year 2024, showing an increase from the previous year. However, external factors such as war and natural disasters need to be monitored as they may impact expenses, potentially leading to a significant increase.

7. Interest Rate

The interest rate exhibits an upward adjustment, both in policy interest rates and interest rates for major enterprises, with adjustments to 2.5% and 6.95% , respectively. This directly impacts major enterprises, resulting in increased borrowing costs, which, in turn, affects prices. Additionally, this may influence consumer investment decisions, leading to increased savings.

3.3.2 Gross Provincial Product (GPP) for Ubon Ratchathani (2022)

According to the National Economic and Social Development Council, the Gross Provincial Product (GPP) of Ubon Ratchathani Province at current market prices in 2022 was valued at 126,088 million Baht. This comprises 23,520 million Baht from the agricultural sector and 102,568 million Baht from non-agricultural sectors. The agricultural sector includes farming, fisheries, and forestry, accounting for 18.7% of the total. Non-agricultural sectors consist of industry (16.3%), wholesale and retail trade (16.0%), education (13.6%), financial intermediation (8.5%), and other sectors (26.9%) (National Economic and Social Development Council, 2022)

The primary economic drivers for Ubon Ratchathani Province are the wholesale and retail trade, agricultural, fishery, forestry, and industrial sectors. Key products driving the economy include rice, upland rice, cassava, durian, and rubber. The industries related to rice and cassava play a crucial role in the economic growth of the province, encompassing activities from upstream to downstream, such as cultivation, processing, and distribution.

The significant contributions of the agricultural, fishery, and forestry sectors underline their importance in the economic prosperity of Ubon Ratchathani Province. The province places great emphasis on agriculture, particularly in the cultivation of rice, upland rice, and continuous industrial development, ranging from upstream to downstream, including irrigation, midstream activities, and end-product processing. This comprehensive approach enhances competitiveness and contributes significantly to the economic growth of the province. The major sectors of agricultural production in Ubon Ratchathani Province in 2024 include crops, accounting for 75.2% of the agricultural GPP. Other sectors include agricultural services (11.2%), livestock (10.7%), fisheries (2.8%), and forestry (0.1%) (National Economic and Social Development Council, 2022)

3.3.3 Economic Situation of Ubon Ratchathani Province

As of December 30, 2022, the Provincial Treasury Office of Ubon Ratchathani Province reported on the economic situation of the province. In the year 2024, it is anticipated that the economy will expand by approximately 1.5% (forecast range: 0.6-2.2%), compared to the growth of 17.1% in 2023. The contraction is expected in the service and tourism sectors due to the reduction in retail trade value within the province, stemming from the impact of the COVID-19 virus (the Provincial Treasury Office of Ubon Ratchathani, 2024) The outbreak led to a decrease in the number of tourists,

and the agricultural sector is also anticipated to contract, affecting both crop and livestock values.

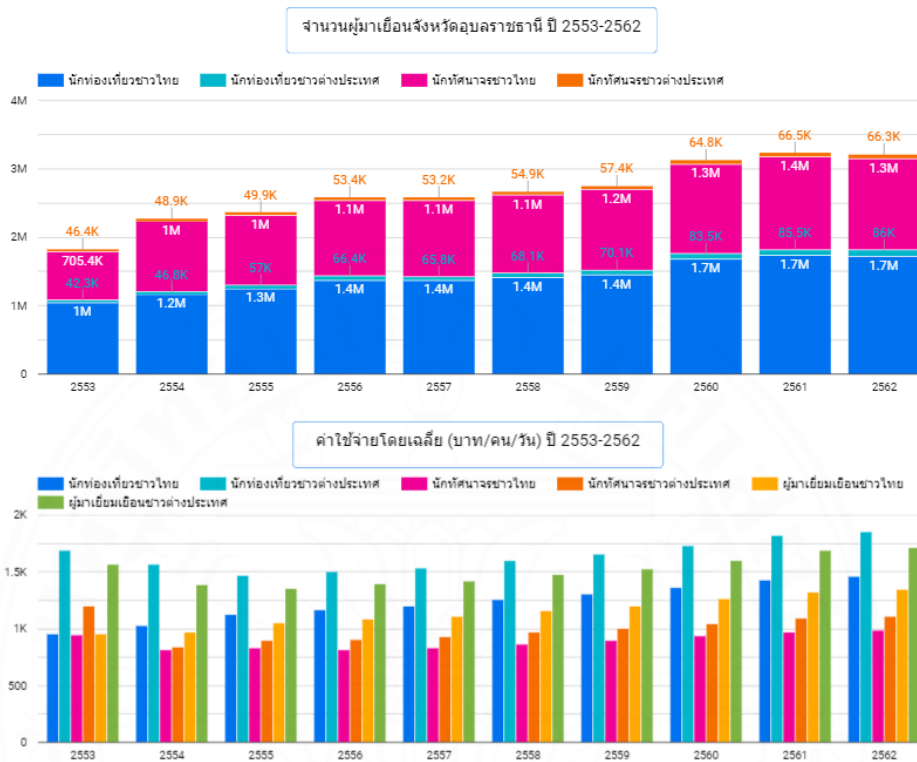
On the other hand, the industrial sector is expected to expand due to an increase in industrial electricity consumption. The public sector is predicted to expand, driven by border trade growth resulting from increased agricultural product imports. Government spending has increased, and private sector investment has been consistently expanding. Private consumption is expected to grow, supported by the government's economic stimulus measures.

Speaking of Tourism in Ubon Ratchathani Province. In the year 2019, there were a total of 3,217,865 visitors to Ubon Ratchathani Province, consisting of 3,065,554 Thai nationals and 152,311 international visitors. The total revenue generated from tourism was 7,997.57 million Baht, with an average length of stay of 2.45 days. The average daily expenditure per person was 1,369.40 Baht. (NSO,2023)

The accommodation facilities in the province included a total of 4,822 rooms across various hotels. The total number of guests accommodated was 1,414,337 people. In the year 2019, there were a total of 3,217,865 visitors to Ubon Ratchathani Province, consisting of 3,065,554 Thai nationals and 152,311 international visitors. The total revenue generated from tourism was 7,997.57 million Baht, with an average length of stay of 2.45 days. The average daily expenditure per person was 1,369.40 Baht. The accommodation facilities in the province included a total of 4,822 rooms across various hotels. The total number of guests accommodated was 1,414,337 people (NSO,2023)

Figure 3.3

Number of Traveller in Ubon Ratchathani,



Source: NSO, 2021

The inflation rate is projected to be approximately 1.4% , increasing from the previous year. This adjustment is primarily influenced by the food and beverage category and the energy sector, with a rising trend in fuel prices. Looking ahead to the year 2025, the economy of Ubon Ratchathani Province is expected to expand by approximately 3.9% (NSO,2021)

3.3.4 The Real Estate Market Situation in Ubon Ratchathani

The report from REIC outlines the current status of the housing market, specifically properties that remain available for sale during the first half of 2023 in the provinces of the northeastern region. These provinces include Nakhon Ratchasima, Khon Kaen, Udon Thani, Ubon Ratchathani, and Maha Sarakham. The report provides an overview of the current situation in the residential property market that remains unsold during the first half of 2023. The number of available units for sale has increased by 22.8%, contributing to an overall market absorption rate of 2.1%.

Focusing into Ubonratchathani province, For the first half of 2023, in the surveyed area of Ubon Ratchathani province, there were a total of 1,382 residential

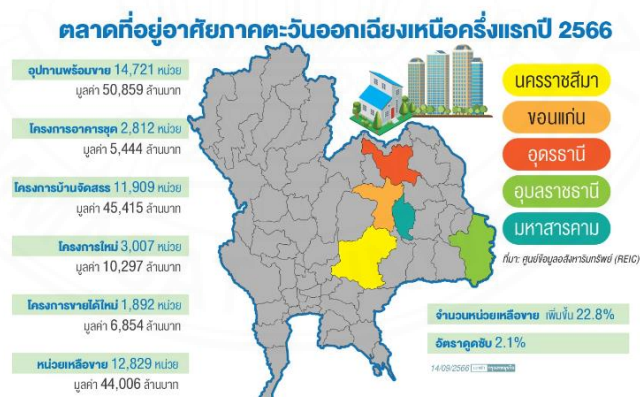
units offered for sale, with a value of 4,330 million Baht. This represents a decrease of -6.3% in quantity and -7.1% in value. The projects were categorized into 1,293 house units valued at 4,187 million Baht and 89 condominium units valued at 142 million Baht.

During the first half of 2023, there were 294 new residential units introduced to the market, experiencing a decrease of -36.9% in quantity and -38.9% in value, amounting to 869 million Baht. Meanwhile, the number of newly sold units decreased by -53.3% in quantity and -46.3% in value, with 191 units sold at 663 million Baht. The remaining unsold units increased by 11.9% in quantity and 6.9% in value, reaching 1,191 units valued at 3,667 million Baht, compared to the same period in 2022 (YoY).

According to REIC projections for the year 2023, it is anticipated that 441 residential units, valued at 1,303 million Baht, will enter the market. Of these, 372 units are expected to be newly sold, with a value of 1,291 million Baht, leaving 1,157 units unsold, valued at 3,565 million Baht. (REIC,2023)

Figure 3.4

Housing Demand & Supply NE 2023



Source: REIC

Despite a slight reduction in demand of the province, there remains an interest in the area, with absorption rates experiencing a modest decrease compared to the previous year. Major real estate developers, such as AP with its subsidiary brand APITOWN, along with Supalai, have continued their investments by launching projects in 2023. This has led to a resurgence in the real estate market in Ubon Ratchathani province. In the commercial real estate sector, major developers such as the Central Group have contributed to the market with the opening of Central Ubon Ratchathani in October 2023.

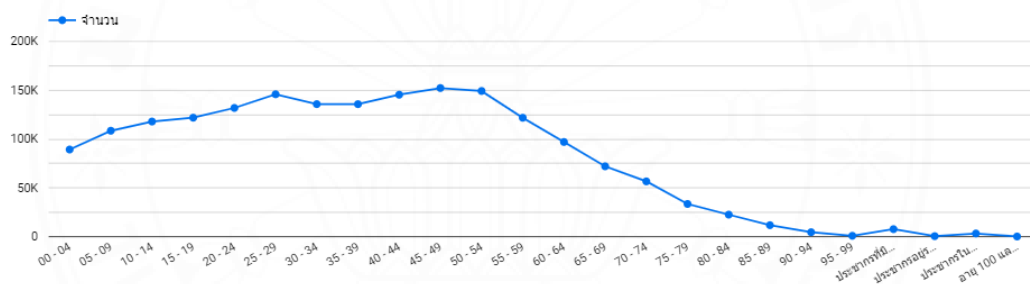
The development is characterized by a mixed-use concept meticulously designed to cater to the diverse needs of the local populace in Ubon Ratchathani.

3.3.5 Trade Area Analysis

In 2021, Ubon Ratchathani Province is administratively subdivided into 25 districts, 216 sub-districts, and 2,704 villages. According to NSO (National Statistical Office), data as of 2022, The total population of the province is 1,868,052 people, with 932,286 males and 935,766 females. The majority of the population falls within the age range of 5-59 years. The age group with the highest population is 45-49 years, accounting for 8.1% , followed by the age group of 50-54 years at 8% . The elderly population (60 years and older) constitutes 16% of the total population (NSO,2022)

Figure 3.5

Ages trends in Ubon Ratchathani



Source: NSO 2021

According to Gapmaps data, the population of Ubon Ratchathani is reported to be 1,686,455. The population analysis for community malls within proximity is based on a 3-kilometer radius from the site. Within this radius, there are 106,375 individuals, out of which 64,595 are identified as workers, constituting 7% of the total workforce in Ubon Ratchathani, estimated at 821,957 people. The majority of consuming class of the population in 3 kilometers radius is non-consuming class at 50.67%, middle consuming class at 40.82% and premium consuming class at 8.50% respectively. (NSO,2021)

Table 3.4*Population*

ADJUSTED POPULATION	Defined Area	Ubon Ratchathani	Thailand
2019 Population	106,902	1,693,517	67,918,910
2021 Population	106,375	1,686,455	67,591,316
2021 Workers (working within catchment)	64,595	821,957	33,793,069

Data sources: GapMaps 2022

Source: Data from GapsMap

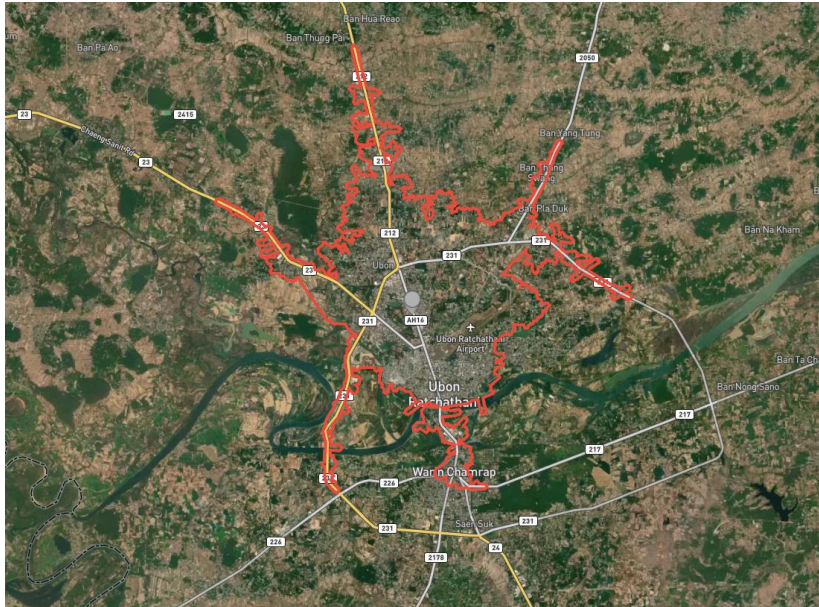
The predominant age group in the population falls within the range of 45-54 years old, comprising 16.21%, followed by individuals aged 25-34 years at 15.26%, and those aged 35-44 years at 15.17%. Therefore, it is inferred that the majority of the population falls within the age bracket of 25-54 years old, accounting for approximately 46% (Gapmaps, 2024).

