CASE STUDY: A FEASIBILITY STUDY
FOR A PROPOSED HOTEL IN CHIANG MAI, THAILAND

A Project
Presented to the
Faculty of
California State Polytechnic University, Pomona

In Partial Fulfillment
Of the Requirements for the Degree
Masters of Science
In
Hospitality Management

By
Araya Rojanapirom
2017
SIGNATURE PAGE

PROJECT:       CASE STUDY: A FEASIBILITY STUDY FOR A PROPOSED HOTEL IN CHIANG MAI, THAILAND

AUTHOR:       Araya Rojanapirom

DATE SUBMITTED:    Spring 2017

The Collins College of Hospitality Management

Margie Ferree Jones, Ph.D.     ________________________________
Project Committee Chair
Professor of Hospitality Management

Myongjee (Michelle) Yoo, Ph.D.     ________________________________
Project Committee Member
Assistant Professor of Hospitality Management

Zhenxing (Eddie) Mao, Ph.D.       ________________________________
Project Committee Member
Associate Professor of Hospitality Management
ABSTRACT

In recent years, the number of tourists has grown rapidly in the northern region of Thailand, and with this increase in tourists there has been an increase in the number of hotels. Chiang Mai is a province located in the northern region of Thailand and is Thailand’s fastest growing economy, with its main revenue generated from the tourism and hospitality industries. This growth provides an environment for the lodging business to flourish in the region. A hotel developer who owns a property in Chiang Mai is considering to repurpose it into a small boutique hotel. The developer needs to examine if the proposed hotel concept is suitable for the site and market, and if it will be financially profitable for investors. Additionally, the developer needs to consider if a boutique hotel would be more successful than other types of lodging, such as Airbnb or affiliating with an international hotel chain. A feasibility study would be used as a method to analyze the hotel competitiveness, and its ability to generate revenue and income.

Secondary data from historical reports and statements by respected organizations such Thailand Tourism Bureau, National Statistical Office Thailand, The Bank of Thailand and Chiang Mai Tourism and Sports Bureau will be reviewed to analyze the projected performance of the proposed hotel.

Keywords: Boutique hotel, Chiang Mai, Feasibility study, Thailand
# TABLE OF CONTENTS

SIGNATURE PAGE ................................................................. ii

ABSTRACT ................................................................................. iii

LIST OF TABLES .......................................................................... vi

LIST OF FIGURES ....................................................................... vii

INTRODUCTION ........................................................................ 1

Chiang Mai ..................................................................................... 2

Property Information and Site Location ........................................ 3

Project Objective ......................................................................... 4

LITERATURE REVIEW ............................................................ 5

Overview of the Hotel Industry in Thailand .................................. 5

Domestic vs. International Hotel .................................................. 7

Hotel vs. Airbnb .......................................................................... 8

Hotel Industry in Chiang Mai ....................................................... 9

Feasibility Study ......................................................................... 10

Component of Feasibility Study .................................................. 11

METHODOLOGY ....................................................................... 18

Data Collection .......................................................................... 18

Data Analysis ............................................................................. 19

Component 1 – Market Analysis .................................................. 19

Component 2 – Financial Analysis .............................................. 19

Component 3 – Valuation Analysis .............................................. 20

RESULTS .................................................................................. 22

Market Analysis ......................................................................... 22
LIST OF TABLES

Table 1. Competitive Supply ................................................................. 25
Table 2. Historical hotel market growth in CM 09-15 ......................... 28
Table 3. CM’s internal market performance ......................................... 30
Table 4. CM’s market performance projections .................................. 31
Table 5. Proposed hotel performance projections .............................. 33
Table 6. Projected revenues and expenses ........................................... 34
Table 7. Discounted cash flow analysis .................................................. 36
LIST OF FIGURES

Figure A. Map of Thailand................................................................. 47
Figure B. Map of Chiang Mai.......................................................... 48
Figure C. Map and site location....................................................... 49
Figure D. Competitive hotels ......................................................... 50
INTRODUCTION

Thailand has become the most popular tourist destination in the Asia-Pacific region mainly due to its value for money, more affordable hotel pricing, a lower cost of living, and traveling in Thailand (Tourism Authority of Thailand, 2014). The main groups of tourists coming to Thailand are from mainland China, followed by Hong Kong, Malaysia, Japan, and South Korea. The lodging industry plays an important role in supporting the overall economy of Thailand, bringing in over $33 billion US dollars, or 1.16 trillion Thai Baht (Ruengtaveesil, 2015). In 2015, the total number of hotel rooms in Thailand had increased to 138,286, where the number in 2010 was only at 63,460. The number of international tourists in Thailand has also increased from 24 million in 2014 to nearly 30 million in 2015, a staggering 20 percent increase in foreign tourists visiting Thailand (National Statistical Office Thailand, 2017). The quick growth reflects the better infrastructure including improved roads, and the expansion of several of the country’s airports, allowing tourists to more easily travel to multiple places in Thailand, expanding options for travelers to new tourist destinations (Ruengtaveesil, 2015). The favorable economy presents opportunities for new developers to build new tourism products to meet the expanding needs.

In spite of the increase in tourists, economists are concerned that the hotel supply may exceed consumer demand. Hotels, restaurants, and airlines have fixed inventory supplies that need managing, particularly in an unpredictable seasonal demand (Ingold, McMahon-Beattie and Yeoman, 2000). Inventory such as hotel rooms, seats and meeting spaces are perishable; if rooms are not occupied, for example, the hotel is unable to generate revenue to cover the maintenance and other related costs. Products have a certain level of intangibility; production and
consumption are concurrent; and the cost structure tends toward a high concentration of fixed costs (Vanhove, as cited in Modica, Landis and Pavan, 2009).

**Chiang Mai**

Chiang Mai is located 700km north of Bangkok, the capital city of Thailand. It is one the major provinces in the northern region of Thailand and is one of Thailand’s most well-known and most visited provinces (Tourism Authority of Thailand, 2014). The map of Thailand can be seen in Figure A; map of Chiang Mai in Figure B.

Chiang Mai, also known as “The Rose of the North,” is situated on the famous Ping River; it is known for its natural beauty, and unique culture. Chiang Mai is also distinctive in its infrastructure and is recognizable to anyone who has familiarity with it. Locals maintain their distinct dialect, traditions, and cuisines, and the city is host to hundreds of ancient temples. The charming northern Thai architectural style and appealing decorative details stun those who have the chance to visit (Tourism Authority of Thailand, 2014). Because of these features, Chiang Mai is strategic location for establishing a hotel.

The tourism and hospitality industries are the fastest growing industries in Chiang Mai with an increasing number of hotels and restaurants (Chiang Mai Tourism and Sports Bureau, 2017). According to the National Statistical Office Thailand (2017), the number of hotels and guest houses (officially registered with the government) in the northern region of Thailand has risen from 550 in 2008 to 1,854 in 2013. The occupancy rate of hotels in the northern region of Thailand has increased from 40.29 percent in 2010 to 57.68 percent in 2015 (Bank of Thailand, 2015). The number of visitors to Chiang Mai has also risen tremendously from
4,343,090 in 2009 to 7,425,772 in 2015 making Chiang Mai the 2nd most visited province in Thailand after Bangkok (The Office of Chiang Mai Province, 2012; Chiang Mai Tourism and Sports Bureau, 2015).

Hotels and guest houses in the northern region of Thailand are usually smaller in size and number of guest rooms in comparison to other regions of the country. Over 52 percent of lodging properties have fewer than 60 rooms, follow by 29 percent with 60-149 rooms and 19 percent with 150 guest rooms or more (National Statistical Office Thailand, 2017). The smaller properties size likely stems from the scarcity of large land parcels, smaller capital requirements and greater ease in management. The seasonal traveling behavior also impacts the size of lodging facility in the northern region (Chiang Mai Tourism and Sports Bureau, 2017). However in Chiang Mai, city planning laws have the greatest impact on hotel and properties sizes in the province.

