



FIDĒRĒ

A hand pointing at a digital screen displaying various business and technology icons, including charts, graphs, and symbols like a lightbulb, dollar sign, and rocket, representing a business strategy or innovation.

A Peer Reviewed Journal
Published Bi-annually by the
Adventist University of the Philippines

F I D È R E

JOURNAL OF BUSINESS, GOVERNANCE, & INFORMATION TECHNOLOGY

Volume 4 | Number 1

July 2022

A Peer-Reviewed Journal

Published Bi-annually

by Adventist University of the Philippines

Copyright ©2022

by Adventist University of the Philippines Printing Press

All rights reserved

No part of this publication may be reproduced, stored in a retrieval system, or transmitted in any form or by any means, electronic, mechanical, photocopying, recording, or otherwise, without permission in writing from the publisher.

PRINTED IN THE PHILIPPINES

P-ISSN 2704-3231

E-ISSN 2704-324X

RESEARCH OFFICE

Adventist University of the Philippines

Puting Kahoy, Silang, Cavite, Philippines

www.aup.edu.ph/urc/

Fidēre is a peer-reviewed journal published biannually by the Adventist University of the Philippines. This journal accepts papers from business, governance, & information technology from local and international researchers.

Editors

Jolly S. Balila, PhD, *Director, Research Office, Adventist University of the Philippines*

Glenda Joy B. Lopez, PhD, *Faculty, College of Business, Adventist University of the Philippines*

Associate Editors

Gracel Ann S. Saban, PhD, *Vice President-Academics, Adventist University of the Philippines*

Reuel E. Narbarte, PhD, *Director, Human Resource, Adventist University of the Philippines*

Robert A. Borromeo, PhD, *Vice President-Finance, Adventist University of the Philippines*

Ruben T. Carpizo, PhD, *Director, Accreditation Office, Adventist University of the Philippines*

Lualhati P. Sausa, PhD, *Faculty, College of Business, Adventist University of the Philippines*

Marta B. Macalalad, PhD, *Faculty, College of Business, Adventist University of the Philippines*

Managing Editor

Beryl Ben C. Mergal, PhD, *Research Consultant, Research Office, Adventist University of the Philippines*

Copy Editor

Madonna Lourdes M. Felicitas, MA, *Editor, Research Office, Adventist University of the Philippines*

Layout Artist

Vergel Neil Galang, *Research Staff, Research Office, Adventist University of the Philippines*

Peer Reviewers

Wayne Hamra, PhD, *Asia-Pacific International University*

Damrong Sattayawaksakul, PhD, *Asia-Pacific International University*

Noah Balraj, PhD, *Asia-Pacific International University*

Francis Hutabarat, PhD, *Universitas Advent Indonesia*

Elvis Ronald Sumanti, PhD, *Universitas Klabat, Manado, Indonesia*

Research Council Members

Jolly S. Balila, PhD, *Research Director and Consultant, Research Office*

Beryl Ben C. Mergal, PhD, *Research Consultant, Research Office*

Rowena Imelda A. Ramos, PhD, *Research Consultant, Research Office*

Lorcelie B. Taclan, PhD, *Research Consultant, Research Office*

Madonna Lourdes M. Felicitas, MA, *Editor, Research Office*

Vergel Neil B. Galang, *Lay-out Artist and Encoder, Research Office*

Ethics Review Board

Beryl Ben Mergal, Ph.D, *Chair, Research Consultant, Research Office*

Jolly Balila, PhD, *Director, Research Office*

Doris Mendoza, MD, *Dean, College of Medicine*

Rico Javien, PhD, *Faculty, College of Theology*

Jacqueline G. Polancos, DrPH, *Faculty, College of Nursing*

Jesse Songcayawon, PhD, *Chair, History Department, College of Arts and Humanities*

Myrtle C. Orbon, PhD, *Chair, Psychology Department, College of Arts and Humanities*