Table 3.5*Age profile*

2021 AGE PROFILE	Defined Area	%	Ubon Ratchathani	%	Thailand	%
0 to 4 years	5,631	4.78%	89,389	4.78%	2,989,361	4.52%
5 to 9 years	6,896	5.85%	109,508	5.86%	3,697,646	5.59%
10 to 14 years	7,561	6.41%	119,108	6.37%	3,967,430	6%
15 to 19 years	7,863	6.67%	122,825	6.57%	4,059,987	6.14%
20 to 24 years	8,348	7.08%	132,531	7.09%	4,390,795	6.64%
25 to 34 years	17,989	15.26%	283,857	15.19%	9,528,984	14.40%
35 to 44 years	17,888	15.17%	283,043	15.15%	10,053,114	15.19%
45 to 54 years	19,116	16.21%	303,120	16.22%	10,397,175	15.71%
55 to 64 years	13,927	11.81%	220,513	11.80%	8,748,168	13.22%
65+ years	12,678	10.75%	204,798	10.96%	8,338,709	12.60%
TOTALS:	117,897		1,868,692		66,171,369	

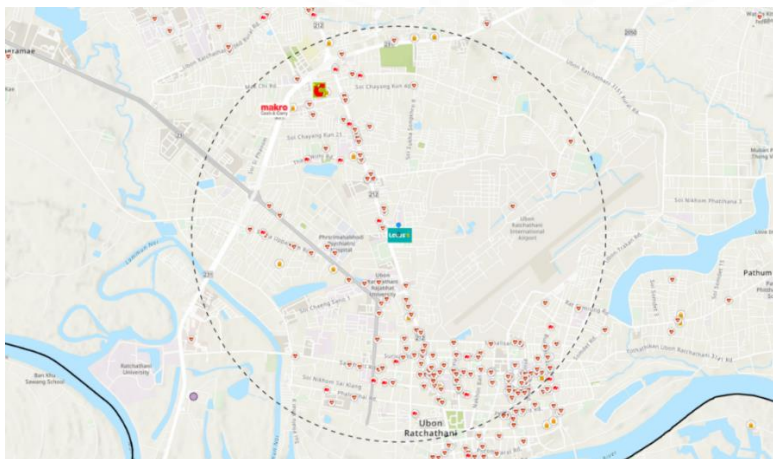
Source: Gapsmap

total of 117,023 individuals has convenient access to the site within a 10-minute drive time radius, as analyzed using the drive-time method, covering an approximate distance of 5 kilometers from the site (Gapmaps, 2024)

Figure 3.6*Driving Time within 10 minute from studied site*

Source: Gapmaps

The number of Points of Interest (POI) illustrates the distribution of villages within a 3-kilometer radius from the study location. There are a total of 100 real estate properties, comprising 20 condominiums, 80 villages, and 7 dormitories (Gapmaps,2024)

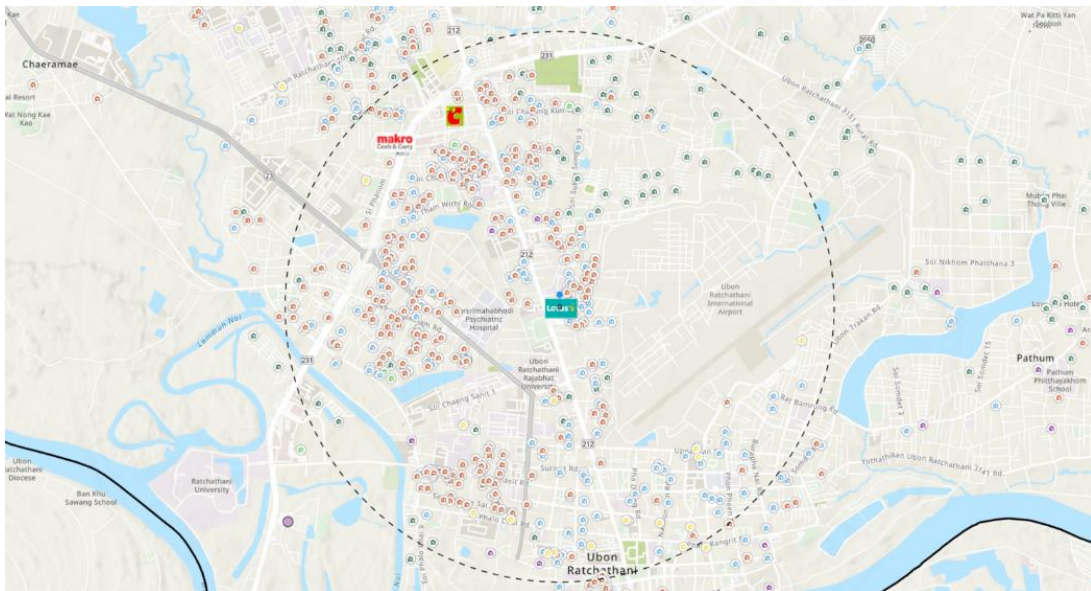
Figure 3.7*POI of Residential Estates in 3 Km Radius*

Source: ArcMap

The area under study exhibits a sense of community and a commercial presence within its boundaries. This not only portrays a community atmosphere but also indicates commercial viability. Additionally, it reveals opportunities for trade, commerce, and real estate development to cater to the needs of business-to-business (B2B) customers. Within a 3-kilometer radius from the study point, data from ArcMap reveals the presence of 12 markets, 65 hotels, and 1,179 restaurants (ARCGIS,2024)

Figure 3.8

POI of Restaurants, Markets and Health care in 3 Km Radius



Source: ArcMap

3.3.6 Market Analysis: shopping mall in town

Upon surveying the competition and market landscape, it has been observed that there are four major retail players in the market. All four prominent developers have established large-scale shopping centers, namely Lotus Ubon Ratchathani, Big C, Makro, and the recently introduced Central Ubon Ratchathani this year. Each of these market players possesses a sizable area, with Lotus's having an expansive space of up to 13,160 square meters. This area is divided into a mall zone covering 7,107 square meters and a hypermarket spanning 6,053 square meters. Big C Ubonratchathani has a total area of 11,248 square meters, while Makro Ubonratchathani encompasses 10,278 square meters and Central Ubonratchathani covers an area of

10,000 square meters, excluding the space dedicated to the Robinson department store. In addition to well-established players, there are also local real estate developers who have developed small-scale community mall projects, such as SK Park, U Park, Ubon plaza, Y square foodmall and Ubon Square. The combined area of these developments exceeds 10,000 square meters. All the aforementioned projects are located within an approximate 5-kilometer radius from the city center of Ubon Ratchathani, serving as a hub for prosperity and offering various amenities, including hospitals, schools, offices, and other essential governmental facilities in the city. As of the survey conducted in November 2023, the space leasing occupancy rates for Lotus, Big C, and Central are 98%, 95%, and 96%, respectively.

3.3.7 Market Analysis: Hotel

Krungsri survey result reveals that the hotel business is anticipated to show positive adaptability between the years 2022-2024. It is expected that in 2022, the industry will experience marginal recovery, primarily due to a limited influx of international tourists, especially from China, which continues to grapple with challenges posed by the Zero-COVID policy, compounded by the global economic slowdown resulting from the consequences of the Russia-Ukraine conflict. However, it is projected that the number of international tourists will escalate significantly in the years 2023-2024, reaching levels approaching pre-COVID-19 figures (38-40 million) in 2025 (Krungsri Survey, 2022)

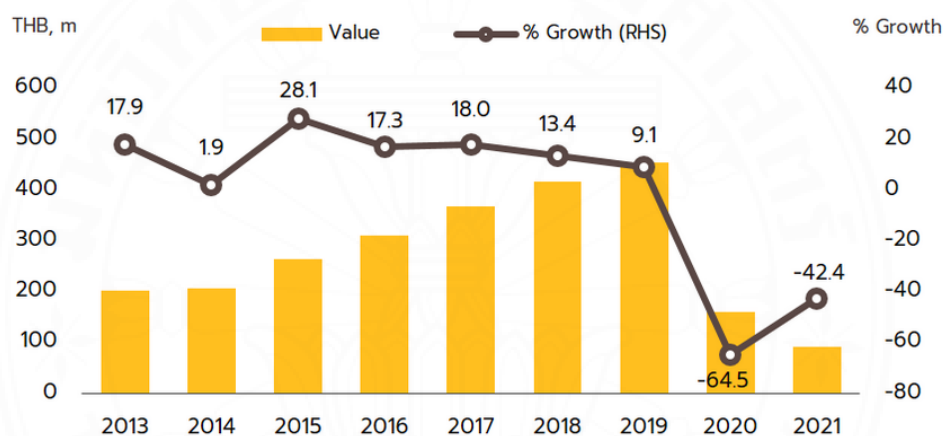
Meanwhile, the domestic tourism sector among Thai nationals is expected to exhibit sustained recovery due to government initiatives stimulating the domestic tourism market. It is anticipated that major hotel operators will persist in continuous investment expansion, albeit potentially at a slower pace than initially planned. This, in turn, is projected to maintain the overall national hotel occupancy rate at an average low of 45% in 2022, gradually increasing to 55% in 2023 and 65% in 2024. Nevertheless, the hotel industry is expected to remain intensely competitive, given the persistently high excess supply, while the slow-paced economic recovery makes room rate adjustments challenging.

Hotels in the central province, a hub of regional prosperity and key tourist destinations, are showing a continuous trend of recovery. This is primarily attributed to a focus on the domestic tourist segment, capitalizing on the government's initiatives to stimulate domestic tourism. Consequently, the hotel occupancy rate is expected to be in the range of 50%-52%, compared to the 66% recorded in 2022 (Krungsri Survey, 2023)

As for hotels in other provinces, the overall business outlook may still experience a gradual recovery, despite receiving impetus from government measures to boost domestic tourism. This is because most provinces cater predominantly to tourists passing through to visit the central hub or major tourist destinations. As a result, revenue and occupancy rates are anticipated to remain at lower levels.

Figure 3.9

GDP Origination from Accommodation Sector



Source: Office of the National Economic and Social Development Council (NESDC)

The Thai domestic tourism market has consistently witnessed an increasing trend, reaching 144.8 million trips per year or an average annual growth of 5.5% during the period 2012-2019 (refer to Figure 3.9). This growth can be attributed to:

A. Continuous Tourism Promotion Measures: These include government initiatives such as tax incentives and annual private sector-organized tourism promotion events.

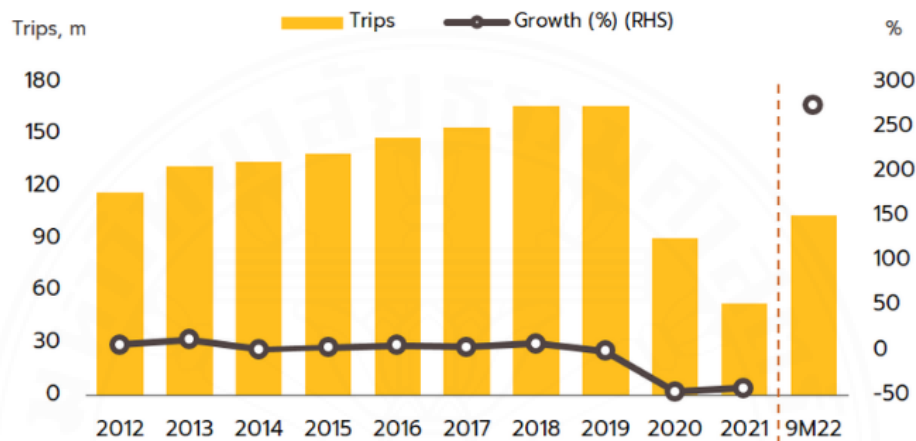
B. Low-Cost Airline Expansion: The growth of budget airlines, coupled with improvements and expansions in airports across various provinces, has contributed to the accessibility of tourist destinations for Thai travelers.

C. Infrastructure Development: The expansion of road transportation networks has made it more convenient for Thai tourists, particularly those who prefer traveling by private vehicles, to access tourist destinations.

However, the strict COVID-19 control measures, such as lockdowns, curfews, and inter-provincial travel restrictions, significantly impacted domestic tourism, leading to an average decline of 43.6% per year during the years 2021-2022.

Figure 3.10

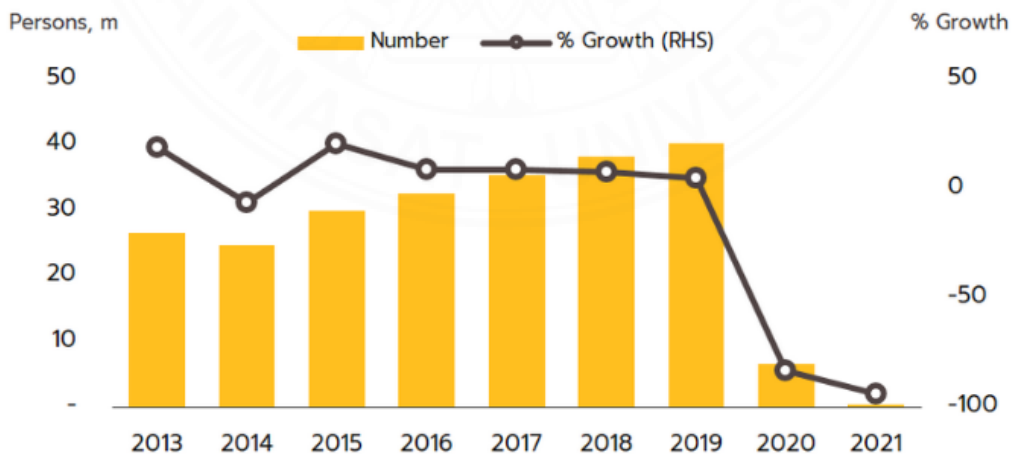
Thai Tourists (Domestic Tourism)



Source: Ministry of Tourism and Sports (MOTS)

Figure 3.11

Foreign Tourists to Thailand



Source: MOTS

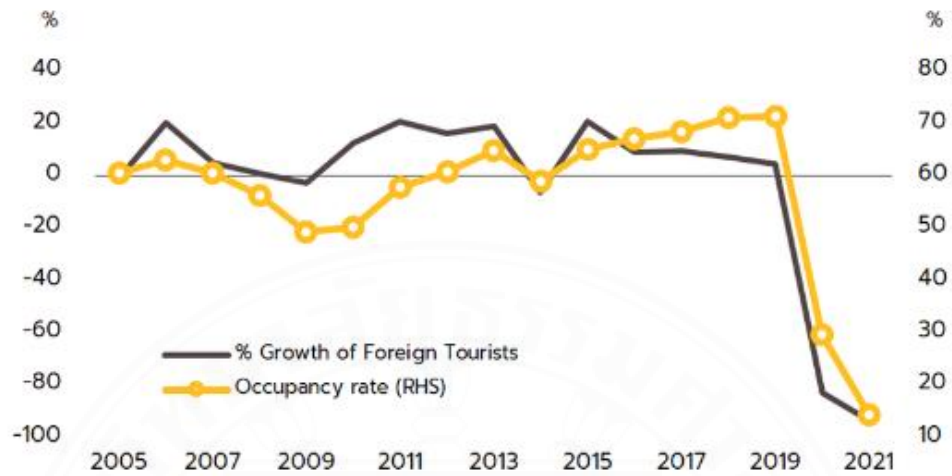
The number of international tourists has declined significantly, contracting by 93.6% to 430,000 individuals, a consecutive decrease from the year 2023 when there

were 6.7 million tourists, representing an 83.2% reduction (refer to Figure 3.11). Meanwhile, the revenue has reached 38 billion Baht, reflecting an 88.6% decrease. However, there has been a gradual increase in the number of international tourists in the latter half of the year following the relaxation of COVID-19 control measures. This includes the adjustment of quarantine days for international tourists and the authorization of travel to various areas as stipulated by the promotional tourism project aimed at urgently attracting international tourists back to Thailand.

The number of Thai tourists traveling domestically totalled 53.0 million trips, marking a decline of 41.4% (refer to Figure 3.10). The revenue generated amounted to 220 billion Baht, reflecting a decrease of 60.6%. Thai tourists significantly reduced their travels, averaging only 1.1 million trips per month during the third quarter, compared to an average of 8.1 million trips per month in the same period of 2021 (MOTS,2021) This decline was a direct consequence of the severe impact of the COVID-19 pandemic, leading to stringent control measures such as curfews and restrictions on inter-provincial travel.

The situation began to improve in the fourth quarter, with an average of 8.5 million trips per month, as control measures were gradually eased, coupled with various tourism stimulation campaigns, notably the “We Travel Together Phase 4” campaign.

In the year 2021, the Thai domestic occupancy rate experienced a significant reduction, plummeting to 29.5%. This decline continued to reach a historic low in 2022, dropping consistently to 14.2%. This unprecedented decline is attributed to the substantial contraction in the number of both Thai and international tourists (BOT,2022) (Refer to Figure 3.11).

Figure 3.12*Occupancy Rate*

Source: Ministry of Tourism and Sports (MOTS), Bank of Thailand (BOT)

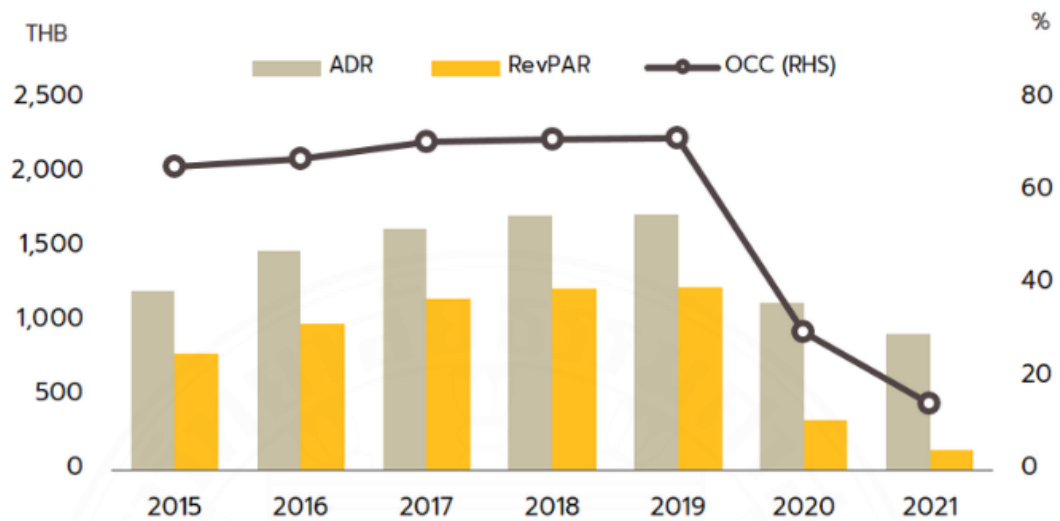
The average nationwide occupancy rate (OCC) reached a historic low of 14.2%, down from 29.5% in 2021 (Bank of Thailand ,2023) (refer to Figure 3.12). Notably, the occupancy rates in key tourist areas heavily dependent on international tourists, such as Phuket, Surat Thani, and Krabi, dropped to less than 10%.