**Property Information and Site Location**

The location of the land to be used for the construction of the hotel sits in the heart of the old city area in Chiang Mai; this area is one of the most visited areas for tourists. The proposed site is 2,400 square meters and is neighbored by ancient temples, local shops, and restaurants. A Thai architectural firm in Bangkok acquired the property from local Chiang Mai land owners. The improvements include an apartment, three houses, which are currently occupied by the former owners and their family, a parking lot, and a small garden. The new owner wishes to keep the buildings and repurpose these old structures into a hotel instead of tearing them down and rebuilding a whole new property. The land and improvements were purchased for 60 million baht (or $1.7 million USD). The preliminary budgets to renovate and convert the buildings into a hotel is estimated
77 million Baht (or $2.2 million USD) in the estimate, totaling at 137 million Baht (or $3.9 million USD). The hotel facilities will include 40 guest rooms, a coffee shop, swimming pool and a large landscape surrounded by gardens. The map and location of the site can be found in Figure C.

The project is being proposed by a local developer who already owns several parcels of land in Chiang Mai and wants an opportunity to improve his assets. The tourism industry is growing rapidly in Chiang Mai; this trend supports the creation of hotels, guest houses and motels to support the escalating tourist demands. The property will target customers of all ages, but mainly targets middle class individuals, families and couples that have decent travel knowledge, and are willing to embrace new experiences by staying in local hotels. The property will provide cultural experiences to guests through interaction with local employees, local food provided on property, and facilitates that utilize traditional Thai interior design. The rate price of guest rooms will be around 2800-4550 Thai Baht per night, or around $80-$130 USD.

The design of this hotel will embrace local and tradition designs that are attractive to both local and tourists. The aspiration for the proposed hotel is that it should not only be beneficial to owners but also culturally beneficial and appropriate to the surrounding environment. This purpose means that the hotel is to be designed in a contemporary Thai northern (Lanna) style, with vegetation that covers the property, and charming decoration. The architectural design must abide by the law which regulates specific building characteristics such as structural heights, setbacks, roof appearance (such as color and style), etc. According to The Association of Siamese Architects under Royal Patronage (2013) or ASA, the new
city planning law of Chiang Mai regulates that hotels cannot exceed 1,000 square meters and twelve meters in height.

Furthermore, the design of the hotel should encourage minimum usage of electricity and water as well as promoting open space and clean air through a plantation of trees and vegetation surrounding the area. The efficient use of energy can be accomplished through the combination use of clean energy generated from solar panels, and more efficient lighting systems in the hotel.

**Project Objectives**

The overall objective of this project is to conduct a feasibility study to determine whether it is feasible to build a hotel that can be profitable. Specific objectives are as follows:

a. To complete a feasibility study which serves as a guideline on whether this particular hotel if built will be a success or not.

b. To meet the locals’ desire of a local-friendly hotel that does not disturb the image of Chiang Mai, and help to preserve the cultural and environmental embodiment of Chiang Mai and the Thai society.

c. To construct a hotel that meets the demand of local and international tourists to appreciate Chiang Mai and its culture, and to create sustainable employment and income for locals.

d. To build a financial asset for the developer and owner of the property that is capable of generating reasonable income. Thus, the hotel will contribute to the generation of income for local businesses and Chiang Mai’s overall economy.
LITERATURE REVIEW

Overview of the Hotel Industry in Thailand

Tourism in Thailand is one of the main contributors to the economy in Thailand. Alan and Chotihamwattana (2013) report that of all the countries in Asia, Thailand was ranked second in revenue generated from the tourism sector after China. The number of visitors to Thailand is still on the rise in spite of the growing concern regarding the political unrest in the country that damages image to ‘the land of smile’ (Kanlayanasukho, 2014). The statistics show that international visitors are reaching nearly 30 million people annually (Tourism Authority of Thailand, 2014).

For more than a decade, Thailand has had one of the largest hotel room inventories amongst Asian countries with more than 300,000 guest rooms in lodging properties (Bank of Thailand, 2015). Many of these properties are situated on the beaches and on islands in southern Thailand. The impression of spending a vacation in paradise, surrounded by walls of palm trees, sandy landscape, and sun-soaking weather in a tropical-style resort has been an image that attracts tourists to destinations in Asia-Pacific region such as Thailand (Teo and Chang, 2009). For this reason, many international hoteliers and investors find business development throughout Thailand favorable. Well-known international hotel chain brands such as Hilton, Sheraton, Accor, Crowne Plaza and Marriott have plans to expand in Asia and Thailand (Narangajavana, 2007). In comparison to other types of hotel ownership and management, such properties benefit from standardization, marketing know-how, brand awareness, sales team and loyalty programs (Pearce & Thanksooks, 2016).
However, it would be misguided to concentrate solely on the growth of international hotels and lodging properties influencing and shaping the Thai tourism economy. To understand the magnitude of domestic accommodating facilities, one must investigate management structure of many owned businesses. Many studies in the tourism context focused mainly on boutiques, specialized and traditional hotels (Pearce & Thanksooks, 2016). Some of these related studies and analyses are focused on traditional hotel styles in specific countries that can appropriately be considered a parallel work to the contemporary field of domestic hotels. In Asia alone, Handerson (2011) has contemplated the home-produced boutique and chic hotels in Singapore, while Huang and Sun (2014) have studied about economy lodging in China.

**Domestic vs. International Hotels**

Several characteristics of local and small-scale hotels are described in the literature. For instance, it is properly documented that small domestic properties may offer more reasonable rates, employ local traditions in catering and services, allow better contact with property owners and provide flexibility in fundamental procedures such as check in and check-out procedures (Alteljevic and Doorne, 2000). The importance of lifestyle tendency for the hotel operators is that they enjoy living in a certain community and can offer employment opportunities to friends and family members (Getz and Peterson, 2005). In other studies, Di Domencio (2005) stated that domestic guest house owners want to keep their business at a particular scale to avoid stress and overwork, while Pearce and Moscardo (1992) emphasized how specialized and local small-scale lodging facilities provide a great pride to the region.
Domestic hotels are becoming popular with the growing interest from the new generation of travelers. Tourists now seek a more intimate and private experience with the locals and their surroundings (Sagnarong, 2009). In comparison to other forms of lodging properties, several analyses found that domestic hotels are better in delivering various qualities, such as local culture services and relations and unique design (Thanksooks, 2014). Further studies have discovered that the supplementary stylistic impression of domestic hotels are that they are chic, hip and trendy, and were appealing to the upper and middle class. It was reported that the Thai middle class has the strongest influence towards the Thai image and values that shape the lifestyle of the Thai people (Thanksooks, 2014). This lifestyle trend provides a parameter which helps for the development of boutique hotels (McIntosh and Siggs, 2005).

**Hotels vs. Airbnb**

The main users of Airbnb are Western tourists, especially Americans with an average age of 35. This preference of Airbnb over hotels may be from tourists wanting to experience an authentic lifestyle. However, since 71% of tourists in Thailand consist of Asian travelers, hotels are not as affected because these tourists are more concerned with safety, which Airbnb fails to provide. Additionally, hotel rates cost an average of 2,500 Thai Baht per nights in Thailand while both hotel and Airbnb rates are at an average of 1,500 to 2,000 Thai Baht in Chiang Mai. Travelers, therefore, are likely to choose a hotel over Airbnb for their safety, for the cleanliness, the amenities and the availability of hotel personnel (Akaraphanth, 2016).
Hotel Industry in Chiang Mai

Since the economic recovery from the political turmoil in 2014, Chiang Mai welcomed around 870,000 international tourists in November 2015 YTD, which represents a significant increase of 45.9%. Domestic arrivals were recorded at over 2.6 million in 2014 and almost 2.9 million in the first nine months of 2015. With an increase of total visitors during the five years period (2009-2014) of 16.8%, Chiang Mai is believed to be one of the fastest growing tourist destinations in Thailand (JLL Hotels & Hospitality Group, 2016). In 2014, Chiang Mai’s main tourist groups were from mainland China, with over 420,000 visitors, accounting for almost 18% of international guests at lodging establishments and achieved the highest visitor growth of 50.3% compared to last year. Other tourist groups are from Japan, France, United Kingdom, United States, Germany and Australia (JLL Hotels & Hospitality Group, 2016).