Gizelle Lou C. Fugoso, LLB *Faculty, College of Business*

F I D È R E

JOURNAL OF BUSINESS, GOVERNANCE, & INFORMATION TECHNOLOGY

Volume 4 | Number 1

July 2022

Table of Contents

Perceived Factors Contributing to Employee Initiated Separations in Retail Carts and Kiosks	1
Raphael Louis E. Fernandez	
Relationship Between Credit Administration and Asset Quality in Ghana's Financial Sector	16
Daniel Adofo Kwakye Ameyaw, Reuel Esteban Narbarte, Isaac Anowuo, Patience Yamoah	
Predictors of Students' Performance in Accounting 1 at Romblon State University	25
Sherryl M. Fetalvero, Tomas T. Faminial, Errol S. Foja, Emelyn F. Montoya, Bless Faith F. Andal, Ma. Jessica C. Fabito, Jerome F. Fesalboni	
Establishing a Catering Business in Sto Domingo, Santa Rosa City, Laguna	33
Alexis Louise O. Anaya	
Establishing a Lifestyle Food Restaurant in San Lorenzo, Makati City	41
Nisaam Ibbar L. London	
A Feasibility of Establishing a Pharmacy in Sunrise Subdivision, Brgy. Inosluban, Lipa City	56
Theresa Mae F. Faina	
A Feasibility Study of Establishing a Convenience Store in Caloocan Matnog Sorsogon	72
Aileenmae G. Silverio	
Accounting and Consultancy Services Firm in Puting Kahoy, Silang, Cavite: A Feasibility Study	90
Fevi Iris B. Rabino	
Establishing a Hazardous Waste Transporter Company in Mexico, Pampanga: A Feasibility Study	103
Samantha Grace G. Musni	

Perceived Factors Contributing to Employee Initiated Separations in Retail Carts and Kiosks

Raphael Louis E. Fernandez

Adventist University of the Philippines
mrjapfernandez@gmail.com

Abstract

Small enterprises, such as retail businesses in carts or kiosks, are the most vulnerable to the effects of employee turnovers given their limited resources and number of employees. In view of the foregoing, it would be beneficial for retail cart and kiosk owners and those who may be interested to pursue such business to be familiar with the factors that can adversely affect employees' job satisfaction which can lead to loss of employees. This study is descriptive research aiming to present the statistics of known factors in employee-initiated separations focusing on retail carts and kiosks and provide explanations of the results based on data collected from primary and secondary sources. The target population for this study is those who had past employment in retail carts or kiosks and whose employment was terminated by the employee. Given the nature of the target population of this study which makes determining the population size not feasible, quota sampling is used and 400 qualified respondents were deemed sufficient. Conduct of surveys was employed with the use of questionnaires to acquire the needed data from the sample population to present the statistics of each factor in employee separations. Survey results on 400 respondents show that 70.25% stated compensation as a reason to initiate employment separation, 49.5% on employer's management of the business, 20.5% on occupational safety and health, 20% on job security and long-term work, 19.75% on job or task being done, 19.25% on personal circumstances affecting work, 16.5% on treatment of employer, 12.5% on the pursuit of further studies, business, other vocation or interests, and 3% on conflict with co-workers. Employee-initiated separation is an indelible fact of employment regardless of scale or nature of business, but it can be minimized with awareness of its causes and their appropriate management.

Keywords: *employee turnover, employee engagement, job satisfaction, small business, resignation, management*

Employees come and go. It may be employer initiated, or of the employee's own volition which is due to a myriad of reasons attributed ultimately to the employee's interests. For instance, the top three reasons for employee-initiated termination of employment in the Philippines' National Capital Region during the fourth quarter of 2019 according to the Philippine Statistics Authority (2020) are being hired by another employer at 34.5%, family considerations at 21.4%, and to work overseas at 12.8%. The desire to work for another employer whether local or overseas employment has varying motivations, one of the strongest and most well-known being salary. (Al Mamun & Hasan, 2017; iMoney, 2017; Hasnan, 2019; Mahadi, Woo, Baskaran & Yaakop, 2020; Holliday, 2021; Cuaresma, 2021). However, as seen in the aforementioned research findings from the Philippine Statistics Authority, compensation is only one of the various factors that lead employees to leave their jobs. It would be unwise for a business owner or manager to focus all sights and resources on higher compensation in a bid to retain experienced and valued employees. If the matter is left unchecked, high employee turnovers can be costly for an employer not just in the recruitment of a replacement but in almost every aspect of business operations. (Smith, 2021).