Figure 3.13*Occupancies rate (%) by province*

Province	2018	2019	2020	2021
Bangkok	82.4	82.2	28.2	13.0
Chonburi	79.6	80.4	28.9	11.5
Phuket	76.0	75.2	19.5	7.7
Suratthani	72.1	68.2	20.0	5.4
Chiang Mai	76.0	74.3	41.8	20.5
Krabi	69.2	68.5	18.6	6.0
Phang Nga	66.3	64.6	21.9	11.9
Song Khla	73.5	71.5	21.2	6.5
Prachuap Khiri Khan	66.7	64.3	35.7	21.2
Petchaburi	70.5	69.0	41.5	24.6
Rayong	70.9	69.9	28.6	20.2
Kanchanaburi	69.6	69.3	42.5	22.6
Nakhon Ratchasima	66.8	66.8	39.4	25.0
Udonthani	72.1	72.4	42.0	15.5
Buriram	60.2	61.0	29.7	19.9
Chiang Rai	55.0	54.9	38.3	22.8
Nationwide	71.2	70.1	29.5	14.2

Source: Ministry of Tourism and Sports (MOTS), Bank of Thailand (BOT)

The Average Daily Rate (ADR) for hotel rooms nationwide has decreased by -18.5%, currently standing at 914 Baht per night. Consequently, the Revenue per Available Room (RevPAR) for hotels across the country has experienced a significant reduction, decreasing by -60.9% to 129 Baht, down from 311 Baht in the year 2020 (MOTS,2022)

Figure 3.14*Occupancies rate, ADR and RevPAR*

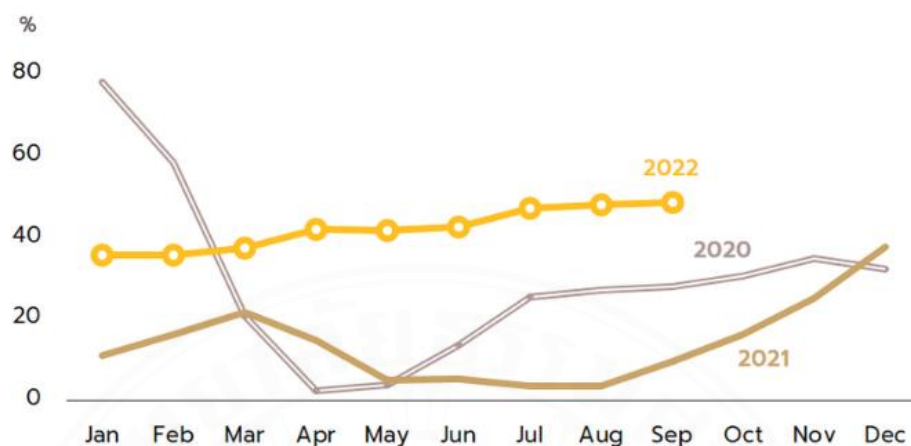
Source: BOT, MOTS, Krungsri Research

During the first 9 months of the year 2022, Thai tourists traveling within the country reached a total of 103.4 million trips, marking a substantial increase of 274.2% Year over Year (YoY) (MOTS,2022) Key contributing factors include the government's relaxation of travel restrictions and continuous promotion of domestic travel. This effort is further supported by initiatives like the "We Travel Together" campaign, which extended from July to October 2022 (Figure 3.14)

Figure 3.15*Number of increasing tourist in Thailand*

Source Krungsri Research

The nationwide occupancy rate has steadily increased to 42.0% during the first 9 months of 2022, compared to just 9.9% during the same period the previous year (Krungsri Research, 2022) (Figure 3.12). This upward trend is observed across all provinces, reflecting the gradual recovery of both Thai and international visitors (Figure 3.12). However, when compared to the pre-COVID-19 period, the current occupancy rate remains significantly lower (71.1% during the first 9 months of 2019). The average room rate per night has increased by 9.7% YoY, contributing to an incremental growth in average revenue per available room, reaching 417 Baht compared to just 90 Baht during the same period the previous year.

Figure 3.16*Occupancy Rate Monthly*

Source: Krungsri Research

Krungsri research forecast that the hotel business is expected to gradually recover during the period from 2022 to 2024 after a severe downturn. It is anticipated that the number of international tourists will return to levels close to those before COVID-19 (around 38-40 million people) by the year 2025. Meanwhile, the recovery of domestic tourists is expected to be faster, supported by continuous measures to stimulate tourism within the country. It is projected that Thai tourists will return to normal levels around 185 million trips by the year 2024. Large hotel operators are expected to continue expanding their investments during this recovery period. (Krungsri research,2022)

3.3.8 Market Analysis: Apartment

News from the Thansethakij reports that the trend-monitoring dormitory business has significant importance, especially during the consecutive two-year period from 2023 to 2024. This is particularly true for the student dormitory business due to the increased prevalence of online learning offerings across various educational levels. There are also multiple accommodation options available. The majority of students are opting for condominium-style room rentals, contributing to this increasing trend. Moreover, based on the analysis of quarterly sales data, conducted by the National Statistical Office in collaboration with the National SMEs and Cooperative Development Fund (SMEs Fund), along with relevant economic factors, businesses can be categorized into three groups for the promising year 2023. These groups include businesses that are poised for a bright

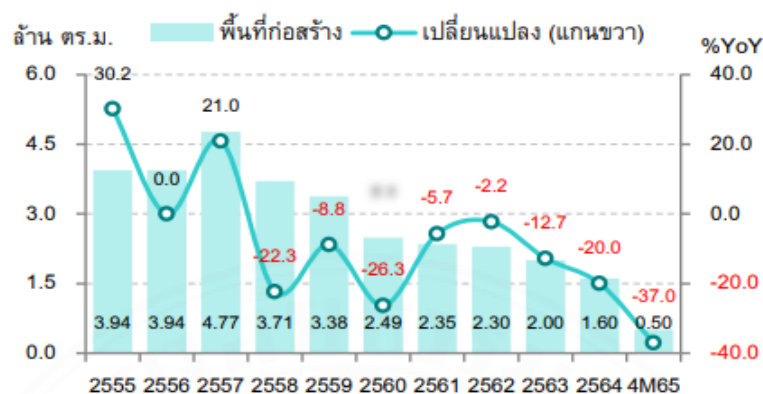
future, those making a comeback, and those that require careful monitoring in the year 2026 is the sectors that need careful monitoring are those affected by changing consumer behavior, such as accommodation rental businesses, dormitories, and indoor fitness establishments (Thansetthakij, 2023)

For the overall picture of the apartment business in 2023, it continues to be impacted by the prolonged spread of the COVID-19 virus, affecting various sectors and industries and altering the behavior of residents, especially in dormitories and apartments near educational institutions. The shift to online teaching has significantly reduced the number of residents, particularly students in higher education institutions, showing a continuous decline. Meanwhile, apartments catering to working professionals have also been affected by the change in working methods, such as the widespread adoption of work-from-home (WFH) practices.

These factors have contributed to increased business risks, resulting in a downward trend in investments in apartment rental businesses. This is evident in the reduced issuance of licenses for apartment construction, which dropped to 1.60 million square meters in 2023, marking a 20.0% decrease compared to the previous year. Additionally, the number of buildings decreased from 1,032 in 2022 to 764 in 2023, reflecting a 26.0% YoY decline (Krungsri Research,2023)

Figure 3.17

Licenses for apartment construction



Source: Krungsri Research

Figure 3.18

Licenses for apartment construction

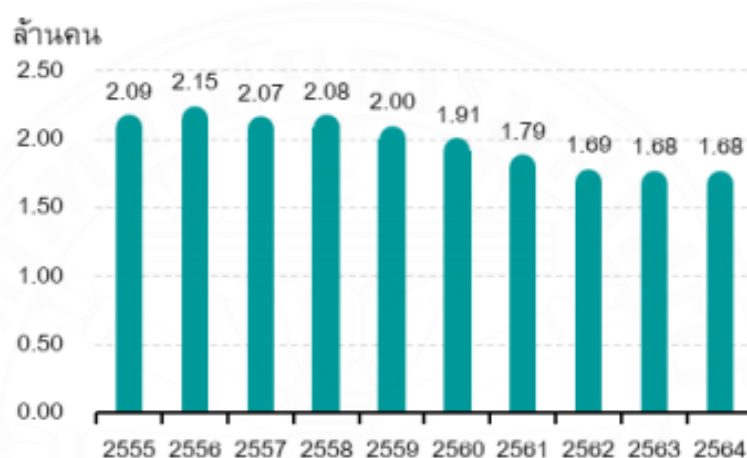
ภาค/จังหวัด	จำนวนพื้นที่ (ตร.ม.)		เปลี่ยนแปลง (%YoY)	
	ปี 2564	4M65	ปี 2564	4M65
ภาคตะวันออก	243,872	49,144	-4.7	-57.8
- ชลบุรี	183,508	30,917	26.9	-66.0
- ฉะเชิงเทรา	29,930	13,356	-23.1	26.8
- จันทบุรี	4,932	2,949	-28.6	253.6
- ระยอง	25,502	1,922	-58.0	-86.5
ภาคอีสาน	121,898	30,774	-1.4	-61.2
- นครราชสีมา	10,218	11,790	-55.3	108.5
- อุบลราชธานี	38,440	8,876	220.0	-66.7
- ขอนแก่น	34,095	5,872	140.5	-81.6
- มหาสารคาม	25,541	1,500	-0.8	-82.9
ภาคเหนือ	62,539	27,512	-41.8	23.3
- เชียงใหม่	24,949	10,563	-47.4	24.5
- ลำปาง	2,999	9,010	-48.4	296.7
- เชียงราย	10,090	2,764	-35.2	n.a.
- น่าน	4,258	2,748	105.9	30.9
- พิชณุโลก	7,646	1,748	-39.6	-72.8
ภาคตะวันตก	31,251	10,047	-33.9	8.9
- เพชรบุรี	9,968	4,927	-38.1	n.a.
- ราชบุรี	14,306	3,888	47.2	-54.1
- ประจวบคีรีขันธ์	3,486	1,232	-79.8	64.3
ภาคกลาง	24,673	750	-36.2	-91.1
- อ่างทอง	2,312	750	15.6	n.a.
- พระนครศรีอยุธยา	16,102	-	-34.0	-100.0
รวมทั้งประเทศ	1,602,625	502,304	-20.0	-37.0

Source: Krungsri Research

Figure 3.17 illustrates that the expansion rate of apartments in Ubon Ratchathani province is trending downwards. This observation is based on data sourced from the Real Estate Information Center (REIC), indicating a business contraction trend of 66% Year over Year (YoY) from the year 2020, (REIC,2022)

Figure 3.19

Number of students in higher education (nationwide)



Source: Office of the Higher Education Commission

Furthermore, the total number of students in higher education institutions nationwide is showing a decreasing trend. Specifically, in Ubon Ratchathani province, there has been no emergence of new educational institutions or large-scale employment opportunities within the past 3 years. This contraction is anticipated due to existing negative factors, stemming from an abundant supply in the market, both within the same business sector and from the residential condominium sector, competing particularly in economically thriving areas. Additionally, the expansion of the railway network beyond the boundaries of the Bangkok metropolitan area and its suburbs has led to improved convenience and time control for commuting, resulting in a decreasing tendency for individuals to seek accommodation close to their workplaces. Simultaneously, there is an upward trend in the operational and investment costs associated with apartment businesses. This is in contrast to a diminishing demand for rentals, influenced by both a declining workforce and a continuous reduction in the number of students, reflecting the ongoing demographic shift in Thailand towards a fully developed aging society. This trend

also encompasses a reduced number of foreign nationals working in Thailand, a phenomenon that persists at lower levels compared to the pre-COVID-19 pandemic era.

These dynamics are consequences of the slow economic recovery, prolonged geopolitical tensions, and an escalating inflation rate. Consequently, businesses may need to adapt by renovating their buildings to present a fresh image, as well as by adjusting rental costs and lease agreements to be more flexible, allowing them to remain competitive. However, these adjustments could impact business performance and extend the payback period. Analyzing this comprehensive information indicates that investing in the dormitory business in Ubon Ratchathani is currently not advisable.

Table 3.6

Market Analysis

Development Possibility				
No	Type of Development	Legal Analysis	Physical analysis	Market Analysis
1	Single House	/	/	/
	Detached House	/	/	/
	Townhome	/	/	/
	Condominium	/	/	/
	Apartment	/	/	X
2	Commercial Building	/	/	/
3	Office	/	X	X
4	Hotel	/	/	/

Source : The author,2024

3.4 Financial Analysis (Preliminary)

3.4.1 Land Cost Analysis

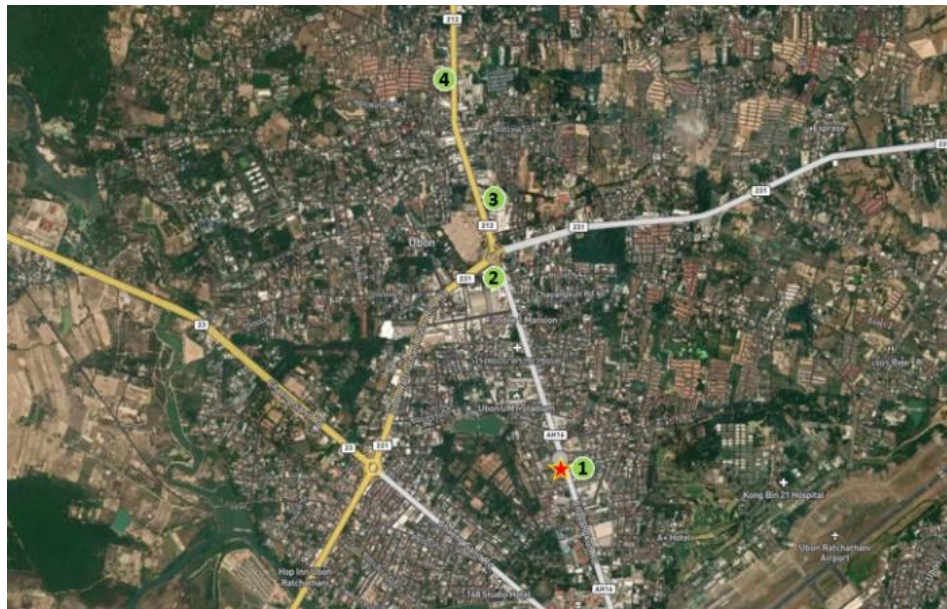
The analysis of land cost has been conducted using the Market Approach and property valuation through the Weighted Quality Score (WQS) method. The obtained scores and the sale prices of each land plot used for comparison are then utilized to create a Linear Regression model. Subsequently, the results derived from the model are incorporated into the equation to determine the land cost value.