The hotel supply in Chiang Mai is dominated by small to mid-sized, local, independent design and boutique hotels. Most lodging facilities are concentrated in the old city area and Nimmanhemin area, targeting all price categories. The slow economic recovery and stricter laws supervising hotel businesses and hotel constructions create barriers for new hotels to enter the market. Despite the deceleration in future hotel supply, many boutique hotels are predicted to enter to compete in the market within the next few years. The continuing growth in international flights and many famous tourist destinations located in the city is expected to further support Chiang Mai’s position as one of the primary travel destinations of Thailand. The expansion of Chiang Mai International Airport in 2016 will also increase passenger capacity from 8 million to 12 million people (JLL Hotels & Hospitality Group, 2016).
Feasibility Study

Developers usually have an idea of the market when they initially consider a site or development plan. As entrepreneurs, they regularly check for trends, observing competitors and seeking demand within the market. Through this knowledge, developers are likely to recognize an opportunity and create a business concept to take advantage of the situation. However, pure intuitive sense cannot guarantee the success of a project without a proper method of analysis (Novak, 1996).

A feasibility study is a crucial process in the preparation stage of development. Before any property development, the clients would hire a quantified inspector or valuation expert to conduct the market and financial feasibility study (Halil, Nasir, Hassan and Shukur, 2015). For an effective evaluation of whether the proposed hotel project is practical, a feasibility study should be conducted (Thompson, 2005). This crucial requirement of a feasibility study allows clients to assess the potential return on investment and a probable development for the project (Halil et al., 2015). Therefore, a business feasibility study can be described as a controlled method for identifying problems and opportunities, explaining situations, identifying objectives, determining profitable outcomes and evaluating the scope of the costs and benefits with solutions to solve relating difficulties. The business feasibility study is composed to support the decision making founded on a cost-benefit analysis of a corporation or development project viability. It is a systematic tool that comprises of limitations and recommendation, which are employed to support decision-makers when defining whether the business concept is viable (Thompson, 2005).
It is approximated that only two out of ten business plans are commercially viable. For that reason, a business feasibility study must be conducted to help protect against further depletion of resources and investments (Bickerdyke, Lattimore, Madge, 2000). If a proposed project is considered a viable project shown from the study, then a full business plan can proceed as a next step. The information from the study will verify the business planning stage and minimize the research period. Consequently, the cost of the business will also be reduced. An effective viability analysis provides significant evidence and information that is essential for the business plan (Thompson, 2005).

Finally, a feasibility study should provide supporting evidence within its recommendations. The strength of propositions can be assessed against the capability of study to exhibit continuity that subsists between the research evaluation and the proposed business project. Recommendations will include a combination of qualitative, ‘experience-based’ citations and quantitative data (Hoagland and Williamson, 2000; Thompson, 2005). The overall result should provide confidence to the decision-making of the ownership as to whether the project is reasonable and worth investing (Bickerdyke et al., 2000).

**Components of a Feasibility Study**

Sangree (2012) stated three major components of a feasibility study that are provided as a groundwork for a market feasibility study and financial analysis as follows: a) Market Analysis; b) Financial Analysis; c) Valuation Analysis.

**Market analysis.** The economic strength of the market area is one of the essential consideration in predicting demand. The purpose of the market analysis is to evaluate demographic and economic figures to determine whether a particular market area will experience economic growth, stability or decline. These trends
will reflect on the variability of lodging demand (Donahue, 2011). The projection of room night demand of a subject hotel can be used to calculate the estimate annual occupancy (HVS, 2011). Conclusively, the market analysis will also aid in identifying the selling price of products of the proposed hotel that matches those of the market demand. Thus, it is important to collect data that will assist in evaluation and projections for the project (Halil et al., 2015).

The market analysis within the feasibility study will be completed once construction has begun. Nevertheless, information gathered in this section can be expended in the business marketing strategy. The market analysis classified the market segments which is required for the management to properly understand their targeted customers (Thompson, 2005). If performed correctly, this analysis should prevent major project failures and detect key opportunities. Due to the importance of market analysis in the feasibility study, proper and continuous attention must be given by the owner and consultant (Novak, 1996). Furthermore, Rushmore et al. (2012) described four components of the market analysis including area economics, market segments, existing competition and latent demand.

**Area economics.** The study of the proposed project site and development, the competitive supply and demand influences, and the market area’s historical and potential lodging demand are included in the area overview (Hennessey, 1986). Once the historical data has been considered, the evaluator will be able to forecast changes in the competitive supply or local economy influencing average room rates in the upcoming future (Rushmore, 2002).

**Market segment.** This section focuses on an understanding of the categorical demand, which are separated in target groups. These target groups have different purchasing behaviors, values and characteristics, and are divided
according to their travel behaviors (Lynn, 2011). Segmentation variables can be divided into four different variables: a) Geographic - continents, nations, regions etc.; b) Demographic - age, sex, family size, occupation, income etc.; c) Psychographic - social class, personality, lifestyle; and d) Behavioristic - usage rate, brand loyalty, benefits sought, etc. Understanding each of the market segments will allow the hotel to identify its target market so that they can suitably market and position themselves to meet their demands (Rushmore et al., 2012).

**Competition.** It would seem unrealistic and subjective to conduct a study in a market deprived of competitors (Rushmore et al., 2012). In the study, potential competitors within the market area are considered. There are two types of competitors: competitive hotels that can be categorized as either direct (primary) or indirect (secondary) competitors. Direct or primary competitors compete for the same market segment(s) and offer similar facilities and services to the proposed hotel. However, such hotels do not necessarily have to be located around the same geographic area. Indirect or secondary competitors are hotels that are located within the same area but obtain fewer characteristics in comparison to the subject hotel (Nicholls and Roslow, 1989).

**Latent demand.** The analysis of demand that can be generated from either unaccommodated demand or induced demand. Latent demand means that demand would be generated if product/service are available to meet consumer needs (Bowie and Buttle, 2004). Estimating the total latent demand is the most difficult part of the lodging activity build-up approach because unaccommodated demand and induced demand are not simply quantified (Rushmore, 2002). Unaccommodated demand is made up of transient travelers who seek accommodation but are unable to stay due to the lack of vacancies, while induced
demand is the demand that is generated through the attraction generated by the new hotel. This demand can be from new lodging facilities that provided recent unsupplied services and facilities, or from aggressive marketing strategies attracting new demand (Rushmore, 2002). The sum of unaccommodated demand and induced demand add up to the total latent demand of the market area.

**Financial Analysis.** The financial analysis section of the report analyzes the feasibility to generate income and forecast future financial capacity for the proposed development (Halil et al., 2015). For investors to engage in the new development project, the project has to be seen as financially viable. The invested capital should mean the project will generate an economic return to investors (Bennett, 2003). For instance, the revenue generated from the proposed hotel must able to cover expenses that the proposed hotel may have, and effectively generate adequate profit for the investors. Approximating operating and upkeep cost for the proposed hotel, and income generated are therefore necessary for clarifying the financial feasibility of the proposed hotel (Bennett, 2003).

The financial feasibility analysis is a systematic approach used to calculate the economic viability of an investment. It is comprise of the evaluation of the financial situation and operating performance considering the investment, and forecasting future functions and stipulations. A financial resolution is reliant on two factors, expected return on investment and expected risk, where a financial feasibility analysis provides an instrument for assessing the two (Fabozzi and Peterson, 2003).