The effects of losing employees can be even more painful for smaller businesses with their limited capital and small workforce. One example is a food kiosk manned by a single employee. If this employee tenders a 30-day resignation, this leaves the owner the trouble of looking for and training a replacement in such a short time. Failing to find a suitable replacement would leave the owner two options: manning the kiosk himself or closing the business while payment of fixed expenses continues until a replacement is found. In relation to this, first-hand information shared by workers at food kiosks with the researcher during past visits revealed that some employees in similar establishments are leaving their employers within a week from the first day on the job, more often without prior notification. This, together with the fact that workers at those kiosks are compensated according to the minimum requirements of labor laws and work in the comfort of an air-conditioned shopping mall, sparked the researcher's curiosity on the matter leading to this study.

Most retail enterprises in carts or kiosks operating either under their own brand or a franchise would fall under Micro, Small, and Medium Enterprises (MSME) while a few brands or business entities who operate larger numbers of carts or kiosks can be categorized as large enterprises. In the Philippines, The Magna Carta for Micro, Small, and Medium Enterprises (MSME) defines micro and small enterprises as any business activity "whose total assets, inclusive of those arising from loans but exclusive of the land on which the particular business entity's office, plant, and equipment are situated" values not more than Php3,000,000 and Php3,000,001 to Php15,000,000, respectively. (Republic Act No. 9501, 2008). MSMEs alone comprise 99.51% of the total recorded establishments in the Philippines as of 2020 and employ 5,380,815 workers or 62.66% of the country's total employment. (Department of Trade and Industry, 2020). From the foregoing figures, it can be assumed that a good portion of MSME employees works in retail carts or kiosks. One can find retail stalls, typically operated by 1 or 2 workers, in shopping malls and arcades, public markets, supermarkets, parks, and roadsides among other places in virtually every city or town across the country.

Objective

Numerous studies on the causes of employee-initiated separations and employee turnovers were conducted throughout the years, revealing different factors that contribute to employees deciding to terminate their employment. The scope of most of these studies is not limited to a particular scale or the nature of business establishments. The researcher aims to conduct a study on the factors contributing to employee-initiated separations limited in retail carts and kiosks. For this purpose, applicable data found in the results of relevant studies presented by online articles, journals, and research studies, among other sources, were used and such data were utilized to determine the statistics of factors in employee-initiated separations with the valuable assistance from respondents for this study possessing actual work experience in retail carts and kiosks. Information on the

results of this study would allow the owners or managers of these small businesses, as well as those who plan on engaging in such ventures, to determine appropriate measures or changes that could help promote better employee retention.

Significance of the Study

While some employment terminations are unavoidable, they can be minimized and it generally boils down to the employees' motivation and job satisfaction. (Sears, 2017; Herzberg, et. al., 1959, as cited in Yousaf, 2019). It is, therefore, beneficial especially to business owners to determine and be familiarized with the factors that can adversely affect employees' job satisfaction which can lead to the loss of employees that could have been otherwise prevented. As stated earlier, employee turnover can be costly and problematic for business operations, especially for smaller enterprises. Employers incur direct costs through financial expenses mostly in recruitment and indirect costs that may refer to productivity costs due to lost knowledge, the time it takes to find a replacement, and training time until the new worker becomes fully productive. (Sears, 2017). By determining the frequency of influencing factors leading to employee-initiated separations, interventions can be made to address the problems. In addition, knowledge and awareness of the foregoing should raise awareness of retail cart or kiosk owners and managers on the matter and prepare appropriate actions to address the possible effects of employee separations, especially due to unavoidable factors. Lastly, this study should be helpful for the many people who dream and plan on having such a small retail business due to their smaller capital requirement.

Scope and Limitations

The scope of research and discussions in this study is limited to factors contributing to employee-initiated separations that apply to retail carts and kiosks. This study will be confined to retail carts and kiosks as, given their limited resources and the number of employees, they are more vulnerable to the effects of employee turnovers.