3.4.1.1 Properties Used for Comparison.

The assessor has selected a total of 4 land plots with physical characteristics closely resembling the studied land. These selected plots are intended for comparative property valuation, referencing actual offered sale prices. The studied site is the red star that shown in Figure 3.20

Figure 3.20

Location of land comparison

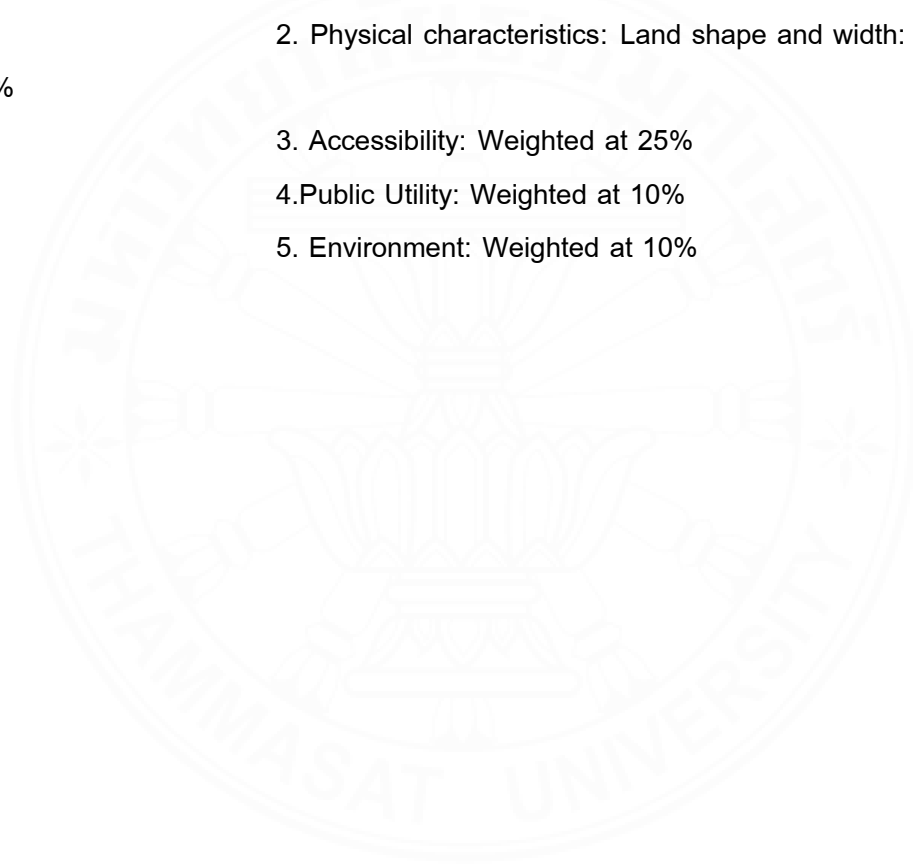







Source: Gapmaps

3. 4. 1. 2 Criteria for Scoring Factors and Adjusting Comparable Property Prices

Comparison of market data involves the assignment of scores based on quality levels, ranging from 1 to 10 points. A score of 1 denotes very poor quality, while a score of 10 signifies excellent quality. Each factor considered in the evaluation is assigned a weighted value based on its significance, as delineated in the established criteria. The factors and their respective weights are as follows:

1. Location: Weighted at 35%
2. Physical characteristics: Land shape and width: Weighted at 20%
3. Accessibility: Weighted at 25%
4. Public Utility: Weighted at 10%
5. Environment: Weighted at 10%



	Studied Property	Property No1	Property No2	Property No3	Property No4
Photo					
Land Size	5 Rais 1 Ngarn 73.0 Sq.wah.	4 Rais 1 Ngarn 75.2 Sq.Wah + 9 Rais 0 Ngarn 62 Sq.Wah = 16 Rais 1 Ngarn 136 Sq.Wah	5 Rais 0 Ngarn 83..7 Sq.Wah	2 Rais 4 Ngarn 73 Sq.Wah	4 Rais 2 Ngarn 3 Sq.Wah and 2 Rais 1 Ngarn 65.9 Sq.Wah = 6 Rais 3 Ngarn 65.3 Sq.Wah
Area (sq.wah)	2,173 sq.wah	5,436.4 sq.wah	2,083.7 sq.wah.	1273.3 sq.wah	2,769.3 sq.wah
Lanf Shape	L Shape	Square	Square	Irregular	Irregular
Land Width (Facing main road) Width x Depth (meters)	Width 38 m Depth 200 m	Width 122 m Depth 183 m	Width 50 m Depth 230 m	Width 68 m Depth 85 m	Width 145 m Depth 105 m
Attributes	15.2571616492, 104.846925871	15.2573282667, 104.847492316	15.2727014038, 104.841490942	15.2787309866, 104.840480844	15.287961305, 104.837331451
Land Condition	Vacant Land	Vacant Land	Vacant Land	Vacant Land	Vacant Land
Soi/Minor road	None	None	None	None	None
Main Road	Chayangkun Road	Chayangkun Road	Chayangkun Road	Chayangkun Road	Chayangkun Road

Distance from Public transportation	None	None	None	None	None
Distance from main road	0 km	0 km	0 km	0 km	0 km
Road Surface	Concrete	Concrete	Concrete	Concrete	Concrete
Public Utility	Electricity, water supply, telephone line	Electricity, water supply, telephone line	Electricity, water supply, telephone line	Electricity, water supply, telephone line	Electricity, water supply, telephone line
Accessibility	Public Road	Public Road	Public Road	Public Road	Public Road
Land Level	Road Level	Road Level	Road Level	Road Level	Road Level
Number of frontages	1	1	2	1	1
Ownership document type	Title deed	Title deed	Title deed	Title deed	Title deed
Usage	Medium Density Housing	Medium Density Housing	Medium Density Housing	Medium Density Housing	Medium Density Housing
Town Plan	Pink	Pink	Pink	Pink	Pink
Selling Price	70,000	79,000	70,000	66,500	71,000
Negotiation price (10%) discounted	-	71,100	63,000	59,850	63,900

Source: The author, 2024

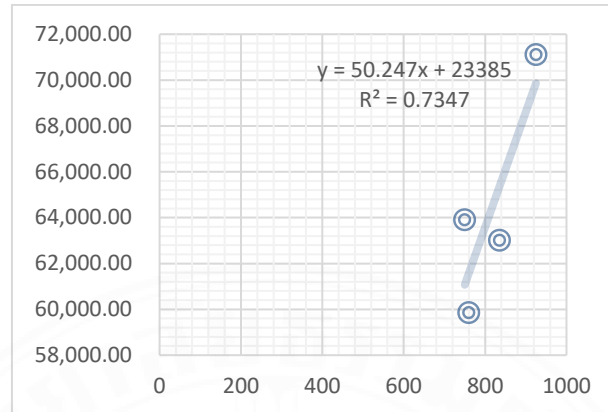
Comparable Factor	Weighted Quality Score	Score				
		Appraisal Property	Property No1	Property No2	Property No3	Property No4
1. Location	35.00	9	9	8	7	7
2. Physical characteristics: Land shape and width	20.00	7	9	8	6	6
3. Accessibility	25.00	9	10	9	9	9
4. Public Utility	10.00	9	9	9	9	9
5. Environment	10.00	9	9	8	8	7
Total	100.00	8.6	9.25	8.35	7.6	7.5

Source: The author, 2024



Comparison Factor	Weight (%)	Scoring Criteria				
		10 - 9	8 - 7	5 - 6	4 - 3	2 - 1
Location	35%	Located in the heart of community and business district	Located away from the community area	Located in suburbs	Located outside the suburbs	Located on the outskirts of the city, far from development
Land Shape	30%	Rectangular plot, easily subdividable, size 7 rai or more	Polygonal plot, size 4 rai or more	Polygonal plot, area no more than 2-3 rai	Polygonal plot, area no more than 2-3 rai	Polygonal plot, area no more than 1 r
Transportation	20%	Very convenient transportation, easily accessible, near main roads, adjacent to main community roads	Moderate transportation, adjacent to main community roads	difficult transportation	difficult transportation	Inaccessible transportation
Infrastructure	5%	Complete infrastructure	Water, electricity, telephone	Lack of some infrastructure	Lack of some infrastructure	No infrastructure
Environment	10%	Commercial and high-density residential area	Residential area mixed with vacant land	Residential area mixed with vacant land and agricultural land	Residential area mixed with vacant land and agricultural land	Residential area mixed with large vacant lands and agricultural land

Source: The author,2024

Figure 3.21*Land Price by Regression equation*

Source: The author,2024

Summary of land prices derived from the evaluation using the Weighted Quality Score (WQS) method, aiming to distribute the importance of variables affecting land prices. The regression equation obtained is $Y = 50.247X + 23,385$ with an R Square value of 0.7347, indicating an acceptable level of reliability. When substituting the values from scoring the property factors studied, specifically 845, into the equation, the calculated value of Y at 66,597. From the calculation of the Weighted Quality Score (WQS), the adjusted land price is obtained. When compared to the selling price of 70,000 Baht per square wah, it is found that the land price is reasonable. However, negotiation is necessary to achieve a reasonable and justified land cost.

3.4.2 Project Financial Assumption

3.4.2.1 Project Financial Assumption: Retail Development

Following the acquisition of land prices and their comparison with market rates, it is intriguing to note that the developed land is considered to have a land cost equivalent to the market price. This parity results in a competitive edge in terms of land costs. The Front Door Method analysis has been employed by the researcher to analyze preliminary financial feasibility

The investor's awareness of construction costs is crucial for calculating the minimum achievable retail space rental on the developed area. Subsequently, this rental value can be compared with the rental rates of competitors in the market. If the obtained rental value surpasses that of the competitors, it indicates that the construction cost of the project is excessively high. In such cases, it becomes

imperative to manage and optimize construction costs or adjust the financial structure to align with the market's reality.

The investment assumptions are as follows:

1. Debt Coverage Ratio of 1.2%
2. The interest rate is 8.15% (MLR 7.15 + 1), and this interest rate is derived from the average loan interest rate provided by 5 well known commercial banks in Thailand, according to the Bank of Thailand. (Table 3.7)

Table 3.7

Average loan interest rate

Commercial Bank registries in Thailand	MOR	MLR	MRR
BBL	7.5500	7.1000	7.3000
KTB	7.5200	7.0500	7.5700
KBANK	7.5900	7.2700	7.3000
SCB	7.5750	7.0500	7.4000
BAY	7.5750	7.2800	7.8300
AVG interest rate	7.5620	7.1500	7.4800

Source: BOT, December 2023

3. Payment Term 25 Years
4. Occupancy Rate (Y1) starting 80% (Average market occupancy 95%)
5. Loan to Value Ratio 80%
6. Development Cost price is from "Standard Price List per Unit for Building Structures" by the Valuers Association of Thailand, BE 2566-2567, The possibility of developing a shopping mall on a 5-Rais land plot, equivalent to approximately 2,000 squares wah or 8,000 square meters, in accordance with the city planning regulations of Ubon Ratchathani province, allows for the construction of a shopping mall larger than 1,000 square meters. However, there is a specified requirement for a designated portion of the available space to be allocated for garden, tree planting, or recreational purposes. This allocation must not be less than 20%, which is approximately 1,600 square meters. Henceforth, the feasibility of constructing a building is constrained by the available land area of 6,400 square meters, with a potential allowable building

height of four stories. This restriction is attributed to the commercial character of the area, as the construction of a multi-story building could potentially inconvenience customers and impact the tenants' operations within the project. The feasibility assessment consequently recommends the development of a four-story building, based on an average (medium) construction cost of 18,000 Baht per square meter, inclusive of material and construction expenditures.

Table 3.8

Commercial Building Construction Price per sqm

Department Store/ shopping mall	Unit	Price Per Unit		
		Low	Medium	High
Less than 4-storey building	Sqm	18,000	25,400	29,700
5 to 8 stories building	Sqm	20,200	26,500	31,800

Source: The author, 2024

7. Operating Expense is forecasted 30% of the EGI (Effective Gross Income)

8. CAPEX is 7% of EGI after OPEX

Table 3.9*Project Assumption: Commercial Building*

Project Assumption		
Construction Area	6,400	Sqm
Leasable Area	4,200	Sqm
Development Cost	162,560,000	Baht
Land Cost	144,504,500	Baht
Loan To Value	80%	of total loan
Loan To Value	245,651,600	Baht
Debt Coverage Ratio	1.2	
Interest Rate	8.15%	Per year
Payment Period	20	Years
Expected Occupancy rate	80%	
Operating Expense	30%	of EGI
Capex	7%	of EGI after Opex

Source: The author,2024

Analysis by using front door analysis method to understand the project expected income.

Table 3.10*Project Expected Income: Commercial Building*

Project Expected Income		
Cash Required for Debt (Month)	2,077,720	Baht
Cash Required for Debt (Year)	24,932,639	Baht/Year
Debt Coverage Ratio	1.2%	
Required Net Operating Income (NOI)	29,919,167	Baht
Required Effective Gross Income (EGI)	45,958,781	Baht
Required Potential Gross Income (PGI)	57,448,477	Baht/Year
Total required revenue	57,448,477	Baht/Year
Min Required Rent per sqm/year	13,678	Baht/Year
Min Required Rent per sqm/month	1,140	Baht

Source: The author,2024

For the development of commercial space in the area, the proposed rental rate is set at 1,140 Baht per square meter per month. This rate is deemed to be lower than the prevailing market rates by 1,600 Baht per square meter. It is imperative to highlight that this pricing strategy aligns with the overarching objective of establishing commercial space to bolster residential communities and cater to the needs of the local populace. The strategic positioning of the shopping centre is geared towards a mid to high-tier market, with a specific emphasis on the food and pet categories. Pricing structures and product offerings are meticulously curated to harmonize with the demographic of the residential community. Notably, market surveys indicate an absence of direct competitors within a 1–2-kilometer radius capable of providing shopping facilities conducive to including pets. Should the prospective tenant possess the requisite potential and financial capability to generate sustainable income, they stand in good stead to secure leasing arrangements. The entry of a tenant with distinct competitive advantages in this strategic location is considered a pivotal milestone in the developmental trajectory of the project.

Using assumption expected ROE 10% led the minimum required rent per month to 1,270 baht per sqm which is equal to market rental rate at around 1,300 baht per square meters. It is foreseeable that the project holds potential for development.

Table 3.11

Project Expected Income : Commercial Building

10% ROE Assumption		
Assume ROE10%	10%	
Required Potential Gross Income (PGI)	57,448,477	Baht
ROE 10%	6,141,290	Baht
Total required revenue	63,589,767	Baht
Min Required Rent per sqm/month	1,262	Baht

Source: The author,2024

3.4.2.2 Project financial assumption: Hotel Development

The investment assumptions are as follows:

1. Debt Coverage Ratio of 1.2%
2. The interest rate is 8.15% (MLR 7.15 + 1), and this interest rate is derived from the average loan interest rate provided by 5 well known commercial banks in Thailand, according to the Bank of Thailand. (Table 3.7)
3. Payment Term 20 Years
4. Occupancy Rate (Y1) starting 70% (Average market occupancy 65%)
5. Loan to Value Ratio 80%
6. Development Cost price is from “Standard Price List per Unit for Building Structures” by the Valuers Association of Thailand, BE 2566-2567 (Table 3.12) The feasibility assessment consequently recommends the development of 6-8 stories building, based on an average (medium) construction cost of 21,000 Baht per square meter, inclusive of material and construction expenditures.

Table 3.12*Hotel Construction Price per sqm*

Hotel	Unit	Price Per Unit		
		Low	Medium	High
Less than 5-storey building	Sqm	14,900	18,000	21,200
6-8 stories building	Sqm	19,100	21,000	23,100
9-15 stories building	Sqm	23,300	25,700	28,300
16 stories and above	Sqm	26,500	29,200	32,100

Source: The author, 2024

7. Operating Expense is forecasted 40% of the EGI (Effective Gross Income) which 17% is fixed cost, 20% is variable cost and 3% is other expenses.

Table 3.13*Project assumption: Hotel*

Project Assumption		
Construction Area	2,000	Sqm
Leasable Area	1,500	Sqm
Development Cost	186,504,500	Baht
Loan To Value	80%	of total loan
Mortgage	149,203,600	Baht
Debt Coverage Ratio	1.2	
Interest Rate	8.15%	Per year
Payment Period	20	Years
Expected Occupancy rate	70%	
Operating Expense	40%	of EGI
Capex	5%	of EGI after Opex

*Source: The author,2024***Table 3.14***Project Expected Income : Hotel*

Project Expected Income		
Cash Required for Debt (Month)	1,261,963	Baht
Cash Required for Debt (Year)	15,143,559	Baht/Year
Debt Coverage Ratio	1.2%	
Required Net Operating Income (NOI)	18,172,271	Baht
Required Effective Gross Income (EGI)	31,881,177	Baht
Required Potential Gross Income (PGI)	45,544,538	Baht/Year
Total required revenue	45,329,655	Baht/Year
Room (60) * 365 days	21,900	
Room /Night	2,080	Baht

Source: The author,2024

In the hotel development plan, it is assumed that the hotel will be developed as a small-sized 4-star hotel. Due to legal constraints on limited land, the assumption is made that it can accommodate 60 rooms, each approximately 25 square meters in size. With an estimated occupancy rate of 70% in the first year, which is higher than other hotels in the nearby area with a 65% occupancy rate, it is expected that the new hotel will attract more customers. The minimum selling price per night is set at 2,080 Baht. This price, when compared to nearby 4-star hotels, is considerably higher. The average price for a 4-star hotel in the city of Ubon Ratchathani is around 1,500 Baht per night.