During the project planning process, results from a financial feasibility evaluation will denote the performance of the project under certain assumptions in regards to market conditions, technology, and other financial properties. The
analysis is the first study in the development process, hence it serves a purpose to see that these assumptions generate an economically feasible project. It also exemplifies the sensitivity to changes in this assumption (Matson, 2000). Knowing these assumptions and their sensitivity to changes can help the analyst to identify which key areas are needed to be looked in more detailed, to get the best possible estimates for financial feasibility (Björnsdóttir, 2010).

As mentioned by Helfert (2001), there are four levels in business that financial analysis can support. The first level or a) Operational Planning or day-to-day decision making on daily operation; b) Strategy development, Investment Analysis, Capital structure and Planning and financing; c) Performance, Assessment, and Incentives; and the last level or d) Valuation and Investor communication. Different levels of financial analysis provide different challenges within the practice and decision-making process, and the analyst must confront each challenge in a diverse manner. Analyzing the financial feasibility of any project is a crucial progression in the decision-making process. Though the study is carried out as a screening method, the analyst must regularly make updates to the figures whenever any of these assumptions are used in transformation (Björnsdóttir, 2010). If the results from the analysis suggest the project is unable to provide a required return on investment to the investor, the business concept should be rejected. It is therefore very important to consistently keep track and make updates to the analysis, using the latest information and to verify that the project is financially feasible (Bennett, 2003).

Valuation analysis. Hotel owners, investors and operators are sometimes required to assess to the value of their properties. In accomplishing a market study and appraisal, an assessment is needed to determine the proposed project economic
feasibility (Rushmore et al., 2002). A project is considered feasible when its economic value is greater than the cost incurred from its development. On the other hand, if the cost of development is greater than the project economic value, then it is considered not feasible (Rushmore et al., 2002).

In evaluating hotels, three approaches to hotel valuation can be considered: the income capitalization, sales comparison, and cost approach. Although the importance of the three valuation approaches is commonly given, each approach contain strengths that question the ability of the project to generate supportable value estimates, considering the hotel environment. There are differences in each methodology and hotel investors prefer the use of income capitalization approach to others types of approach (deRoos and Rushmore, 2003).

**Income capitalization approach.** The income capitalization approach is founded on the theory that the value of a property is determined by its net return, also known as “present worth of future benefits” (deRoos and Rushmore, 2003). These include income-generating facilities, such as hotels, where the net income of such amenities are estimated from their income and expense, and earnings from future sales. These numerical figures can then be converted into the hotel market value through a direct capitalization process and discounted cash flow analysis (deRoos and Rushmore, 2003). The income capitalization approach is the most commonly practiced approach due to its valuation reflects investments rationale of knowledgeable buyers (HVS, 2010).

**Sales comparison approach.** The sales comparison approach approximates the value of the property through comparing it to properties currently sold in the market. Furthermore, to acquire the estimated value and the sale price of property, dissimilarity between the comparable properties must be eliminated. The sales
comparison approach is useful for valuating simple forms of real estate property, such as unstructured land and small-size homes. However, the lack of financial information on hotel transactions and property income not being formulated makes the approach incomplete to hotel analyst (HVS, 2010).

Cost approach. The cost approach can provide a reliable evaluation of new properties, but when buildings and other structures start to deteriorate, the subsequent loss in value becomes more difficult to accurately compute (deRoos and Rushmore, 2003). Because the cost approach to hotel valuation does not project income-related figures, it does not appeal to knowledgeable buyers who base their purchase decision on economic factors. However, the approach is useful for initiating benchmark between build versus buy decisions and for comparative pricing over time (deRoos and Rushmore, 2003).

The overall objective of this project is to conduct a feasibility study to determine whether it is feasible to build a hotel that can be profitable. The next section of this paper covers the methodology used to conduct this feasibility study.
METHODOLOGY

Data Collection

The data collection process is one the most important parts of the research paper. The accuracy of results is derived from good data collection. As for the research paper, the author has utilized both primary and secondary data for the completion of a feasibility study of the proposed hotel in Chiang Mai, Thailand. Secondary data is from the official public and private documents containing statistics, while primary data is information about the proposed hotel received from the owner.

The main sources of secondary data on the tourism and hotel economy of Chiang Mai, Thailand, are from official government data including The National Statistical Office Thailand, Chiang Mai Sport and Tourism Bureau, The Office of Chiang Mai Province and The Tourism Authority Thailand. Other statistics are gathered from official private reports including The Bank of Thailand, LH Bank Thailand, Krungsri Bank and other companies publishing official data. These reports include tourism statistics, lodging statistics, hotel room rate and RevPAR, average occupancy rates, market segment demand, average and total revenues generated and average operating expenses. Competitors’ data and statistics will be from official hotel websites and OTA since most hotel competitors are local and have no public record available. Primary data was gathered by the owner. This information included details on hotel planning and development. These data include intended budgets, land prices, and property descriptions. All data will be used to analyze the feasibility of the proposed hotel.
Data Analysis

The following components will be included in the results section to fulfill the three analyses presented in the feasibility study section of the research paper: (market analysis, financial analysis, and valuation analysis)

**Component 1 - Market Analysis**

The initial portion of the proposed hotel feasibility study will be the market analysis. The three main variables that will be utilized for the market analysis are project location, market orientation and segmentation and competitive supply. In the proposed project location, the hotel is examined regarding the perspective of its surrounding and settings. It is also necessary to analyze whether the hotel location is suited for business; meaning it is easily assessed by various means of transportation, and that it is near to tourist attractions, local businesses, and emergency services, etc. The market orientation and segmentation section will include an examination of demand generator for the proposed hotel, whether the demand arises from the target market, future demand, or latent demand. It is imperative that the developer understands who the hotel’s target market is, thus the hotel design will offer utilities and services that correspond to their needs. The competitive supply section will cover analysis of hotel competition, both direct and indirect, that will attract the same group of consumers, which provides similar amenities and services, or are situated in the same area as the proposed hotel.

**Component 2 - Financial Analysis**

In the financial analysis section of the feasibility, the assessment will provide the answer the question of whether the proposed hotel is financially feasible, that they can generate a return on investment to investors. The main variables that will be used in the analysis include occupancy rate, average daily
rate (ADR) and revenue per available room (RevPAR). Further analyses include the projection of the proposed hotel income and expenses and revenue forecast. The occupancy rate is a measurement of the percentage of room sold by the hotel, calculated by the number of room night sold divided by the total available room nights. The average daily rate or ADR is the mean of total room rates and is calculated by total rooms revenue divided by the total number of room nights sold by the hotel. The revenue per available room or RevPAR will determine the average revenue that the hotel makes considering all rooms available in the property. It is calculated by the total room revenue divided with the total available rooms, or it can be calculated using the occupancy rate multiplied by the average daily room rate or ADR.

Component 3 – Valuation Analysis

The valuation analysis section will include an assessment of the hotel’s potential to generate a return on the investment. It will also formulate and estimation of the hotel's performance and value from observing into the future period. The main variables that will be used in the analysis include a capitalization rate, the net operating income (NOI), the net present value, the discount rate, and the discounted cash flow. Net operating income is the final income after all expenses are disbursed, and is used for computing discounted cash flow. Due to the preferred usage of such method, an income capitalization approach will be utilized for the proposed project. The capitalization rate of the hotel will be calculated by dividing the investment’s net operating income (NOI) by the current market value of the property, where the NOI is calculated from the annual return of the property minus total operating expenses. Since the owner will want a particular rate of return, the market value should be greater than the owner’s property purchase
price. The income capitalization rate is then calculated using the net operating income divided by the capitalization rate. Finally, the discounted cash flow is calculated by finding net present value through discounting of future cash flow. The minimum span for using future cash flow is five years.
RESULTS

Market Analysis

Site evaluation/ location. The proposed location for the hotel is the “old city area” of Chiang Mai, Thailand, which is known to be one of the most popular tourist destinations in Chiang Mai. The hotel site rests on Pra Pok Klao Rd Soi 4/2, the southern section of the old city area. The area has been kept underdeveloped by the government, in comparison to other areas of Chiang Mai, which aims to resemble the old traditional Chiang Mai and its exotic past. The composition of the area mainly consists of local residences, schools, restaurants, temples, museums and historical buildings. Famous attractions include a large numbers of ancient temples (such as Wat Chedi Luang and Wat Chiang Man) and the Sunday night market, all of which are walking distance from the proposed hotel site.