Review of Literature

This will cover the theoretical framework, research paradigm of this study, and definition of terms. The theoretical framework will discuss theories and all information relevant to this study that explains the frequency of each factor, as well as how each factor leads to employees in retail carts and kiosks leaving their employers.

Theoretical Framework

There are two types of employee-initiated turnover. One is the unavoidable turnover wherein unavoidable circumstances lead the employee to leave the job and which the employer has no control over. Avoidable turnovers are those that can be prevented by managerial interventions. (Luecke, 2002; Chiu, Luk, & Tang, 2002, as cited in Al Mamun and Hasan, 2017). As previously mentioned, factors detrimental to an employee's job satisfaction can lead to the decision of leaving employment. (O'Connor, 2018). Abraham Maslow, the author of the well-known Hierarchy of Needs, theorized that an individual has five basic needs that must be met in order: physiological needs, safety needs, social needs, esteem needs, and self-actualization needs. Maslow explained that physiological needs include the need for relief from hunger, thirst, and fatigue, safety needs include the need to be free from bodily harm, social needs include the need for love, affection, and belongingness, esteem needs include the need for individuals to be recognized and to achieve, and self-actualization needs include the need to reach one's full potential in a specific area. (Maslow, 1954, as cited in O'Connor, 2018). Maslow's Hierarchy of Needs lets us assume that employees are satisfied only if their needs are met. (O'Connor, 2018). Another related theory is Frederick Herzberg's Two Factor theory which includes two sets of needs referred to as hygiene factors and growth factors or motivators. Hygiene factors can include salary, benefits, work policy, and work

conditions. If hygiene factors are not acknowledged, dissatisfaction can occur. Motivators or growth factors stimulate inspiration in employees. Motivation factors include recognition, promotion, and achievement. The theory suggests that the hygiene factors do not lead to long-term satisfaction but the lack thereof causes dissatisfaction, while the motivators are the ones stimulating true job satisfaction. (O'Connor, 2018, Herzberg, et. al., 1959, as cited in Yousaf, 2020). Mobley's model of turnover presents a series of deliberations wherein dissatisfaction in the job leads the employee to look and evaluate alternatives and, if the alternative proves satisfying enough, eventually decide to leave the current employment in favor of the alternative. (Alla & Rajaa, 2019, O'Connor, 2018). March and Simon's model influenced subsequent turnover models. This theory suggests that the employee's decision to depart from a job is influenced by the perceived desirability of movement which is influenced by job satisfaction, and perceived ease of movement which is an assessment of perceived alternatives. (March & Simon, 1958, as cited in Saridakis & Cooper, 2016, O'Connor, 2018).

Philippine and international sources such as online articles and studies from Parker & Horowitz (2022), Cuaserna (2021), Heathfield (2021), Holliday (2021), Nelson (2021), Springboard Philippines (2021), Suárez-Albanchez, Blazquez-Resino, Gutierrez-Broncano, & Jimenez-Estevez (2021), Mahadi, Woo, Baskaran, & Yaakop (2020), Kalesi (2020), Li (2020), Liu, Gyabeng, Sewu, Nkrumah, & Dartey (2019), Reyes, Aquino, & Bueno (2019), Perez (2019), Spencer (2019), Cullimore (2018), Kelly (2018), Safitri, Musadie, and Aziz (2018), Westfall (2018), Serrano (2017), Effiong, Usoro, & Ekpenyong (2017), Sears (2017), iMoney (2017), and McQuerrey (n. d.) showed the various factors affecting job satisfaction of employees in workplaces of general settings and scale. Upon comparison and review of the aforementioned sources, the following factors contributing to employee-initiated separations were determined as applicable in retail carts and kiosks and used in data gathering for this study.

Treatment of Employer

Employees who are shown and treated with care and respect by their employers boost their job satisfaction and engagement. On the other hand, unsatisfactory treatment of employees by employers may be manifested by lack of credit for a job well done, indifference, or any forms of abusive treatment in worse cases can result in low productivity and job satisfaction which can lead to employees leaving such unpleasant workplaces as they would perceive it. (Abun, Ranay, Magallanes, Encarnacion, & Alkalde, 2020, Westfall, 2018).