Table 3.15

Project Expected Income ROE 10% : Hotel

10% ROE Assumption		
Assume ROE10%	10%	
Required Potential Gross Income (PGI)	45,544,538	Baht
ROE 10%	3,730,090	Baht
Total required revenue	49,274,628	Baht
Min Required Rent per sqm/month	2,250	Baht

Source: The author,2024

Therefore, it can be concluded that developing a hotel on the studied area may not be feasible. Due to the fact that the minimum selling price required is significantly higher than the market price and considering a 10% Return on Equity (ROE) would necessitate a selling price of 2,250 Baht per night. This price is comparable to 5-star hotels in Ubon Ratchathani, making it challenging to compete in the market. The limited development space and legal requirements that are not conducive to hotel development further complicate the feasibility of the project.

CHAPTER 4

LITERATURE REVIEW

A comprehensive study on the determinants influencing domestic tourism patterns among residents of Bangkok by Kultakha Naruthai in 2004 revealed that a predominant segment of the populace prefers traveling with companions and family members, predominantly utilizing private automobiles for transportation. This demographic primarily relies on interpersonal networks and diverse advertising mediums for tourism-related information dissemination. Notably, the study identified several pivotal marketing factors significantly impacting the tourism decisions of this demographic. Foremost among these factors is the aesthetic appeal and ambiance of tourist destinations, followed by service delivery processes, distribution channels, product quality, pricing strategies, and marketing communication efforts, in descending order of importance.

The aesthetic allure and ambiance of tourist sites are deemed paramount, necessitating an atmosphere of scenic beauty and visual appeal to attract and retain tourist interest. Service provision must be characterized by expeditiousness and excellence, with service personnel exhibiting commendable interpersonal skills and amiable dispositions. Distribution channels should prioritize convenience and swiftness in facilitating travel arrangements. Product offerings ought to ensure safety and security, while accommodation pricing must strike a balance between affordability and perceived value. Effective marketing initiatives, encompassing diverse media platforms, are imperative to foster brand awareness and engagement.

The study also uncovered several pertinent challenges impeding tourism experiences. These include tardy service delivery, inadequacies in communication channels, inflated hotel tariffs, concerns regarding safety and security at tourist destinations, and discrepancies between advertised service standards and actual service encounters. In conclusion, this academic inquiry underscores the multifaceted nature of marketing influences on domestic tourism behaviors, shedding light on critical areas for enhancement within the tourism sector to meet the evolving needs and expectations of Bangkok's resident population. Moreover, Charoenkitthanarat Songwit (2008) undertook an academic investigation on the determinants influencing the decision-making process of water tourism among visitors to Ayutthaya Province. Their research revealed that several factors related to tourism significantly impact the decision-making process of water tourists in the region. Among these factors, the most influential were found to be the

presence of historical sites and artifacts. Despite variations in demographics such as gender, age, socio-economic status, occupation, and average monthly income among tourists, the factors affecting decision-making in water tourism did not exhibit significant differences among visitors to Ayutthaya Province. However, notable disparities were observed concerning educational attainment levels, where statistically significant differences in factors were identified. This academic inquiry sheds light on the intricate interplay of various factors influencing tourist decision-making in water tourism, providing valuable insights for tourism management and marketing strategies in Ayutthaya Province.

Jaturongkul Adun (1998) defined consumer behavior as the process of decision-making and the activities of individuals when evaluating the acquisition, usage, and disposal of goods and services. In other words, it is the study of how each individual decides to allocate resources (money, time, personnel, etc.) related to purchasing and using goods. It also refers to the direct reactions of individuals to receiving and using goods and services in the economy, including the various decision-making processes, which occur beforehand and serve as determinants for subsequent reactions. Thatsanameht Khajarin (2019) conducted a study on the factors influencing purchasing decisions of consumers at modern retail stores in the Bang Khun Thian district. The aim was to investigate personal factors and marketing mix factors affecting purchasing decisions of consumers at modern retail stores in the Bang Khun Thian district and to compare personal factors affecting purchasing decisions of consumers at modern retail stores in the Bang Khun Thian district. The study found that demographic factors such as age, education level, occupation, and average monthly income significantly influence purchasing decisions at modern retail stores, except for gender and marital status. Marketing mix factors, including distribution channels and marketing promotion, significantly influence consumers' decisions to purchase products at modern retail stores, except for product and price factors.

Srisaad Kanin (2021) conducted an academic inquiry into the determinants influencing consumers' purchasing decisions at Top Market retail outlets situated within the Central Bangna shopping mall. The study aimed to scrutinize the marketing mix factors impacting consumers' purchasing decisions at these retail stores. The findings revealed that the majority of the sampled individuals were female, aged between 31 and 40 years, with educational attainment below a bachelor's degree, primarily employed in private sector roles or engaged in freelance work, and with a monthly income below 15,000 Baht. Regarding consumer behavior within Top Market retail outlets at the Central

Bangna shopping mall, most respondents frequented the stores 1-2 times per month, spending between 500 to 1,000 Baht per visit. Their preferences predominantly leaned towards snack and confectionery items, with peak visitation hours observed between 17:01 and 19:00. The research underscored a significant influence of consumers' perceptions regarding marketing mix factors on their purchasing decisions at Top Market retail stores. Overall, perceptions were notably positive, with statistically significant correlations observed between marketing mix factors (7Ps) and purchasing decisions at Top Market retail outlets in the Central Bangna shopping mall. The analysis revealed an R Square value of 0.50, signifying that marketing mix factors account for 50% of the variance in purchasing decisions. Specifically, two dimensions—process and price—emerged as significant determinants affecting consumers' purchasing decisions at Top Market retail outlets in the Central Bangna shopping mall.

The results of hypothesis testing found that marketing mix factors (7P's) affected the decision to purchase products Laemtong Department Store, Bangsean Chonburi Province with a statistical significance level at 0.05. R square of the model was found as 0.498. Showed that independent variables was marketing mix factors affected the consumers' decisions to purchase products Srisaad Kanin (2021) Laemtong Department Store, Bangsean Chonburi Province at 49.80 percent and the marketing mix factors (7P's) that affected the consumers' decisions to purchase products Laemtong Department Store, Bangsean Chonburi Province. There were 4 aspects: product, place, person and physical.

CHAPTER 5

MARKET FEASIBILITY ANALYSIS

Determining the demand for a community mall in Ubon Ratchathani would involve various factors and considerations to analyses demand in Ubon Ratchathani Demand

5.1 Overview Economic

The Thai Bankers Association has announced that the global economy in the year 2024 shows a growth trend but still faces significant risks. The economic activities of major countries in February 2024 mainly saw growth in the service sector (Thai Bankers Association,2024) However, labor indicators in the United States are beginning to decline, while China's stimulus measures remain limited. The crisis in the Red Sea has kept shipping rates high. These factors continue to pressure Thailand's export sector recovery. Thailand economy remains weak due to several factors. Export recovery has been slow, and tourism has not returned to its previous levels. Domestic purchasing power is also being constrained by household debt issues. Although the export sector has shown a trend of expansion, it is expected that the overall export value will grow at a low level throughout the year. Additionally, external risks remain high, while export-dependent industries operate at low production capacity. Tourism is recovering, but the number of Chinese tourists is still below pre- COVID levels as they prioritize domestic travel. Moreover, ongoing issues with debt and weak domestic purchasing power will continue to suppress household consumption in the future. Spending budget has shown improvement in the second quarter, adjusting faster from the annual expenditure calendar of 2024. This accelerated spending aims to facilitate economic recovery and sustain momentum from the second quarter onwards. It also aims to support both public and private sector investments in the near future. Therefore, it is expected that the Thai economy will expand within the range of 2.8-3.3%, as previously estimated.

5.2 Retail Sector Summary

During the first half of the year, businesses benefited from the recovery of the tourism sector, supporting the revival of retail businesses. This resulted in retail space demand reaching 6.4 million square meters, an increase of 1.7% from the end of 2022, while the available retail space accumulated to 6.8 million square meters, up by 1.9% YTD. Part of this increase was due to the reopening of renovated spaces in previously closed projects, with retail space supporting significantly increased by 16.8% YTD, leading to a slight decrease in the rental rate from 95.5% in 2022 to 95.3% at the end of June 2023 (CBRE Research, 2023)

Figure 5.1

Commercial Supply Trends



Source: CBRE Research, Krungsri Research

Source: CBRE Research, Krungsri Research

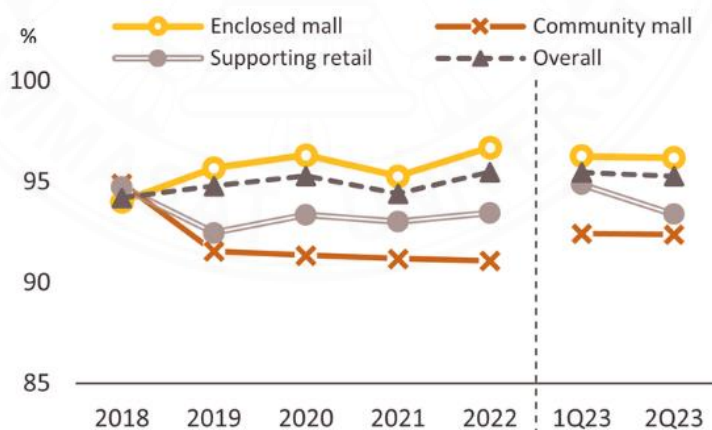
During the latter half of the year, it is expected that the demand for retail space will continue to grow steadily due to the strong purchasing power of foreign tourists (expected to be around 14.8 million people), which is a positive factor for retail areas in downtown areas, mostly located in large-scale shopping centers. Meanwhile, domestic purchasing power is still recovering within limited sectors. In terms of business owners, there is a trend of launching new projects according to business plans, resulting in an estimated 300,000 square meters of new supply entering the market in 2566 (+4.8% YoY), while the demand for rental space is expected to reach 250,000 square meters, an increase of 4.0% from the end of 2022. The rental rate is expected to stabilize at 94.7% (Krungsri Research, 2024)

5.3 Commercial Estate Trend for 2024-2026

The research from Krungsri research team reveals that the retail space rental business shows a continuous recovery trend, driven by factors such as (1) private sector consumption expanding in line with economic recovery, (2) government infrastructure investment in transportation leading to increased investment in retail space to accommodate urban community expansion, and (3) the return of purchasing power from foreign tourists to pre-COVID-19 levels in 2568. Krungsri Research stated that the demand for rental space will grow by an average of 2.4-3.6% per year, while business owners will continue to expand investment both in refurbishing existing branches and opening new projects. Some projects have been postponed from the previous year, especially large-scale shopping center projects, resulting in an estimated average of 3.7% new supply entering the market each year. As a result, the occupancy rate is gradually decreasing to an average of 93.3% (Krungsri Research, 2023).

Figure 5.2

Commercial building growth



Source: CBRE Research, Krungsri Research

Enclosed malls: Revenue is steadily growing, especially in central locations, which are desired by major brands and international brands. The supply is increasing in both central and suburban areas, with residential expansion. Most of the investment is in large-scale shopping centers, leading to an upward trend in rental rates, especially in downtown areas.

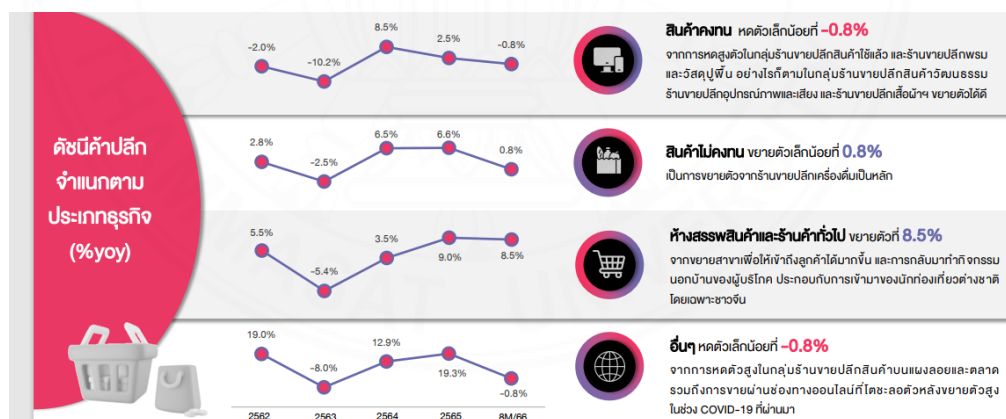
Community malls: Revenue is stabilizing due to the expected continuous increase in supply. However, the increase in investment spending is not high, making it easy to develop projects, especially in suburban areas. Nevertheless, recovery of purchasing power from middle-income target groups may take time, limiting the ability to raise rental rates.

Supporting retail: It is expected that revenue will remain stable, with a significant increase in supply-driven by incentives, particularly in central areas where mixed-use projects are being developed. Meanwhile, demand is growing in areas focusing on modern designs and convenient transportation, leading to a slight increase in rental rates.

Research from GSB shows that Department stores and general retail shops expanded by 8.5%, increasing their branches to reach more customers and resuming outdoor activities for consumers, coupled with the influx of foreign tourists, especially Chinese visitors.

Figure 5.3

Retail Index by Categories (%YOY)



Source: GSB

5.4 Infrastructure Development in Ubon Ratchathani

During the period of 2024-2026, the government trended towards expediting large-scale infrastructure projects consistently, both existing and new projects. Particularly, the development of transportation and logistics networks, according to the country's logistics system development plan for the years 2566-2570, under the Ministry of Transport, was designated with 112 projects with an investment budget of 9.8 trillion baht. (Thansettakij,2020)

The projects related to promoting the transformation of transportation patterns and various forms of continuous transportation were the most numerous, totaling 42 projects. (Thansettakij,2020) Accelerating investment in infrastructure will support new investment opportunities, especially for targeted industries in the EEC area, which will elevate Thailand's position in industries focused on advanced technology and lead to investment in related businesses as a result of the Crowding-in effects, such as construction contracting, real estate, transportation, and logistics. Ubon Ratchathani province will be beneficial from the construction of the dual-track railway phase 2, linking Chira Junction to Ubon Ratchathani. The construction, planned from 2566 to 2570, has a total budget of 37.534 billion baht according to the master plan. ((Thansettakij,2020)) As of now, construction has not yet commenced. The construction of the new railway line will serve as a key network facilitating connectivity with industrial estates and border trade. Once the transportation network linking regions is completed, it will boost Thailand's export and tourism opportunities with neighboring countries which will ultimately increase the demand in Ubon Ratchathani area. The driving force behind infrastructure policy supports private sector investment.