The proposed hotel is to be a two-story boutique hotel with a touch of traditional Lanna (Northern-Thai style) design. The hotel will feature 40 guest rooms and have many facilities and amenities including a coffee shop, outdoor swimming pool, courtyard, and approximately ten parking spaces.

Access and visibility. Chiang Mai is easily accessible by both domestic and international travelers. Domestic voyage to the province can be done via flights, buses and trains. International travel to the province is mainly via flights. There are currently 20 airlines that fly directly to Chiang Mai international airport from various countries around the globe (such as China, Myanmar, Singapore, Taiwan, Malaysia etc). Therefore, connecting flights via Bangkok are not necessary.

The city of Chiang Mai is relatively small despite its vast land. This is due to its geographical structure that has many mountainous areas and preserved
national forests. Nevertheless, the commute in the city can be easily achieved by walking and local transportation. The old city area, where the proposed site is located, is approximately ten minutes from the Chiang Mai International Airport and about an hour from many tourist attractions by car.

**Surrounding development.** Chiang Mai is separated into four main areas including the old city, Nimmanhaemin, outside the old city and outskirt of the city. The two most famous areas for tourists are the old city and Nimanhaemin. Due to its vast tourist attractions and landmarks, Chiang Mai has become one of the most visited places in Thailand. It attracts different groups of tourists around the world.

The *cultural destinations* are comprised of temples, historical landmarks, museums, art galleries and local restaurants. In Chiang Mai, there are over 2,000 temples that tourists can visit and many of which are famous landmarks of Thailand. The Saturday/ Sunday night markets are also the showcase of Chiang Mai’s local lifestyle where tourists can purchase locally made products. There are also several museums and galleries which exhibit artworks that are significant to the Thai culture and history. For instance, the MAIIAM Museum, recently opened in 2016, showcases Thai contemporary art which attracts many art lovers around the country.

*Natural destinations* include mountains, national forests, zoos and outdoor activities. These destinations are catered for tourists who seek adventures and want to explore the natural beauty of Chiang Mai. Natural preserved forests and royal botanical gardens are considered to be the most famous attractions among tourists. Chiang Mai Zoo and other outdoor adventure places have been undergoing significant renovations and expansion to accommodate demands from tourists.
Shopping destinations mainly include shopping malls and local shops. The most recent shopping mall opened in Chiang Mai was the Maya lifestyle mall, located at the corner of Nimmanhaemin/ Superhighway and Huay Kaew Road. The 5-story mall is considered to be one of the most conveniently located shopping complexes in town. The mall features supermarkets, restaurants, movie theatre, digital complex and many fashion brands.

Demand generators. The main market that the proposed hotel aims to capture is tourists with leisure purposes. These tourists include individuals, couples and families who seek new experiences and pursue relaxation, demands that Chiang Mai is able to satisfy. The target audience will be the newer generation of travelers who are adventurous and are not afraid to attempt local services such as boutique hotels and guesthouses. As mentioned previously, the old city area is the most famous tourist destination and is located in the heart of Chiang Mai which is convenient to travel to and easy to access other locations. The old city is also the most popular place for accommodation, hence the demand is high compared to other areas.

There are many famous tourist attractions located within the city walls (surrounding the old city area). For instance Wat Chiang Man which is the first temple in Chiang Mai and the Sunday walking street in which most parts of Prapokklao road are closed for shops selling locally-made products. Other local attractions include cafes and restaurants, clothing stores, museums, historical monuments etc. Furthermore, the old city area is one of the least congested and most discreet areas due to the majority of land is used for local residences and temples. Hence, many international tourists prefer to stay there than the surrounding areas.
Competitive supply. According to Agoda, an online travel agent website, there are nearly 500 hotels, guesthouses and other lodging facilities listed within Chiang Mai old city area. The price ranges from 10 to 200 USD per room depending on the quantity of the offering and season. Competitors of the proposed hotel will be those with similar amenities, architectural designs, room rates, location and target audience. There are six hotels that provide similar services and facilities, located within 1 kilometer of proposed hotel with the price range of $80-$130 USD. The table below shows a list of the above-mentioned competitive hotels:

Table 1

<table>
<thead>
<tr>
<th>Hotel</th>
<th>Location</th>
<th>Distance</th>
<th>Types of Hotel</th>
<th>Number of Rooms</th>
<th>Amenities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bodhi Serene Chiang Mai Hotel</td>
<td>Ratchaphakhinai Rd., Old city area</td>
<td>550 m</td>
<td>Boutique</td>
<td>38</td>
<td>4 room types, restaurant, 2 outdoor pool, meeting room, library</td>
</tr>
<tr>
<td>Bann Klang Wieng Hotel</td>
<td>45 Ratchamanka, Old city area</td>
<td>150 m</td>
<td>Boutique</td>
<td>10</td>
<td>4 room types, restaurant, swimming pool</td>
</tr>
<tr>
<td>De Naga Hotel Chiang Mai</td>
<td>Moon Muang Rd Old city area</td>
<td>850 m</td>
<td>Boutique</td>
<td>55</td>
<td>4 room types, restaurant, bar, swimming pool</td>
</tr>
<tr>
<td>Kodchasri Thani Hotel</td>
<td>Ratchaphakhinai rd., Old city area</td>
<td>500 m</td>
<td>Boutique</td>
<td>39</td>
<td>3 room types, restaurant, bar, swimming pool</td>
</tr>
<tr>
<td>Sirilanna Chaing Mai</td>
<td>99/3 Ratchaphakhinai Rd., Old city area</td>
<td>700 m</td>
<td>Boutique</td>
<td>21</td>
<td>4 room types, restaurant, bar, swimming pool, massage spa</td>
</tr>
<tr>
<td>Viangluang Resort</td>
<td>Phra Pok Klao 8 Alley, Old city area</td>
<td>750 m</td>
<td>Boutique</td>
<td>40</td>
<td>3 room types, restaurant, bar, swimming pool</td>
</tr>
<tr>
<td>TOTAL</td>
<td></td>
<td></td>
<td></td>
<td>203</td>
<td></td>
</tr>
</tbody>
</table>

The table reflects 6 competitive hotels with a total of 203 guest rooms. The hotels comprise of approximately 10 to 55 guest rooms with similar amenities. The
hotels are The Bodhi Serene Chiang Mai hotel, Bann Klang Wieng Hotel, De Naga Hotel Chang Mai, Kodchasri Thani Hotel, Sirilanna Chiang Mai and Viangluang Resort. The location of the competitive are presented in Figure D.

**Bodhi Serene Chiang Mai.** Bodhi Serene Chiang Mai is located at 110 Ratchaphakhinai Road in the old city area, just 550 meters away from the proposed hotel. This boutique hotel is designed with Chiang Mai’s traditional Lana style offering 38 guest rooms and modern amenities. The hotel facilities include restaurant, library, swimming pool, parking spaces and meeting rooms. The Bodhi Serene is the latest member of The Serene Group of Hotels. There are four room types offered; Garden Superior, Garden Deluxe, Suite and an Executive room.

**Bann Klang Vieng.** Bann Klang Vieng is a boutique hotel located at 45 Ratchamanka Road in the old city area, just 150 meters away from the proposed hotel. It is the smallest hotel among the competitors. This boutique hotel is designed with Thai colonial style. It features ten guest rooms and offers facilities such as a restaurant, swimming pool and park spaces. There are four types of room offered; Basic Shared Bathroom, Standard Room, Deluxe and En-Suite.