Compensation

People have various personal reasons to work. Whatever those reasons are, money will always be included with them. Money is required to cover human living expenses which range from the most basic to life indulgences. In addition, compensation is also a language of appreciation for one's work. (Li, 2020). Money can buy almost all human needs and wants, therefore, compensation is a powerful factor that by itself can drive workers to leave employment and offer their services to other employers who are prepared to pay them better.

Job or Tasks Being Done

This involves jobs or tasks that have become highly repetitive with minimum creativity. Eventually, employees would lose interest in the job since there is no creative stimulation, no prospect for innovation, and no opportunities to stand out. (Kalesi, 2020). In addition, employees whose expectations of the job were not met can lose enthusiasm at work. (Cullimore, 2018).

Employer's Management of the Business

Employees can see through the employer's management of business resources. Retention of employees would require employers to show and practice good business management which,

especially in the eyes of the employees, is manifested by financial stability, human resources management, and organizational stability. (Heathfield, 2021, Cullimore, 2018).

Job Security and Long-Term Work

People would rather have a stable job that would constantly provide them with money for their living expenses. For others who aspire more in life than just earning some cash, a long-term if not a retiring job would be preferred. Fewer opportunities for personal advancement in their current employment could lead employees to look for another employer that can provide those. In the coming years, career advancement could be consistently topping the list of reasons for employee-initiated separations as more Generation Z people or those born in the mid-1990s enter the workforce. This group values career progression and growth above all else. (Westfall, 2018).

Personal Circumstances Affecting Work

These are circumstances that may render leaving employment unavoidable. Examples of these are relocation, retirement, and personal and family exigencies. (Sears, 2017; Kelly, 2018).

Occupational Safety and Health

Unsafe and unhealthy workplace conditions can be detrimental to employees' productivity and job satisfaction. Perception of occupational safety and health has changed in recent years. This was more evident during the Covid-19 pandemic as more job sectors that used to give low priority to occupational safety and health have instituted policies and programs to establish safe and healthy workplaces and workers choose their safety and health over their job. (Hsu, 2021, Suárez-Albanchez, Blazquez-Resino, Gutierrez-Broncano, & Jimenez-Estevez, 2021).

Pursue Further Studies, Business, Other Vocation or Interests

People who work for an employer for the purpose of earning money to finance their education for a different career, a dream business, or other interests will leave their job sooner or later and this is out of the employer's control. In some cases, conditions in the job may have been the contributory factor for an employee to decide on pursuing other things in life. (Sears, 2017).

Research Paradigm

This study is designed as descriptive research. The American Psychological Association defines descriptive research as "an empirical investigation designed to test prespecified hypotheses or to provide an overview of existing conditions, and sometimes relationships, without manipulating variables or seeking to establish cause and effect". (American Psychological Association, n. d.).

Definition of terms

Separation

Separation is the term used by the Philippine Statistics Authority (2020) to refer to the termination of an employer-to-employee relationship. It may be employer initiated by means of retrenchment or dismissals or employee-initiated through resignations or retirement, among others.

Employee turnover

The voluntary termination of employees from employing organizations. (Mobley, 1982, as cited by Hom, Allen, & Griffeth, 2020).

Employee Engagement

The involvement and enthusiasm of employees in their work and workplace. (Gallup, n.d.).

Job Satisfaction

The feeling of pleasure and achievement that you experience in your job when you know that your work is worth doing, or the degree to which your work gives you this feeling. (Cambridge University Press, n. d.).

Methodology

Research design

This study is descriptive research, the result of which shall provide an overview of employee separations in retail carts and kiosks. The needed data will be acquired from respondents with the appropriate qualifications through the conduct of surveys.