Figure 5.4

Railway development area and progress

โครงการ	ระยะเวลา ดำเนินการ	วงเงินตามแผน (ล้านบาท)						ความคืบหน้า
		ปี 2566	ปี 2567	ปี 2568	ปี 2570	ปี 2570	รวม	
1) รถไฟทางคู่ระยะที่ 1								
- ช่วงท่งผี - ปากน้ำโพ	2561-2567	8,025	286				8,311	อยู่ระหว่างดำเนินการ
- ช่วงสามกิโลเมตร - อู่รถไฟนครราชสีมา	2561-2569	2,830	225				3,055	อยู่ระหว่างดำเนินการ
- ช่วงนครปฐม - หัวหิน	2561-2567	1,785					1,785	อยู่ระหว่างดำเนินการ
- ช่วงหัวหิน - ปลายทางศิริราช	2561-2567		560				560	อยู่ระหว่างดำเนินการ
- ช่วงประจวบคีรีขันธ์ - อู่รถไฟ	2561-2567	1,715					1,715	อยู่ระหว่างดำเนินการ
2) รถไฟทางคู่ระยะที่ 2								
- ช่วงขอนแก่น - นครราชสีมา	2566-2570	3	5,012	11,195	11,749	1,790	29,749	ยังไม่ได้ดำเนินการ
- ช่วงปากน้ำโพ - นครราชสีมา	2566-2570	6,064	5,879	14,181	21,756	13,792	61,672	ยังไม่ได้ดำเนินการ
- ช่วงนครราชสีมา - เชียงใหม่	2566-2570	6	7,180	8,055	17,826	17,837	50,904	ยังไม่ได้ดำเนินการ
- ช่วงชุมทางถนนจิระ - อู่รถไฟนครราชสีมา	2566-2570	3,749	4,745	14,093	12,939	1,998	37,524	ยังไม่ได้ดำเนินการ
- ช่วงชุมทาง - อู่รถไฟนครราชสีมา	2566-2570	6	3,466	6,371	9,917	4,527	24,287	ยังไม่ได้ดำเนินการ
- ช่วงอู่รถไฟนครราชสีมา - หาดใหญ่ - สงขลา	2566-2570	6	6,920	9,975	19,552	16,768	53,221	ยังไม่ได้ดำเนินการ
- ช่วงหาดใหญ่ - ปาดังเบซาร์	2566-2571	5	895	2,165	2,908	685	6,658	ยังไม่ได้ดำเนินการ
3) โครงการรถไฟความเร็วสูง								
- รถไฟความเร็วสูงเชื่อม 3 สนามบิน ระยะที่ 1 (ดอนเมือง - สุวรรณภูมิ - อู่รถไฟนครราชสีมา)	2565-2571	424	413				837	อยู่ระหว่างดำเนินการ
- รถไฟความเร็วสูงเชื่อมเมืองภูมิภาค ช่วงกรุงเทพฯ - นครราชสีมา (ระยะที่ 1 กรุงเทพฯ - นครราชสีมา)	2561-2569	21,955	23,820	75,170	37,795		158,740	อยู่ระหว่างดำเนินการ
4) โครงการทำเชื่อมเพิ่มเติม ระยะที่ 3 (ในส่วนการทำเชื่อมแห่งประเทศไทย)								
5) โครงการขยายทางของแผ่นดินทั่วประเทศ	2566-2570	7,586	23,609	43,746	47,441	42,811	165,193	อยู่ระหว่างดำเนินการ
6) โครงการพัฒนาศูนย์ปฏิบัติการทางอากาศเพื่อเชื่อมโยงเครือข่ายคมนาคมขนส่ง	2566-2572	3,563	5,622	2,646	2,491	2,256	16,578	อยู่ระหว่างดำเนินการ

Source: Office of Transport and Traffic Policy and Planning, as of March 2023
Note: * Action Plan on Thailand Logistics Development 2023-2027; Ministry of Transport

Source: Office of Transport and Traffic and Planning, March 2023

5.5 Population Density in Amphoe Muang Ubon Ratchathani

Population density is a crucial consideration for community malls as it directly impacts the potential customer base, foot traffic, profitability, and attractiveness to retailers. A thorough understanding of the population density of the surrounding area is essential to make informed decisions about the location and feasibility of a community mall project. Assess the population density of Ubon Ratchathani and its surrounding areas. Higher population density generally indicates a greater potential customer base. The project is located in Amphoe Mueang Ubon Ratchathani which contains the highest population in Ubon Ratchathani province. The information from NSO as of 2022 shows number of populations which is 224,850 in total from 98,553 household in Amphoe Mueang Ubon Ratchathani which is the highest number among other districts in Ubon Ratchathani (NSO,2022)

Table 5.1*Number of population in Amphoe Mueang Ubon Ratchathani*

อำเภอ	จำนวนประชากรชาย	จำนวนประชากรหญิง	จำนวนประชากรทั้งหมด	จำนวนบ้าน (หลังคาเรือน)
เมืองอุบลราชธานี	107,345	117,505	224,850	98,553

Source: NSO, 2023

5.6 Demographics

Demographics of the population, including age groups, income levels, and lifestyles. This information helps in tailoring the offerings of the mall to suit the preferences and purchasing power of the target audience. Refer to the data from Gapmaps, the predominant age group in the population falls within the range of 45-54 years old, comprising 16.21%, followed by individuals aged 25-34 years at 15.26%, and those aged 35-44 years at 15.17%. Therefore, it is inferred that the majority of the population falls within the age bracket of 25-54 years old, accounting for approximately the information align with the data from UbonNSO as of 2022, it is revealed that 16.6% of the population are elderly. Information from UbonNSO shows that the unemployment rate in the year 2565 (2022) was 0.09%. The average household debt in 2564 (2021) was 332,570 baht per household while the average monthly household income is 20,969 baht per household and average monthly household expenditure is 19,142 baht per household. (NSO,2022)

5.7 Retail Space in Ubon Ratchathani

Upon surveying the competition and market landscape, it has been observed that there are four major retail players in the market. All four prominent developers have established large-scale shopping centers, namely Lotus Ubon Ratchathani, Big C, Makro, and the recently introduced Central Ubon Ratchathani this year. Each of these market players possesses a sizable area, with Lotus having an expansive space of up to 13,160 square meters. This area is divided into a mall zone covering 7,107 square meters and a hypermarket spanning 6,053 square meters. Big C Ubonratchathani has a total area of 11,248 square meters, while Makro Ubonratchathani encompasses 10,278 square meters

and Central Ubonratchathani covers an area of 10,000 square meters, excluding the space dedicated to the Robinson department store (BangkokBiz, 2018)

In addition to well-established players, there are also local real estate developers who have developed small-scale community mall projects, such as U Park, Y square foodmall and Ubon Square. The combined area of these developments exceeds 10,000 square meters. All the mentioned projects are located within an approximate 5-kilometer radius from the city center of Ubon Ratchathani, serving as a hub for prosperity and offering various amenities, including hospitals, schools, offices, and other essential governmental facilities in the city. As of the survey conducted by the author in November 2023, the space leasing occupancy rates for Lotus, Big C, and Central are 98% , 95% , and 96% , respectively while local operator as Y square foodmall has 90% occupancy rate, Ubon square 98% and U-Park 75% (Thanawan Ratnapradipa, 2024)

5.8 Supply Analysis (Competitor Analysis)

Direct Competitor in Ubonratchathani. Analyzing local competitor as community mall in Amphoe Muaeng Ubon Ratchathani, the researcher found there are 3 major player as listed in Table below;

Table 5.2*Direct competitor information table*

Direct Competitor			
Name	UBon Square	Y Square Foodmall	Upark
Photo			
Gross Area	10,000	7,000	6,500
Net Lease	5,500	2,800	2,500
Occupancy Rate	98%	90%	75%
Price/Sqm	800	850	650
Key Tenant	MR. DIY, KFC, Mc Donald	KFC Drivethru	Wine Connection
Parking (slot)	300	50	70

Source: The author, 2024

Indirect competitors are identified as Central Ubon Ratchathai, Lotus's Ubon Ratchathani, Big C Ubon Ratchathani, the information as per shown in Table below;

Table 5.3*Indirect Competitor Information table*

Indirect Competitor			
Name	Central Ubon	Lotus's Ubon	Big C Ubon
Gross Area (sq.m)	15,675	13,160	11,248
Occupancy Rate	96%	98%	95%
Price/Sqm	1300	900	800

Source: The author, 2024

5.9 STP Analysis

STP is a marketing strategy tool used to segment a market, target specific segments, and position products or services to effectively reach and resonate with those segments. The acronym “STP” stands for Segmentation, Targeting, and Positioning. The researcher conducted an STP analysis in order to determine the direction of the brand and to be able to design projects, establish pricing strategies, and other related aspects that align with the market's needs and the company's objectives by having in-front-of community mall interview for Ubon Square

5.9.1 Segmentation

Segmentation involves dividing the broader market into distinct groups of consumers who share similar characteristics, needs, or behaviors. This allows marketers to identify and understand the diverse needs and preferences of different customer segments. It was found that the majority of customers using the services of various shops within the project are primarily young adults to middle-aged individuals, aged between 18 to 35 years old. They reside within Ubon Ratchathani Municipality and spend no more than 10 minutes traveling to the project. Most customers travel by motorcycle, although some use public transportation. The typical time for customers to visit and make purchases is during the evening, starting from 4 p.m. onwards. The main reasons for visiting the project are to buy food, clothing, and fresh groceries. Customers are generally satisfied with the prices of the products within the project, which are easily accessible and offer a variety of food options. However, there is a lack of other types of products. Customers have expressed the need for public spaces, such as seating areas or gathering spaces.

5.9.1.1 Demographic

The primary focus is on individuals aged 18-55 with moderate to high spending capacity, which aligns with the predominant purchasing power within the target age group. The target customer group has initially been segmented based on the population in Ubon Ratchathani Province and its adjacent districts, including areas bordering Laos. The Demographic of expected customer are related to the information referred to Table 3.4, the data from Gapmaps shows predominant age group in the population falls within the range of 45-54 years old, comprising 16.21% , followed by

individuals aged 25- 34 years at 15. 26% , and those aged 35- 44 years at 15. 17% (Gapmaps,2024) Therefore, it is inferred that the majority of the population falls within the age bracket of 25-54 years old, Therefore, it can be inferred that the target customer group may consist of residents residing in the Mueang Ubon Ratchathani District

5.9.1.2 Geographic

Segmented by geographic focusing on customer who resides in Amphoe Muaeng Ubon Ratchathani as well as the Khueng Nai, Muang Sam Sip, Lao Suesa Kok, Warinchamrap, Sawang Wirawong, and other nearby sub-districts as depicted in Figure 2. 1. Moreover, the secondary targeted customer are identified as Laotians as there is border nearby. Consequently, the estimated population can be summarized as follows:

Table 5.4

Estimated population of Ubon Ratchathani nearby district

No.	District	Total Population	Area (square kilometer)	Total Population/Area (square kilometer)
1	Muang Ubonratchathai	224,850	406.39	553.29
2	Det Udom	177,763	1,416.00	125.54
3	Warin Chamrap	160,641	584.00	275.07
4	Trakarn Puetphol	131,058	1,306.00	100.35
5	Piboonmangsaaharn	129,508	1,277.95	101.34
6	Khueng Nai	106,737	772.82	138.11
7	Buntrix	95,736	1,402.00	68.29
8	Muang Sam Sip	84,447	917.54	92.04
9	Khemmarat	73,181	522.16	140.15
10	Sri Muang Mai	71,043	1,310.00	54.23

Source: NSO, 2024

5.9.1.3 Behavioral

Group of individuals who enjoy hanging out, dining out, socializing, and meeting people. They are modern-minded, enjoy beauty services, value learning, and prioritize family.

5.9.1.4 Psychographic

Individuals inclined towards expenditure for the sake of convenience, aesthetic enhancement, and novelty.

5.9.2 Targeting

In targeting customers for the community shopping center, the focus group includes those located near the project, whether residential areas or workplaces. Therefore, both types are included within a radius of no more than 3-5 kilometers. This encompasses the population in Ubon Ratchathani, specifically Amphoe Muang Ubon Ratchathani. Targeting involves selecting one or more of the segmented groups (segments) identified during the segmentation process as the focus of marketing efforts. Marketers evaluate the attractiveness of each segment based on factors such as size, growth potential, profitability, and compatibility with the organization's resources and objectives. By targeting specific segments, marketers can tailor their marketing strategies and messages to better meet the needs and preferences of those segments. For the target customers, they generally have a more diverse background compared to single-family home buyers. The common characteristics of this customer group include moderate to high income and spending levels. This is to align with the housing project, with the target customer group characterized as follow Figures;

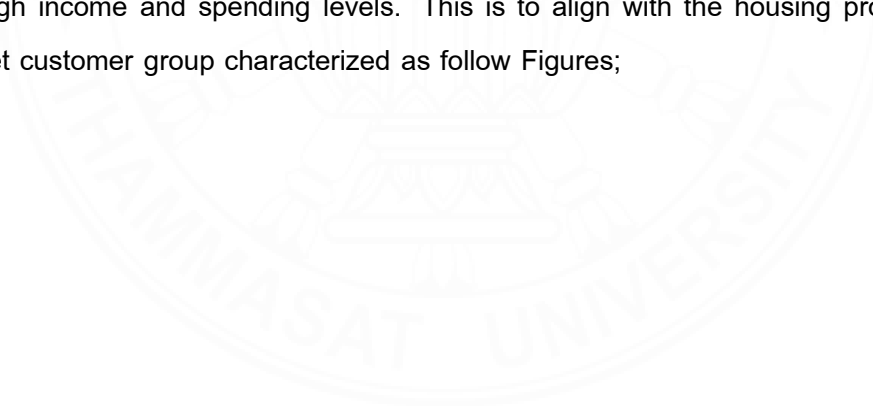


Table 5.5*Target Customer*

Segmentation		Targeting
Demographic	Age	24-55
	Income	30,000 per head and above
	Occupation	Government officer, Business owner, Student
Geographic	In Amphoe Mueang Ubon Ratchathani Nearby sub district	
Behavioral	Seeking for New experiences Family and Friend Valued, Like to hangout Environment Conciousness	
Psychographic	Target customer is group of family who like luxury goods Enjoy convenience but prefer to spend time outdoor with pets	

Source: The author, 2024

5.9.3 Positioning

Positioning refers to the way a product or service is perceived by consumers relative to competing products or services in the marketplace. It involves creating a distinct and desirable image or identity for the product or service in the minds of the target market. Marketers use various positioning strategies to differentiate their offerings and communicate their unique value proposition to consumers. Effective positioning helps to create a strong brand identity, build customer loyalty, and gain a competitive advantage in the market. In crafting our market positioning strategy, we will conduct a comparative analysis encompassing both quantitative and qualitative dimensions. Quantitative assessments will involve the evaluation of retail spending levels, spanning from affordable to premium categories. Concurrently, qualitative considerations will focus on community development in the vicinity, assessed along a spectrum from robust social integration to more independent configurations. Through this methodical approach, we aim to identify distinctive competitive advantages relative to neighboring counterparts, thus enabling the establishment of a market position that distinguishes our offering within the locale.

Moreover, the pronounced emphasis on social and environmental consciousness, the proposed shopping center development underscores a distinctive market positioning. Consequently, the market positioning of the shopping center is delineated clearly, encompassing both brand attributes and product labels, as follows.

Figure 5.5

Positioning



Source: The Author,2024

Overall, STP analysis is a fundamental framework that helps marketers effectively segment their target market, identify attractive segments to target, and develop positioning strategies that resonate with those segments to achieve marketing objectives and drive business success.

5.10 4Ps – Product, Price, Place, Promotion analysis

Through an overarching analysis of the retail market landscape, it has been discerned that the proposed development project exhibits notable distinctions and surpasses competitors on various fronts. This positions the opportunity for market penetration within the said locale at a relatively high level. The primary strategy in product development revolves around creating differentiation, wherein the project offers products and services that stand out from those of other competitors. This is particularly evident in

offering more than competitors, such as enhanced convenience, comprehensive amenities, serving as a new destination for relaxation and leisure amidst urban surroundings, and fostering pet-friendly environments.

5.10.1 Product

5.10.1.1 Logo

The brand personality and product label emphasize value for green spaces and modernity. The brand will be more accessible, with the objective of establishing a community mall that provides convenience for residents in the vicinity. This community mall will operate under the name “PJ Mall (Peace and Joy),” with primary color tones of green orange, and gray.

Figure 5.6

Project Logo



Source: The Author,2024

The development of PJ Mall, a community shopping center, aims to establish a retail destination within a locality readily accessible from residential zones, educational institutions, and commercial districts. This locale also features substantial amenities. The architectural design prioritizes the efficient utilization of space to optimize functionality and usability.

5.10.1.2 Development and Design concept

The development and design concept of this project draw inspiration from Queen Market in Melbourne, emphasizing locality and fresh, innovative cuisine. It blends with the multi-lifestyle concept of The Commons Thonglor in Bangkok. The design philosophy for this project focuses on creating a cohesive community within

the neighborhood by prioritizing accessibility. Design elements emphasize lush green spaces to create a livable environment easily accessible to all. Public spaces play a crucial role, fostering community interaction and shared experiences.