**De Naga Hotel Chiang Mai.** De Naga Hotel Chiang Mai is located at Moon Muang Road in the old city area, and is only 850 meters from the proposed hotel. This boutique hotel is designed with the theme of Naga, Thai mythological creatures existing in ancient Thai legends. The hotel features 55 guest rooms with facilities including a restaurant, bar and swimming pool. However there are no parking spaces. There are four types of room offered; Deluxe Room, Grand Deluxe, King Suite and Premier Deluxe.

**Kodchasri Thani Hotel.** Kodchasri Thani Hotel is located at Ratchaphakhinai Road in the old city area, and is only 500 meters away from the
proposed hotel. This boutique hotel is designed with Kodchasri theme, a combination between a famous Thai mythical animal and traditional Thai Lanna style. The hotel features 39 guest rooms and offers facilities such as restaurant, bar, swimming pool and parking spaces. There are three room types offered; Executive, Penthouse and Deluxe.

Sirilanna Chiang Mai. Sirilanna Chiang Mai is located at 99/3 Ratchaphakhinai Road in the old city area, approximately 700 meters away from the proposed hotel. The design of this boutique hotel is inspired by Thai traditional Lanna style with a touch of Thai northern interior. The hotel features 21 guest rooms with facilities including outdoor swimming pool, restaurant, massage spa and parking spaces. There are five types of room offered; Deluxe, Luxury, Executive, and Honeymoon Suite.

Viangluang Resort. Viangluang Resort is located at Prapokklao Road in the old city area, approximately 750 meters from the proposed hotel. The design of this boutique hotel is a mixture of Thai colonial and Lanna. The hotel features 40 guest rooms and offers facilities such as an outdoor swimming pool, restaurants, bar and parking spaces. There are three types of room offered; Superior, Deluxe and Executive room.
Financial Analysis

Market hotel conditions. An official report by the Department of Tourism Thailand contains data and information on the hotels in Chiang Mai from 2009 to 2015. Historical market performance data demonstrates occupancy, ADR and RevPAR, as shown in Table 2. The statistics display the changes in supply and demand of Chiang Mai’s market within the past several years.

Table 2

<table>
<thead>
<tr>
<th>Year</th>
<th>Available Rooms</th>
<th>Occupied Rooms</th>
<th>Occupancy</th>
<th>Average Daily Rate</th>
<th>RevPAR</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009</td>
<td>22,493</td>
<td>7,013</td>
<td>31.18%</td>
<td>$72.34</td>
<td>$22.55</td>
</tr>
<tr>
<td>2010</td>
<td>29,750</td>
<td>8,889</td>
<td>29.88%</td>
<td>$77.97</td>
<td>$23.30</td>
</tr>
<tr>
<td>2011</td>
<td>36,884</td>
<td>10,962</td>
<td>29.72%</td>
<td>$80.65</td>
<td>$23.97</td>
</tr>
<tr>
<td>2012</td>
<td>30,587</td>
<td>12,256</td>
<td>40.07%</td>
<td>$85.03</td>
<td>$34.32</td>
</tr>
<tr>
<td>2013</td>
<td>32,077</td>
<td>15,150</td>
<td>47.23%</td>
<td>$88.68</td>
<td>$41.88</td>
</tr>
<tr>
<td>2014</td>
<td>32,948</td>
<td>20,490</td>
<td>62.19%</td>
<td>$91.83</td>
<td>$57.11</td>
</tr>
<tr>
<td>2015</td>
<td>34,510</td>
<td>22,894</td>
<td>66.34%</td>
<td>$96.14</td>
<td>$63.78</td>
</tr>
</tbody>
</table>

CAG*: Compound Annual Growth

According to Table 2, the Chiang Mai’s hotel market has been improving with a significant increase in occupancy, ADR and RevPAR since year 2009. The interesting notion is the fact that not only the number of available rooms has been increasing, but so has the occupancy percentage. This advocates that the demand for Chiang Mai’s accommodations exceeded its current supply.

Another interesting notion of the market is the decline in hotel supply from the year 2011 to 2012. The available rooms in Chiang Mai decreased from 36,884 to 30,587. This reduction in the hotel rooms was due to the laws and regulations.
against all the illegal hotels and guesthouses that failed to acquire their hotel license. This has generated a positive impact on Chiang Mai’s market and hotel occupancy, which rose from approximately 30 percent to over 40 percent.

The hotel market has shown a great improvement since 2009, room nights have increased notably with a CAG rate of nearly 38 percent while available supply has increased at a CAG of only 9 percent. The growth of RevPAR from $22.55 in 2009 to $63.78 in 2015 reflect a remarkable 31% CAG.

**Hotel quarterly analysis.** This section of the financial analysis analyzes the market performance of lodging facilities in Chiang Mai. The market of Chiang Mai fluctuates depending on the period of the year since its main target market is leisure travelers who have distinct travel behaviors. The investigation provides hotel managers with notion on its pricing and marketing strategies throughout the year. Chiang Mai’s market performance is shown in Table 3 below.
Table 3

*Chiang Mai’s internal market performance*

<table>
<thead>
<tr>
<th></th>
<th>January - March</th>
<th>April - June</th>
<th>July - September</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>No. available</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rooms</td>
<td>32,948</td>
<td>34,510</td>
<td>32,948</td>
</tr>
<tr>
<td>Occupancy Rate</td>
<td>71.08%</td>
<td>75.30%</td>
<td>55.72%</td>
</tr>
<tr>
<td>ADR</td>
<td>$93.85</td>
<td>$98.62</td>
<td>$85.28</td>
</tr>
<tr>
<td><strong>Length of Stay</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Thai</td>
<td>3.08</td>
<td>3.10</td>
<td>3.21</td>
</tr>
<tr>
<td>Foreigner</td>
<td>2.67</td>
<td>2.69</td>
<td>2.86</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>October - December</th>
<th>January - December</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2014</td>
<td>2015</td>
</tr>
<tr>
<td><strong>No. available</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rooms</td>
<td>32,948</td>
<td>34,510</td>
</tr>
<tr>
<td>Occupancy Rate</td>
<td>67.99%</td>
<td>72.18%</td>
</tr>
<tr>
<td>ADR</td>
<td>$96.28</td>
<td>$98.91</td>
</tr>
<tr>
<td><strong>Length of Stay</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Thai</td>
<td>3.14</td>
<td>3.15</td>
</tr>
<tr>
<td>Foreigner</td>
<td>3.16</td>
<td>3.18</td>
</tr>
</tbody>
</table>

*Source: Department of Tourism, Ministry of Tourism and Sports*

*January – December represents the average*

Table 3 presents the seasonal performance of the overall competitive market. The statistics show an increase of the occupancy and ADR from 2014 to 2015. The increase had a positive effect on the RevPAR generated by hotels and guesthouses in Chiang Mai. This suggested a healthy market that is becoming favorable to hotel owners and investors in each progressing year.

In addition, Table 3 shows that the occupancy rate in Chiang Mai was highest during the first quarter of the year from the month of January to March. For instance, the occupancy rate was 71.08% in 2014 and 75.30% in 2015. The lowest season was from the month of July to September, where the occupancy rate was
only at 53.97% in 2014 and 58.07% in 2015. Nonetheless, the occupancy rate within each of the quarter has increased in the progressing year.

Furthermore, the ADR for each quarter also increased from year 2014 to 2015. For instance, the ADR from April to June has increased from $85.28 to $89.86. These figures indicate that the hotels were able to generate more revenue per room sold in every quarter of the year. Likewise, the table demonstrates that hotels were able to generate higher revenue during the first and last quarters where the occupancy and ADR were at their highest. The considerable events and festivals along with leisure travelers were the main reason for such occurrence.

**Market performance projections.** The projection of the occupancy and ADR of the competitive market was estimated and calculated from the past occupancy and ADR data achieved, in addition to the impact of anticipating and ongoing events, and the growth in hotel supply in the market.