Population and Sampling Techniques

The target population for this study is those who had past work experience in retail carts or kiosks and whose employment was terminated with the employee's initiative through resignations or less graceful exits such as abandonment of work, among others. Given the nature of the target population of this study which makes determining the population size not feasible, quota sampling, a type of non-random sampling which selects a sample based on an exact number of individuals with specific characteristics, is used. (Mertler, 2022). The selection of participants is guided by certain conditions which are stated above. To obtain the necessary data for this study, the researcher surveyed qualified participants found on duty at retail carts and kiosks who have previously worked at other similar establishments, as well as individuals who are no longer working at retail carts and kiosks but with previous work experience at the aforementioned workplace. As determining the exact population size is not possible, it is deemed irrelevant and a sample size of four hundred (400) participants is adequate. (Gay, et. al., 2009, as cited in Mertler, 2022). The surveys were conducted within the Philippines' National Capital Region and cities in the neighboring provinces of Laguna, Batangas, and Cavite, which are all saturated with retail establishments in carts and kiosks.

Instrumentation

For the purpose of data gathering, a questionnaire was used in the conduct of surveys. The first part of the questionnaire requires certain information from each respondent which will be used to support the results of this study namely the respondent's age, educational attainment, the nature of business of retail carts/kiosks previously worked with, length of service at a retail cart/kiosk, rent of place to stay, and daily wage at every retail carts/kiosk worked at.

The core content of the questionnaire requires the respondent to select all factors indicated therein that contributed to the decision to initiate termination of employment from every retail cart or kiosk the respondent worked at. The indicated factors in the questionnaire were based on secondary sources such as online articles, journals, and other studies on employee turnover. Only factors applicable to retail carts and kiosks were used in the questionnaire. Other factors not indicated in the questionnaire may be specified by the respondent.

Data Gathering Procedure

The researcher visited retail carts, stalls, and kiosks in the National Capital Region and heavily populated cities in the provinces of Cavite, Laguna, and Batangas looking for potential respondents with past work experience at other retail carts or kiosks, which comprise the majority of the sample population for this study. The surveys were conducted from October 2021 to March 2022 when the government imposed restrictions in response to the ongoing Covid-19 pandemic and allowed most business establishments to operate. The necessary data were then gathered from qualified respondents through the use of the questionnaires described above. Each respondent was closely guided during the survey to ensure an accurate response. Data gathered from the respondents through the questionnaire will be appropriately sorted to facilitate data analysis.

Ethical Consideration

Voluntary Participation and Consent

Informed consent is the cornerstone of ethical research. (Denzin and Lincoln, 2011, as cited in Fleming and Zegwaard, 2018). It is explicitly stated in the cover letter of the questionnaire the purpose of the study and that participation in this study is completely voluntary. Respondents have all the right to leave questions unanswered if they choose to participate to a certain degree or completely decline participation.

Confidentiality

The cover letter of the questionnaire assures the respondent of their anonymity and that any piece of information obtained from participation will only be used for this study. All information obtained will only be reported as a collective combined total. The questionnaire itself does not require specifying the names of the respondents.

Analysis of Data

The resulting frequency of each contributing factor to voluntary termination of employment will be presented along with its percentage in the sample population. Demographic data from the first part of the questionnaire will provide an overview of employment in retail carts and kiosks and will also be used to enrich discussions.