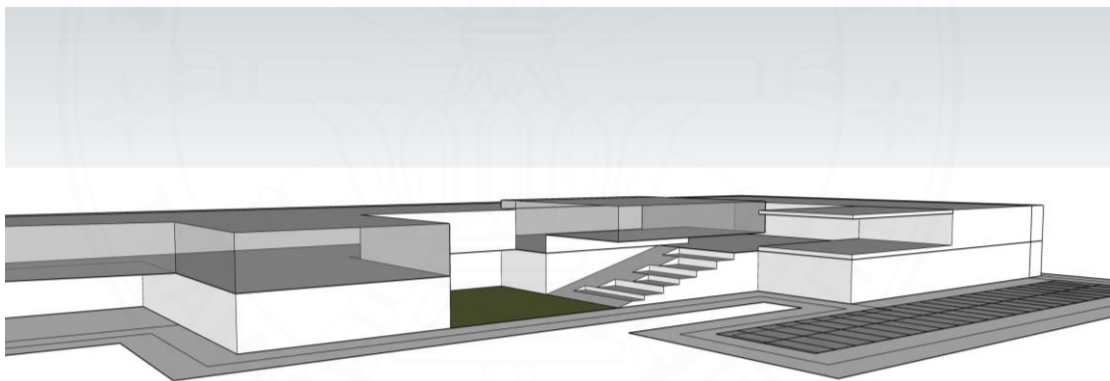
The core concept of the project is “Empowering Tomorrow, Sustaining Today.” Represent the PJ (Peace and Joy) Mall logo that reflects this:

- P: Peace signifies the tranquility and serenity of the mall, offering a relaxing space for unwinding and leisure on weekends.

- J: Joy reflects the fun hidden within the project's design, coupled with a focus on family bonding and shared moments, including across generations with pets. Both these distinguishing features aim to deliver memorable experiences to customers from all walks of life.

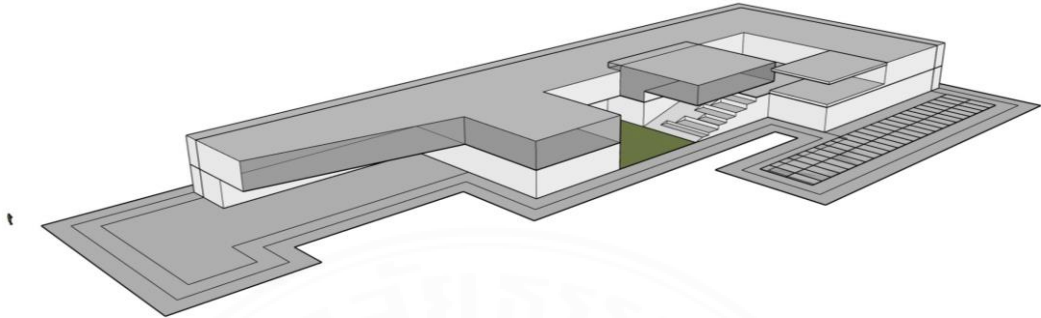
Figure 5.7

Project Scheme



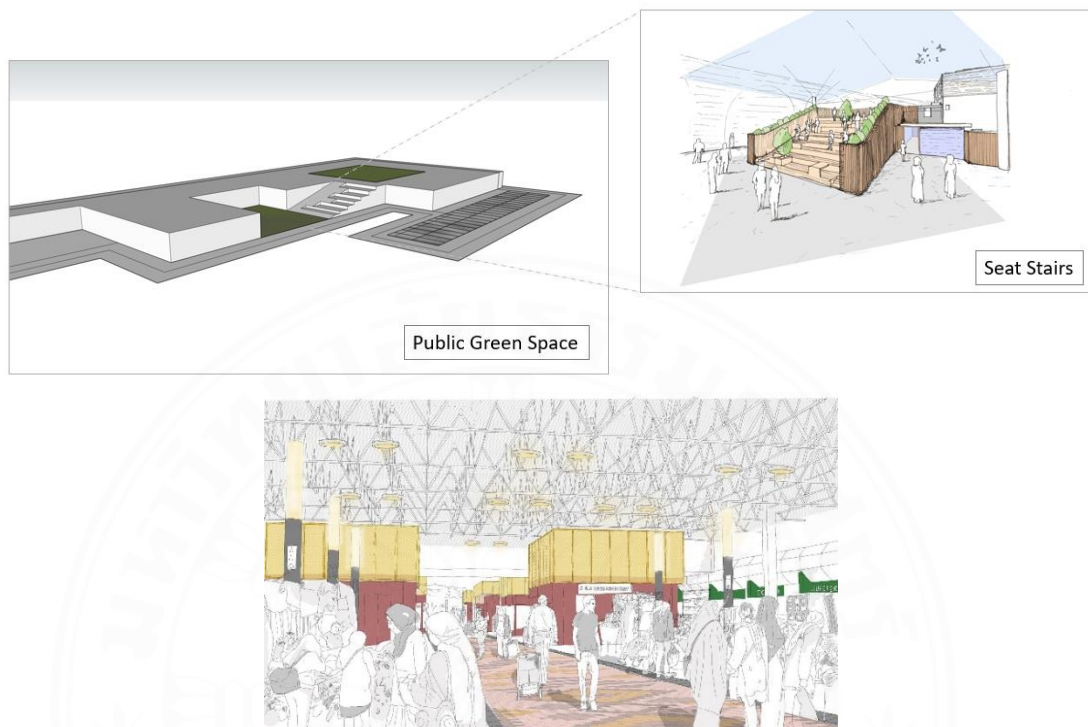
Source: The Author,2024

The project has been structured across two levels to facilitate the presentation of a diverse array of products and services. Plan Level 1 showcases a spatial layout tailored for communal activities. Notably, both Level 1 and Level 2 incorporate verdant zones. Additionally, the parking facility has been meticulously designed to ensure convenience and seamless accessibility to the interior spaces of the project.

Figure 5.8*Project Scheme*

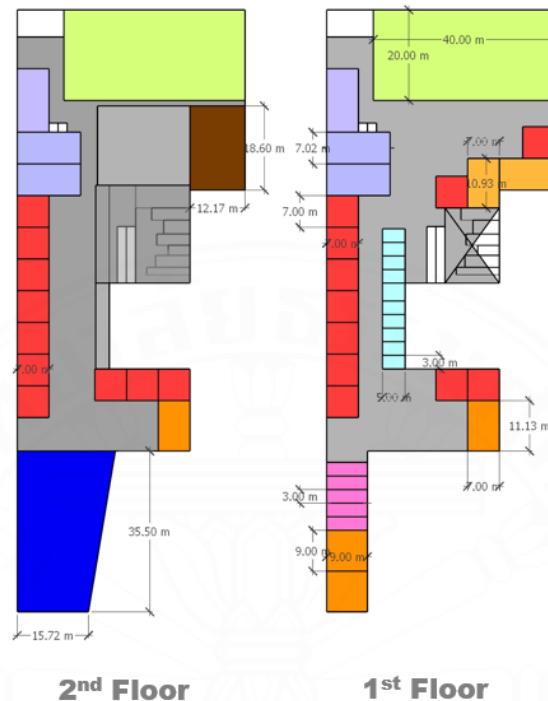
Source: The Author, 2024

In Plan Level 1, the design is meticulously crafted to serve as a communal dining area and a venue for social gatherings, particularly post-office hours. Incorporating verdant spaces for pet-friendly activities, the layout underscores a deliberate emphasis on fostering a vibrant dining and socializing ambiance. The allocation of tenancies on Level 1 primarily prioritizes eateries and retail establishments renowned for their expediency and accessibility.

Figure 5.9*Conceptual Design*

Source: The Author, 2024

The spatial configuration and allocation are delineated in the accompanying layout. Floor area units are subdivided into petite kiosks to accommodate sub-retailers, aligning harmoniously with the overarching project ethos of “Empowering Tomorrow, Sustain Today.” Prospective tenants on Level 1 predominantly comprise local proprietors hailing from Ubon Ratchathani province.

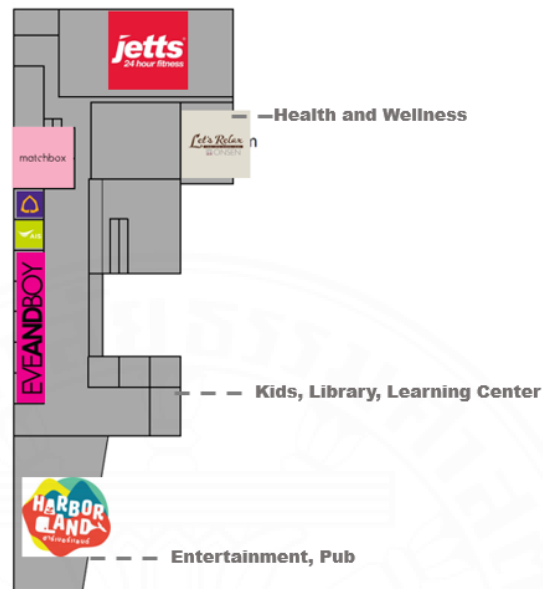
Figure 5.10*Floor Plan*

Source: The Author, 2024

This includes local farmers, strategically placed within the pink zone spanning approximately 21 square meters, a total of 5 units. Adjacent to it, the blue area measuring 15 square meters and accommodating 10 units, is designated for the sale of grab-and-go food items, encompassing finger foods, snacks, and beverages. Positioned proximally to the garden and the public green space, this arrangement ensures convenient access for patrons seeking quick refreshments.

Meanwhile, the red area, encompassing 49 square meters and comprising 11 rooms, is reserved for medium-sized restaurants and an array of ancillary services. These include purveyors of pet provisions, clothiers, and toy emporiums, among others.

Augmenting convenience further, the green area is earmarked as a supermarket, facilitating hassle-free navigation for patrons utilizing shopping carts, obviating the need for elevator traversal. Complementarily, the purple area accommodates health and beauty service providers.

Figure 5.12*2nd floor Prospect Tenant*

Source: The Author, 2024

The second-floor space is allocated to tenants focusing on entertainment, including areas for children, as well as health and wellness services. This is to transform the project into a destination where daily needs can be fulfilled comprehensively.

5.10.2 Place

The customer base of PJ Mall consists of two main groups: tenant customers and service users. These groups utilize different distribution channels, as follows:

For tenant customer online channels, primarily promoted through Facebook and the website, serve as the main communication channels. These channels are the most official and clear means of providing information, allowing for the presentation of various details such as mall size and layout, rental space allocation, and offline channels. Offline channels are crucial, with outreach efforts directed towards potential tenants perceived to have the potential to attract customers. Real estate agents are also utilized to identify potential tenants.

Figure 5.13

Website Example

VENDORS < BACK

Market (Fl. M)

Quality food and drinks by specialized purveyors. Let us be your second kitchen – any meal, any time!

1 Roots
2 Seven Suns
3 Hunter Poke
4 Buenazo by Na Projects
5 Esan Ping Ping
6 Fowlmouth & Crackhouse
7 Sourced Grocers
8 Baba Shuk
9 Monty's by Roast
10 Dolly Churro

11 Guss Damn Good
12 Eastbound
13 Mad Moa
14 The Lobster Lab
15 The Barrel
16 The Beer Cap
17 Sugarray Apartment
18 VIVI's Pasta
19 Bun Meat & Cheese
20 Bapsang

Market (Fl.M) Village (Fl.1) Play Yard (Fl.2) Top Yard (Fl.3)

Source: www.vendors.com

Source: www.vendors.com

For service user customers, the main distribution channel will be offline. This is because customers need to physically visit the mall to utilize its services. The mall itself serves as the primary distribution channel.

5.10.3 Promotion

For tenant customers:

This group primarily focuses on sales-oriented marketing. Therefore, the main approach to attract them is by offering reduced rental rates for high-potential tenants at lower-than-normal rates. These anchor tenants, which are predominantly supermarkets and fitness centers, will receive a 5% discount on rental fees during the first two years of operation to encourage the density and attractiveness of the mall.

For service user customers:

In terms of marketing to service user customers, strategies have been planned for both online and offline channels to attract customers to use the mall's services. The operational approach must align with the analyzed behaviors of the target customer group.

Online Channels

This channel will primarily focus on creating engagement and awareness with Thai customers, who spend a considerable amount of time on the internet. According to a study on behavior, Thais spend approximately 8 hours and 6 minutes on the internet per day. The most popular online channels among Thais are Facebook, LINE, Facebook Messenger, TikTok, and Instagram, in that order (We Are Social and Meltwater, 2022). Therefore, the project will prioritize these suitable online channels. Key Opinion Leaders (KOLs), individuals with influence over their followers' opinions, will be utilized across various marketing channels. Currently, people prioritize trustworthiness, which can be confirmed through experienced reviews. Each channel will have tailored content to suit its specific audience, as each channel's suitability varies.

(1) Facebook is the primary channel for promotion, focusing on providing information, news updates, and announcements about upcoming events. It also provides information about the shops within the project, aiding them in attracting customers.

(2) LINE is used for communication with customers, promoting various activities, and interacting with them. Additionally, it can be utilized for point accumulation systems and distributing discount coupons.

(3) TikTok is a highly popular channel known for its easily digestible content format, allowing users to receive news and information without reading lengthy texts. It summarizes important content into short videos.

(4) Instagram is primarily used by Gen Y and Gen Z groups (Datareportal, 2023). Content mainly consists of visually appealing images and short videos, emphasizing interesting lifestyles.

Offline Channels

In the offline realm, various channels are utilized according to the objectives of each media type, including:

(1) Billboards: Placed in front of the project and nearby areas to promote to the target customers, including residents and those working nearby, encouraging them to utilize the services.

(2) Special Events: Such as garden concerts and free workout sessions held in the park, aimed at attracting customers to use the services. These events align with the project's main concept of fostering community interaction.

(3) Weekly Events: Organized in the rooftop garden area, these events feature various activities, including music performances, to create an engaging atmosphere for customers. Examples include handmade goods markets and vegan food festivals.

(4) Discount Coupons: During the initial phase of the project opening, discount coupons are provided to customers using the mall's services. An additional marketing budget of 500,000 baht is allocated in the first year of operation to stimulate purchases and assist tenants in generating income.

Figure 5.14

example of offline billboard



Source: Googlemap.com

5.11 SWOT Analysis

Encompasses a systematic examination of internal and external factors that influence business operations, aiming to devise tailored strategies conducive to organizational success. In this study, the researcher engaged in interviews with residents of Ubon Ratchathani Municipality, facilitating a focused group discussion involving eight participants to discern the strengths and weaknesses inherent in various community malls within the locality. The outcomes of these discussions are summarized as follows:

5.11.1 Strengths

Each community mall within Ubon Ratchathani Municipality exhibits distinctive strengths. Notably, Ubon Square garners considerable favor among the youthful demographic aged 18-35, owing to its comprehensive array of retail outlets,

affordable dining options, and convenient accessibility. Conversely, Central Ubon Ratchathani distinguishes itself with a diverse assortment of establishments, exemplary customer service, and a conducive indoor ambiance featuring air conditioning, thereby facilitating seamless navigation throughout the day and accommodating the provision of comprehensive services akin to a one-stop destination.

5.11.2 Weaknesses

Challenges confronted by community malls vary, with Ubon Square contending with the limitation of being an outdoor facility, impeding customer mobility during hot daytime conditions. Central Ubon Ratchathani faces issues pertaining to inadequate parking management and congestion during peak hours, while Lotuss and Big C encounter cleanliness concerns and the absence of central or public spaces accommodating pets, thereby detracting from their overall appeal.

5.11.3 Opportunities

Insights gleaned from interviews underscore the geographical advantage conferred by Ubon Ratchathani Province's proximity to the Laotian border. A notable phenomenon entails the influx of Laotian consumers during weekends, traversing the border to partake in culinary and retail offerings. This influx comprises both business-to-consumer (B2C) and business-to-business (B2B) transactions, with popular items including packaged snacks, cosmetics from established brands, and electronic devices.

5.11.4 Treats

The proliferation of developmental initiatives across Ubon Ratchathani Municipality has engendered heightened competition within the market landscape. Prospective entrants may exploit the extensive urban development within the locale, potentially intensifying competitive pressures faced by incumbent community malls.

The operational plan has been projected as follows:

1. Pre-construction

Studies are estimated to take approximately 3 months. Following this, the project concept and design development are expected to span about 3 months as well. Subsequently, the duration for permit application, contractor procurement, and pre-construction activities is projected to be approximately 5 months. This phase comprises the initial steps of the project, including feasibility assessments, conceptualization, design elaboration, permit acquisition, contractor selection, and pre-construction preparations, totaling approximately 11 months.

2. Construction phase

The construction phase of the project entails several key activities, including land leveling, project construction, interior works, infrastructure development, and landscaping. The construction period is estimated to span approximately 24 months, with the initial 3 months dedicated to land leveling. Infrastructure works, such as piping and mechanical and electrical (M&E) installations, are expected to require approximately 3 months initially, followed by an additional 2 months for electronic setup and lighting installation. These activities are integral to the overall construction process, ensuring the completion of the project within the designated timeframe. Additionally, landscaping work is scheduled to commence once the majority of the construction activities are nearing completion. This phase of the project is expected to take approximately 5 months to finalize, enhancing the overall aesthetics and functionality of the development.