Table 4

<table>
<thead>
<tr>
<th>Year</th>
<th>Available Room</th>
<th>Occupied Room</th>
<th>Occupancy</th>
<th>ADR</th>
<th>RevPAR</th>
</tr>
</thead>
<tbody>
<tr>
<td>2015</td>
<td>34,510</td>
<td>22,894</td>
<td>66.34%</td>
<td>$96.14</td>
<td>$63.78</td>
</tr>
<tr>
<td>2016</td>
<td>36,236</td>
<td>23,352</td>
<td>64.44%</td>
<td>$96.14</td>
<td>$61.96</td>
</tr>
<tr>
<td>2017</td>
<td>38,047</td>
<td>23,819</td>
<td>62.60%</td>
<td>$96.14</td>
<td>$60.19</td>
</tr>
<tr>
<td>2018</td>
<td>41,433</td>
<td>26,606</td>
<td>64.21%</td>
<td>$99.02</td>
<td>$63.59</td>
</tr>
<tr>
<td>2019</td>
<td>45,121</td>
<td>29,719</td>
<td>65.86%</td>
<td>$101.99</td>
<td>$67.18</td>
</tr>
<tr>
<td>2020</td>
<td>49,137</td>
<td>33,196</td>
<td>67.56%</td>
<td>$105.05</td>
<td>$70.97</td>
</tr>
<tr>
<td>2021</td>
<td>50,120</td>
<td>34,855</td>
<td>69.54%</td>
<td>$108.21</td>
<td>$75.25</td>
</tr>
<tr>
<td>2022</td>
<td>51,122</td>
<td>36,598</td>
<td>71.59%</td>
<td>$111.45</td>
<td>$79.79</td>
</tr>
<tr>
<td>2023</td>
<td>52,144</td>
<td>38,428</td>
<td>73.70%</td>
<td>$114.80</td>
<td>$84.60</td>
</tr>
<tr>
<td>2024</td>
<td>52,144</td>
<td>38,428</td>
<td>73.70%</td>
<td>$118.24</td>
<td>$87.14</td>
</tr>
</tbody>
</table>

The recent political turmoil in 2015 has slowed the economy of Thailand and thus has a negative effect on the tourism industry of Chiang Mai. The forecast suggests a slight decrease in the demand despite a minor increase in the hotel.
supply, hence the overall occupancy. Chiang Mai’s economy is predicted to recover from the year 2018 onwards, in which the occupancy rate is expected to increase from 64.21% to 73.70% by 2023. The saturation of the market along with stricter laws and regulations may restrict increases in hotel supply.

Furthermore, the ADR in the year of 2016 was at an average of $96.14, same as the previous year. An increase in the ADR could be due to an increase in the hotel operational cost and inflation. The ADR is projected to not go beyond $111.29 because the hotel market price would be seen as uncompetitive to the surrounding markets. Lastly, the RevPAR is expected to be increasing annually due to an increase of the ADR and occupancy rate in Chiang Mai’s lodging market.

**Proposed hotel performance projections.** The market performance projection could then be used to make predictions on the financial performances of the proposed boutique hotel. Factors that should be included in the analysis are the location of the proposed property and the service quality provided by the hotel. The projection can be seen in Table 5 below.

<table>
<thead>
<tr>
<th>Year</th>
<th>Available Room</th>
<th>Occupied Room</th>
<th>Occupancy</th>
<th>ADR</th>
<th>RevPAR</th>
</tr>
</thead>
<tbody>
<tr>
<td>2019</td>
<td>14,600</td>
<td>10,054</td>
<td>68.86%</td>
<td>$100.00</td>
<td>$68.86</td>
</tr>
<tr>
<td>2020</td>
<td>14,600</td>
<td>10,301</td>
<td>70.56%</td>
<td>$103.00</td>
<td>$72.67</td>
</tr>
<tr>
<td>2021</td>
<td>14,600</td>
<td>10,592</td>
<td>72.54%</td>
<td>$106.09</td>
<td>$76.96</td>
</tr>
<tr>
<td>2022</td>
<td>14,600</td>
<td>10,890</td>
<td>74.59%</td>
<td>$109.27</td>
<td>$81.51</td>
</tr>
<tr>
<td>2023</td>
<td>14,600</td>
<td>11,198</td>
<td>76.70%</td>
<td>$112.55</td>
<td>$86.32</td>
</tr>
<tr>
<td>2024</td>
<td>14,600</td>
<td>11,198</td>
<td>76.70%</td>
<td>$115.93</td>
<td>$88.92</td>
</tr>
</tbody>
</table>

The proposed hotel is planned to open in 2019. During the first year of operation, the proposed hotel is forecasted with an occupancy rate of 68.68% and reaching the stabilized occupancy rate of 76.70% by 2023. This is due to the
stabilization of demand and supply market in Chiang Mai. It is assumed that the occupancy of the proposed hotel is going to be slightly higher than the market due to its location, the old city area, which is more popular than other areas. As seen in Table 5, the ADR of the proposed hotel will be lower than the market due to limited services provided by the hotel. This strategy will allow the hotel to stay competitive. The ADR is projected to start at $100, but will increase at the rate of 3% annually to counter the inflation rate and the increase in operational cost. Despite the lower ADR, the hotel will still operate with higher occupancy, thus attaining higher RevPAR than the competitive market. For instance, the RevPAR of the proposed hotel is predicted at $72.67 in 2020, the RevPAR of the market is lower at $70.97 in 2020.

**Estimated revenues and expenses distribution.** Table 6 shows the revenue and expense distribution of the proposed hotel. This allows hotel managers to understand the components that generate hotel income and operating costs. This information is based on the hotel financial information published by Horwath HTL and Thai Hotels Association in 2014.
Table 6

Projected revenues and expenses

<table>
<thead>
<tr>
<th>Revenue Distribution</th>
<th>Proposed Hotel Operation</th>
<th>Y1 2019</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Occupancy</td>
<td></td>
<td>68.86%</td>
<td></td>
</tr>
<tr>
<td>Available Room Daily</td>
<td></td>
<td>40</td>
<td></td>
</tr>
<tr>
<td>Total Available Room</td>
<td></td>
<td>14600</td>
<td></td>
</tr>
<tr>
<td>Total Room Sold (Annually)</td>
<td></td>
<td>10054</td>
<td></td>
</tr>
<tr>
<td>ADR</td>
<td></td>
<td>$100.00</td>
<td></td>
</tr>
<tr>
<td>RevPAR</td>
<td></td>
<td>$68.86</td>
<td></td>
</tr>
</tbody>
</table>

**Total Revenue**  
$1,005,417  100%

<table>
<thead>
<tr>
<th>Expense Distribution</th>
<th>Percent of Rev.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rooms</td>
<td>$130,704  13.00%</td>
</tr>
<tr>
<td>Food &amp; Beverages</td>
<td>$100,542  10.00%</td>
</tr>
<tr>
<td>Fixed Charged</td>
<td>$94,509  9.40%</td>
</tr>
<tr>
<td>Administrative and General</td>
<td>$80,433  8.00%</td>
</tr>
<tr>
<td>Utilities</td>
<td>$68,368  6.80%</td>
</tr>
<tr>
<td>Property Operation &amp; Maintenance</td>
<td>$60,325  6.00%</td>
</tr>
<tr>
<td>Sales &amp; Marketing</td>
<td>$50,271  5.00%</td>
</tr>
<tr>
<td>Minor-Operated Department</td>
<td>$18,098  1.80%</td>
</tr>
<tr>
<td>Telephone</td>
<td>$3,016   0.30%</td>
</tr>
</tbody>
</table>

**Total Expense**  
$606,266  60.30%

| Net Operating Income (NOI)               | $399,151  39.70% |
| Annual Interest                          | $44,000   2.00% |
| Earning Before Tax                       | $355,151  35.32% |
| Corporate Income Tax                     | $71,030   20.00% |
| Local Tax                                | $3,552    1.00% |

**Net Income**  
$280,569  27.91%

By using the projected values from Table 5 together with the average accounting percentage, the projected revenues and expenses can be calculated to obtain the financial operations of the proposed hotel. Since breakfast is included as a hotel complementary, the main revenue generator of the proposed hotel will come from selling guest rooms. With the projected ADR of $100 and the total
annual room sold at 10,054 rooms, the total revenue is calculated to be $1,005,356 in the year of 2019.