Results and Discussion

Demographics

Age Group

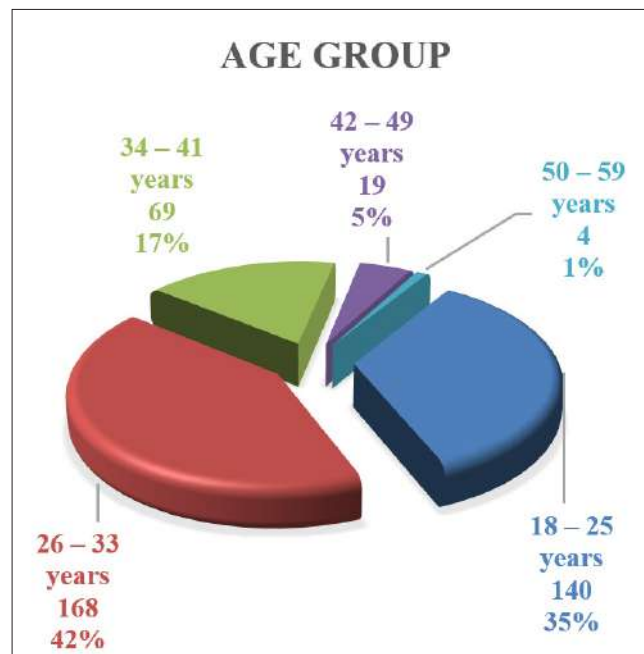
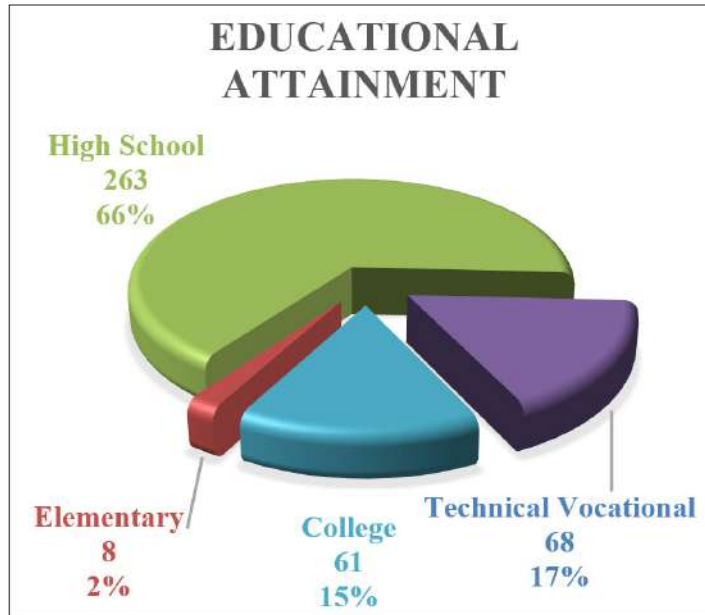
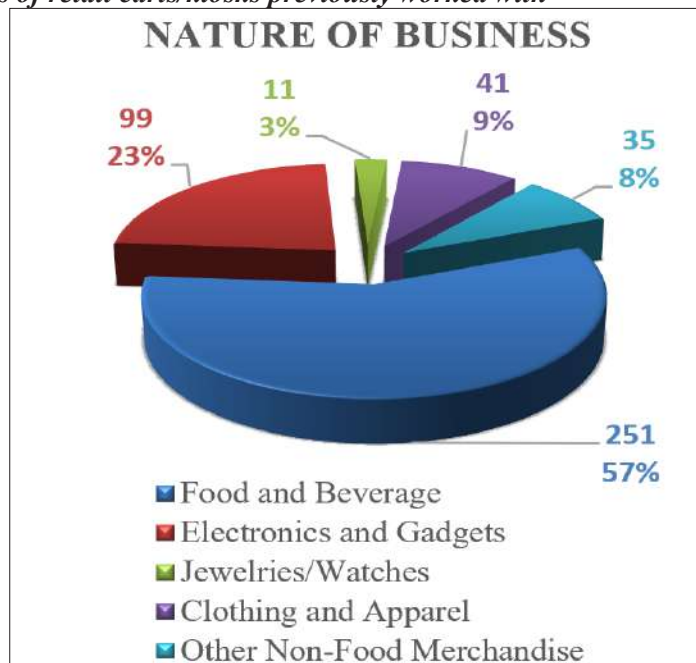


Figure 1. *Age group*

Younger workers with ages 18 to 33 years form the majority of the respondents at a combined percentage of 77%. This is followed by workers aged 34 to 41 years at 17%, 42 to 49 year-olds at 5%, and 50 to 59-year-old workers at 1%.

Educational Attainment**Figure 2.** Educational attainment

High school graduates, which for the purpose of this study refer to graduates of both junior and senior high under the Philippines' K-12 Basic Education Program, secondary education under the old curriculum, and college undergraduates, comprise 66% of the respondents for this study, followed by college graduates at 15%, technical and vocational course graduates at 17%, and 8 elementary school graduates at 2%. Sole proprietorships or franchises are able to hire mostly high school graduates being the largest pool of unemployed people while bigger employers prefer to hire at the very least applicants who completed two years in college. (Philippine Statistics Authority, 2018 and 2020, Orbeta & Potestad, 2020).