3. Post Construction phase

Following the construction phase, post-construction encompasses various activities to facilitate the project's transition to operational status. These include sales and marketing initiatives, brand communication efforts, organizing a grand opening event, and ongoing maintenance work. Sales and marketing activities will focus on promoting the newly constructed facility to potential tenants and customers, highlighting its features, amenities, and benefits. Brand communication efforts will aim to establish and maintain a strong brand presence for the community mall, ensuring consistency in messaging across various channels. Organizing a grand opening event will serve as a platform to celebrate the completion of the project and attract attention from the local community and stakeholders. This event will also provide an opportunity to showcase the mall's offerings and generate excitement among potential customers. Furthermore, maintenance work will

be ongoing to ensure the proper functioning and upkeep of the facility. This includes routine maintenance tasks such as cleaning, repairs, and inspections, as well as addressing any issues that may arise post-construction.

Overall, the post-construction phase plays a crucial role in transitioning the project from development to operational status, with a focus on sales, marketing, brand communication, event organization, and ongoing maintenance to ensure the success and sustainability of the community mall.



CHAPTER 7

FINANCIAL FEASIBILITY

To conduct a financial feasibility analysis, the researcher will commence by formulating financial assumptions, which will be categorized into principal components: revenue, land acquisition and project development costs, and selling and management expenses. Subsequently, we will utilize this information to evaluate financial feasibility, considering metrics such as Net Present Value (NPV) and Internal Rate of Return (IRR). Moreover, we will conduct an analysis of the risks linked with the investment and the project's susceptibility to these risks.

7.1 Project Investment Assumption

7.1.1 Income Assumption

On the revenue side, the main revenue comes from leasing project space, consisting of a total of 4 buildings with different tenants. Therefore, there are different pricing assumptions. In addition to revenue from leasing space, the project also generates additional revenue from activity space rental, water and electricity fees, and parking fees. The main revenue is rental income, which is efficient and varies according to the rental rate. Therefore, assumptions regarding rental rates have been made as another component in calculating revenue from space rental, with the following revenue assumptions.

Table 7.1

The rental prices and revenue growth

Type of Income	Price	Growth Rate
Rental Space	750 baht/sqm/mo	3.33% every year (10% every 3 years)
Event Space (550sqm)	70 baht/sqm/mo	3.33% every year (10% every 3 years)
Utility	10% EGI	-
Parking fee	Free of charge	-

Source: The Author, 2024

7.1.2 Occupancy Rate Assumption

Regarding the rental rate, it will be determined based on the market in the vicinity, which has a relatively high occupancy rate of 90% - 100%. Therefore, the rental rates for the shopping center are set to be comparable to the potential of competitors.

Table 7.2

Occupancy rate Assumption

Type of Income	Occupancy Rate
Rental Space	
Year 1	80%
Year 2	85%
Year 3 onwards	90%
Event Space Income (Only Sat-Sun)	
Year 1	60%
Year 2	65%
Year 3 onwards	70%

Source: The Author, 2024

7.1.3 Land Cost and project development

In project development, the cost of land and land development amounts to 154,826,250 baht, and the total project development cost is 183,528,180 baht, summing up to 338,354,430 baht, inclusive of various expenses as detailed below.

Table 7.3*Land Cost Development*

	Price Per Unit	Unit	
Land Cost	70,000	2,173	152,110,000
Land Development Cost	1,250	2,173	2,716,250
Total			154,826,250
Project Design Fee	3%	of Construction Cost	4,333,500
Construction cost	18,000	8,025	144,450,000
Fence	5,000	90	450,000
Concrete Floor/Road	800	5000	4,000,000
Project Signage	15,000	20	300000
Landscape	3,000	1,000	3,000,000
Rooftop Garden	5,000	500	2,500,000.00
Piping	2,000,000	1	2,000,000
Passenger Lift	1,900,000	2	4,200,000
Loading Lift	2,300,000	1	2,300,000
Escalator	1,200,000	2	2,400,000
Construction Management fee		8% of Dev Cost	13,594,680
Total			183,528,180
Total Land and Development Cost			338,354,430

Source: Table from author survey

7.1.4 Selling Costs and Management Expenses

This section will encompass various expenses associated with the overall project operations, beyond the initial investment, including all costs related to utilities, employee salaries, office expenses, marketing expenses, building maintenance reserves, property taxes, and others related expenses.

Table 7.4*Selling Cost and Management Expense Assumption*

Detail	Assumption	
Utility cost	80%	of total utility income
Utility cost for event space	5%	of event space income
Payroll	3%	Every Year
Utility cost for public space	5%	of Rental Space EGI
Marketing Cost	3%	of Rental Space EGI
Grand Opening & Other Promotion cost	3%	of Rental Space EGI
Office Supply Cost	20,000	Baht per month increase 3% yearly
Maintenance Cost	5%	of Rental Space EGI

Source: The Author,2024

Table 7.5*Payroll Assumption*

	Payroll Cost		
Sale and Marketing	3	25000	75,000.00
Accountant	2	25000	50,000.00
Building Manager	2	30000	60,000.00
Engineer	1	40000	40,000.00
Cleaning Staff	6	15000	90,000.00
Security officer	4	15000	60,000.00
Project Manager	1	50,000	50,000.00
Gardener	2	15,000	30,000.00
Total			455,000.00

The payroll assumption has double the number of staff reflect the longer operation hours since the project plans to operate between 11.00 am to 12.00 pm.

Source: The Author,2024

7.2 Development Investment Assumption

7.2.1 Loan Structure

The total capital used for project development comes from two sources: borrowing from commercial banks and owner's equity. The proportion of debt to equity is referenced from the average debt-to-equity ratio of companies with similar business profiles listed on the stock market, such as MBK, J, CPN, AWC, and PLAT. These companies have an average debt-to-equity ratio of 52:48. As a new entrant in the market, the financial structure used has a lower debt component compared to the average debt-to-equity ratio, with a ratio of 40:60 for debt to owner's equity.

Table 7.6

Loan Structure

Loan Structure		
Total of Land Cost		152,110,000
Debt	40%	60,844,000.00
Equity	60%	91,266,000.00
Project Development Cost		186,244,430
Debt	40%	74,497,772
Equity	60%	111,746,658
Total Loan		135,341,772.00

Source: The Author, 2024

7.2.2 Cost of Capital

In calculating the discount rate, the Weighted Average Cost of Capital (WACC) method is used, taking into account the proportions of investment, the rate of return, and corporate income tax. This is to find the cost of investment in project development.

$$\text{WACC} = W_d \times [K_d \times (1 - T)] + W_e \times K_e$$

Where:

- Wd = Proportion of borrowing from commercial banks
- Kd = Interest rate on borrowings
- We = Rate of return on equity
- Ke = Rate of return on equity
- T = Corporate income tax rate, which is 20%

1. Interest Rate on Borrowings (Kd):

For project development, the interest rate on borrowings used is the interest rate charged by commercial banks, typically referred to as the Marginal Lending Rate (MLR). The average MLR from 5 commercial banks is 7.15% per annum. It is estimated to increase by 1% due to the project being developed by a new real estate entrepreneur. Therefore, the interest rate is MLR+1, or 8.15% per annum.

2. The rate of return on equity (Ke)

The rate of return on equity (Ke) is determined using the Capital Asset Pricing Model (CAPM), which establishes the relationship between expected returns and market risk. This model is used to determine the rate of return that investors should receive from investing in project development. The equation is as follows:

Ke = Expected rate of return for the owner

Rf = Risk-free rate of return, referenced from the 30-year government bond yield, which is 3.14%

(Rm-Rf) = Expected rate of return from investing in the stock market minus the return from risk-free assets (Equity Risk Premium) for Thailand, which is 6.94%

Beta (β) = Coefficient of volatility of investment returns

The calculation of the coefficient of volatility of investment returns can be derived from the volatility coefficient of companies in the Stock Exchange of Thailand that operate in real estate development, specifically in shopping center properties, with similar debt-to-equity ratios. The equation is as follows:

$$B_l = B_u \times [1 + (1-T)(D/E)]$$

B_l = Leveraged Beta (β), the coefficient of volatility of investment returns for leveraged operations

B_u = Unleveraged Beta, the coefficient of volatility of investment returns for operations without leverage

D/E = Debt-to-equity ratio

T = Corporate income tax rate, which is 20%

Table 7.7*Beta Analysis*

Company	D:E	D/E	BI	Bu
MBK	51:49	1.04	1.14	0.7
J	63:37	1.7	1.28	0.48
CPN	64:36	1.39	0.97	0.46
AWC	49:51	0.96	1.42	0.8
PLAT	34:66	0.52	1.04	0.74
Unleveraged Beta: 0.64				

Source: Author,2024

From the calculation to find the leveraged beta:

$$\begin{aligned}
 BI &= Bu * [1 + (1 - T) (D/E)] \\
 &= 0.64 * [1 + (1 - 20\%) (40/60)] \\
 &= 0.98
 \end{aligned}$$

$$\begin{aligned}
 [Ke &= Rf + [(Rm - Rf) * beta] \\
 &= (3.14\%) + (6.94\% * 0.98) \\
 &= 9.91\%
 \end{aligned}$$

Thus, from the calculation to find the leveraged beta, it is 0.98. When substituted into the equation, the rate of return that the owner should receive from investing in project development is 9.91%.

Summary of Financial Costs of the Project:

From the calculation of the discount rate using the Weighted Average Cost of Capital (WACC) method, the average cost of investment in project development is 8.59%.

$$\begin{aligned}
 WACC &= Wd * Kd * (1 - T) + We * Ke \\
 &= 40.00\% * [8.27\% * (1 - 20\%)] + 60.00\% * 9.91\% \\
 &= 8.59\%
 \end{aligned}$$

Therefore, the Weighted Average Cost of Capital (WACC) for the project is 8.59%.

7.3 Project Investment Analysis

The rate of return for the owner (K_e) and the Weighted Average Cost of Capital (WACC) are used as discount rates to calculate the Net Present Value (NPV) and Internal Rate of Return (IRR) of the project.

7.3.1 Net Present Value (NPV)

Net Present Value (NPV) analysis compares the present value of cash inflows and outflows over the project's duration against the present value of investment using the discount rate. If the NPV is positive, it indicates that the future investment value exceeds the present value of the investment, suggesting the project is worth investing in. Conversely, if the NPV is negative, it suggests the project is not worth investing in. After analysing the future investment value of the project, the NPV of the project is determined to be positive at 178,723,786 Baht. Therefore, it can be concluded that the project is suitable for investment.

7.3.2 Internal Rate of Return (IRR)

The Internal Rate of Return (IRR) for the project is determined to be 10.37% which exceeds the Weighted Average Cost of Capital (WACC) of 8.59%. Therefore, the project is considered suitable for investment. However, when compared to other types of investments, the internal rate of return is relatively low, as it is close to the average financial cost.

7.3.3 Payback Period

Given the correctness towards financial assumptions and analysis, the PJ Mall project is projected to have a payback period of 12 years and 8 months.

7.4 Sensitivity Analysis

Project sensitivity analysis is the study of the potential impact on a project in cases where relevant factors change. It examines key factors affecting revenue, such as rental prices and leasing rates, as well as key factors affecting expenses, such as construction costs. so, there are example when three main factors contributing to project sensitivity as detailed below.

7.4.1 Income Sensitivity Analysis

The rental price and leasing rate represent pivotal variables that significantly influence the aggregate revenue of a project. A rise in rental prices invariably leads to an augmentation in both the net present value and the average internal rate of return. Conversely, a reduction in rental prices correlates with a decrease in the net present value and the average internal rate of return.

Based on the analysis, it has been determined that fluctuations in rental prices, whether increasing or decreasing, do not exceed 20%. Additionally, the leasing rate adjusts by 10% annually. It is evident that both the rental rate and the leasing rate significantly affect the Net Present Value (NPV). As per the table shown, to ensure a positive NPV and avoid negative values, the property should be leased at a rate not lower than 675 Baht and with a leasing rate not lower than 60%. However, if leased at these rates, it results in an Internal Rate of Return (IRR) of merely 0.93% for the project however the project can achieve its maximum profit potential when fully leased at 100% occupancy and leased out at a rate 20% higher than the set price of 750 Baht per square meter. This scenario results in an NPV of 436,620,378 Baht and an IRR of 21.08%.

Table 7.8

Rental Rate and Occupancy rate reflect project NPV

Price	NPV				
	Occ rate				
	60%	70%	80%	90%	100%
900	147,636,086.31	219,882,159.32	292,128,232.34	364,374,305.35	436,620,378.37
825	102,974,875.22	169,200,442.15	235,426,009.08	301,651,576.01	367,877,142.94
750	58,313,664.13	118,518,724.98	178,723,785.82	238,928,846.67	299,133,907.52
675	13,652,453.04	67,837,007.80	122,021,562.57	176,206,117.33	230,390,672.09
600	31,008,758.05	17,155,290.63	65,319,339.31	113,483,387.98	161,647,436.66

Source: Author, 2024

Table 7.9

Rental Rate and Occupancy rate reflect project IRR

Price	IRR				
	Occ rate				
	60%	70%	80%	90%	100%
900	8.79%	12.32%	15.50%	18.41%	21.08%
825	6.40%	9.89%	13.04%	15.91%	18.55%
750	3.79%	7.26%	10.37%	13.20%	15.81%
675	0.93%	4.37%	7.45%	10.25%	12.82%
600	-2.24%	1.17%	4.22%	6.99%	9.53%

The author, 2024

7.4.2 Construction cost sensitivity analysis

Upon considering the sensitivity of construction costs, which fluctuate between 10% to 30%, it is observed that even with a 30% increase in construction costs, the NPV of the project remains positive. However, the IRR of the project decreases to just 7.55%, which is lower than the Weighted Average Cost of Capital (WACC) at 8.59%.

Table 7.10

Construction cost sensitivity

Construction Sensitivity			
Construction (%) change	10%	20%	30%
NPV	165,174,886	151,625,986	138,077,087
IRR	9.39%	8.45%	7.55%

The author, 2024

7.5 Scenario Analysis

Financial scenario analysis is a method employed to assess the potential impacts on investment decision-making plans, contingent upon various financial circumstances. It utilizes factors such as rental prices, leasing rates, construction costs, and interest rates on loans from commercial banks. This analysis categorizes scenarios into three distinct situations: the Base Case, the Best Case, and the Worst Case. Each scenario is defined by specific assumptions as follow.

1. **Best Case Scenario:**

- Rental prices exceed the designated value by 10%.
- Leasing rates are at 90%.
- Construction costs are 10% lower than the predetermined benchmark.

2. **Base Case Scenario:**

- Rental prices align with the predefined criteria.
- Leasing rates stand at 80%.
- Construction costs as market conditions as set forth in the initial plan.

3. **Worst Case Scenario:**

- Rental prices fall short by 10% of the specified benchmark.
- Leasing rates drop to 70%.
- Construction costs escalate by 10% from the initially baseline.

Table 7.11*Best-Base-Worst scenario assumption*

Assumption	Best Case	Base Case	Worst Case
Rental Rate (Baht per Sqm)	850	750	650
Occupancy Rate	90.00%	80.00%	70.00%
Construction Cost Change	-10.00%	At Market Rate	+10%
Project NPV	336,108,052	178,723,786	37,394,203
Project IRR	17.82%	10.37%	2.40%
Payback Period	10 years 2 Months	12 years 8 Months	14 years 3 Months

The author, 2024

Based on the financial analysis under the assumptions, it can be concluded that in the worst-case scenario, investing may not be feasible. Despite yielding a positive net present value (NPV), the internal rate of return (IRR) falls below WACC, rendering the investment unviable.

7.6 Financial Summary

The summary of the investment viability in the community mall development project regarding the net present value and internal rate of return demonstrates that this project has the potential to be a sustainable investment. It shows a potential for sustainable investment with an approximate payback period of 12 years and 8 months. It is evident that the investment in this project is feasible. However, investment in this project is highly sensitive as it involves real estate for lease. Despite the internal rate of return not being significantly high, market and financial studies demonstrate the project's viability for investment. Furthermore, this project also aims to create space for the collective benefit of both the community and individuals, serving both business and public interests in the long term.

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