Expenses for the proposed hotel such as rooms, food and beverage, fixed charges, administrative and general expenses are calculated to be $606,230 or 60.30% of total revenue. The highest expense will come from the room expenses, which is $130,696 or at 13% of the total revenue. Furthermore, the net operating income of the proposed property sits at 39.70% of the total revenue. As a result, the net profit, after annual interest, corporate income tax, and local and property tax are deducted, is computed to be at $280,569 or 27.91% of the total revenue.

Valuation Analysis

Discounted cash flow. A discounted cash flow analysis is used to estimate the market value of the proposed hotel. The main purpose of the valuation analysis is for hotel owners to decide whether or not the proposed boutique hotel is financially feasible. The Discounted cash flow analysis can be seen in Table 7 below.
### Table 7

**Discounted cash flow analysis**

<table>
<thead>
<tr>
<th>Year</th>
<th>Projected Revenue</th>
<th>Projected NOI</th>
<th>Discounted Factor 11%*</th>
<th>Present Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>2019</td>
<td>$1,005,417</td>
<td>$280,612</td>
<td>0.900900901</td>
<td>$252,803</td>
</tr>
<tr>
<td>2020</td>
<td>$1,061,046</td>
<td>$296,138</td>
<td>0.811622433</td>
<td>$240,352</td>
</tr>
<tr>
<td>2021</td>
<td>$1,123,654</td>
<td>$313,612</td>
<td>0.731191381</td>
<td>$229,310</td>
</tr>
<tr>
<td>2022</td>
<td>$1,189,996</td>
<td>$332,612</td>
<td>0.658730974</td>
<td>$218,783</td>
</tr>
<tr>
<td>2023</td>
<td>$1,260,295</td>
<td>$351,748</td>
<td>0.593451328</td>
<td>$208,746</td>
</tr>
<tr>
<td>2024</td>
<td>$1,298,178</td>
<td>$5,441,869</td>
<td>0.534640836</td>
<td>$2,909,445</td>
</tr>
</tbody>
</table>

**Projected Total Value: $4,059,439**

2025 NOI: $373,191

*Market Cap Rate 7.2%

Sales Value *(After 2% Transactional Deduction): $5,183,211*

Project Budget: $3,900,000

*Discounted factor 11% based from The Stock Exchange of Thailand (SET)*

*Market Cap Rate 7.2% based from JLL real estate services*

Using the ADR and occupancy rate projections, the projected revenue for the proposed hotel can then be determined from year 2019 to 2024. Assuming that the proposed hotel’s occupancy rate remains constant at 76.70% while the ADR increases to $119.41, the hotel is expected to generate a total revenue of $1,337,124 in 2025.

In order to foresee the total value of the hotel, the projected net operating profit (NOI) for each year must be calculated. As seen in *Table 6*, the expected NOI of the proposed hotel is at 27.91% of the total revenue. The discounted factor of 11% is then applied to the projected NOI to establish a discounted cash flow or present value. To calculate the sale value of $5,183,211, the NOI of $373,191 in
year 2025 is divided with the market capitalization rate of 7.2%. This particular value has already been deducted from the transactional cost of 2%. By adding the sale value with the net operating income of $362,322 will produce a new net operating income of $5,441,869 for the year of 2024. The total projected value is calculated by accumulating the present value of all the projected years, to produce a worth of $4,059,439.
CONCLUSION

Chieng Mai has been seen as a tourist hub of the Northern Thailand and is considered the fastest growing economy of the entire nation. The political turmoil within the last few years seems to stumble other industries while the tourism industry and hospitality sector in Chieng Mai remain strong and on the rise. The increase in the lodging demand that surpasses the market hotel supply is one of the many reasons to invest in new hotels in Chieng Mai. Government offices and private company such as Chieng Mai Tourism and Sport Bureau, The Bank of Thailand, and the tourism Authority of Thailand have analyzed historical data and provided assumptions that the ADR and occupancy rate of the hotels in Chieng Mai will continue to rise, increasing the possible revenue generation of hotels and guesthouses in the coming years. However, such information is not sufficient to verify that opening a new hotel will be a complete success. An in depth analysis of the proposed hotel must take place, hence the utilization of feasibility study.

Within the research paper, three different analysis are covered to investigate whether the proposed hotel will be feasible and able to generate sufficient profit. The proposed hotel which is projected to be opened in 2019, will be located in the heart of Chieng Mai, and thus will target travelers from around the nation and the globe. The assessment includes a market analysis, a financial analysis, and a valuation analysis. The findings from the market analysis have shown that the proposed site is suitable for hotel development since it is located in the old city area, which is the most popular area in town. A hotel in this area could potentially generate a high demand. In addition, the proposed site is close to Chieng Mai International airport and surrounded by many local restaurants,
temples, markets and residences. The old city area allows tourists to experience the authentic northern Thai tradition and interaction with the locals.

The historical data analysis has further supported the development of the hotels in the proposed site. The data from The Department of Tourism Thailand has shown that the occupancy rate and ADR of the hotels have increased every year. This means that lodging facilities in Chiang Mai is achieving a higher RevPAR with every passing year. The city’s preservation (authentic tourist destination) along with the tourism marketing strategies promoted by the government are assumed to increase the demand from tourists around the world. Due to the site of the proposed hotel which is considered a prime location, the proposed hotel is forecasted to outperform the competitive market by achieving a higher occupancy rate and RevPAR than hotels in other areas of Chiang Mai. The valuation analysis of the proposed hotel has shown promising figures and is expected to be profitable if the hotel is built. This indication can be seen from an increase in the projected net operating income in every succeeding year. In conclusion, the research paper has provided favorable report which recommended the owners to repurpose their site into a boutique hotel in Chiang Mai, Thailand.
LIMITATIONS OF THE STUDY

The author has spotted several limitations in regarding the research and content within the proposed feasibility study of the hotel project as follows:

a) The purpose of the study was to see if the hotel is financially feasible and a worthwhile investment, but it does not contain an assessment on the design impact of hotel project to the surrounding, either positive or negative. For example, the cultural or environmental could impact the proposed hotel to Chiang Mai.

b) The study did not evaluate the sustainability of the proposed site, in comparison to other businesses in the surrounding area. The corporate social responsibility analysis was not the main purpose of the paper.

c) The design factor was not included in to the study. The feasibility study focused on the property’s ability to generate income through economic demand, and not from the property’s appearance.

d) The feasibility study of the proposed hotel was specifically for the owner of this property, in this particular area of Chiang Mai, the results of the study cannot be mirrored to other situations.
REFERENCES


http://www2.bot.or.th/statistics/BOTWEBSTAT.aspx?reportID=624&language=ENG


Lynn, M. (2011). *Segmenting and targeting your market: Strategies and limitations*. Retrieved from Cornell University, School of Hospitality Administration website:
http://scholarship.sha.cornell.edu/cgi/viewcontent.cgi?article=1238&context=articles


https://shareok.org/bitstream/handle/11244/7262/School%20of%20Hotel%20and%20Restaurant%20Administration_64.pdf?sequence=1


Figure A. Map of Thailand. Adapted from www.volunteerworkthailand.com, December 20th, 2016
Figure B. Map of Chiang Mai. Adapted from google map, https://maps.google.com/, December 25th, 2016
Figure C. Map and site location. Adapted from google map, https://maps.google.com/, December 26th, 2016
Figure D. Competitive hotels. Adapted from google map, https://maps.google.com/, March 15th, 2017