Nature of business of retail carts/kiosks previously worked with**Figure 3.** Nature of business of retail carts/kiosks previously worked with

Food and Beverages is the leading nature of business of retail carts and kiosks the respondents had previously worked for at 57%. Carts and kiosks selling food and drinks were spotted the most by the researcher during the conduct of surveys in the field. They can be found in any spot one can imagine in a city – roadsides, parks, transportation terminals, public markets, supermarkets, and malls among others – offering food and drinks to hungry or thirsty passers-by. Also included in the establishments reported by the respondents are 99 kiosks selling electronics and gadgets, 41 clothing and apparel kiosks, 11 watch repair or jewelry kiosks, and 35 kiosks selling other non-food merchandise. These establishments are also commonly found in malls and public markets. The total retail carts and kiosks the respondents had previously worked for as reported are 437.

Length of Service



Figure 4. *Length of service*

Respondents reported working for 2 years and longer at 149 (34%) carts or kiosks before quitting, at 151 (35%) for 1 year or more, 79 (18%) for 6 to 11 months, and 57 (13%) for less than 6 months. The total number of employments undertaken by 400 respondents as reported is 437.

Frequency and Percentage of Factors

Table 1

Frequency and percentage of factors

Factors	f	%
Treatment of Employer	66	16.50%
Compensation	281	70.25%
Job or Tasks Being Done	79	19.75%
Employer's Management of the Business	198	49.50%
Job Security and Long-Term Work	80	20.00%
Personal Circumstances Affecting Work	77	19.25%
Occupational Safety and Health	82	20.50%
Pursue Further Studies, Business, Other Vocation or Interests	50	12.50%
Conflicts with Co-Workers	12	3.00%

Treatment of Employer

Relationship with employers is a major factor for 66 respondents to leave employment and look for work elsewhere. Strained relationships with employers are caused by, among other things, conflicts on business operations matters and unmet expectations by employers which are seen by the employees as too demanding or inconsiderate. These lead employers to show displeasure to their employees as manifested by what is perceived as ill-treatment.

Compensation and Benefits

Of the 400 respondents, 281 or 70.25% pointed at compensation as a cause of leaving employment. This should not come as a surprise. Most of the respondents in this study are compensated higher than the mandated rate for retail establishments employing less than 10 workers or with the better known “non-agricultural” minimum rates. In addition, while there are a few respondents who were noted to have daily wages lower than the mandated minimum, there are some who were compensated with the “Manila Rate” or the NCR minimum wage being the highest of all the regional minimum wages at Php537.00 per day even if their workplace is not located in the NCR. However, minimum wage rates may prove difficult to cover the prevailing cost of living expenses. A study showed that the mean value of all regional minimum wages in the Philippines in 2020 is Php7,139.00, 62.3% or Php4,447.60 of which would go to basic food spending alone. (Picodi, 2020). Adding to the living expenses of 173 of the surveyed workers at retail carts and kiosks is rent of place to stay.

Job or Tasks Being Done

Respondents find the tasks they have been doing for a certain period of time in the retail cart or kiosk they have left to be either difficult, unchallenging, or uninteresting. Most of these respondents are presently working at another retail cart or kiosk where the researcher met them during the conduct of surveys, while a few reportedly work at bigger establishments and companies where their education and skills are better utilized. Job or tasks being done is reported by 79 respondents as the cause of leaving employment.

Employer’s Management of the Business

Poor sales, late payment of wages, and lack of flexibility in work schedules are how 198 out of the 400 respondents illustrate their former employers’ management. Sales are largely dependent on marketing efforts and management decisions have their effects on them as well. Employers who do not fully understand the business and make the right decisions could see its sales unable to cope with operational expenses, which include the employees’ wages. Employees working with mediocre employers can result in disengaged employees, which can push them away to their next employer.

Job Security and Long-Term Work

Small retail businesses such as those in carts or kiosks do not require large capital to start and if sales do not go as expected, it would not be hard for the owner to cease operations and probably pursue another line of business or franchise. Most of the 80 respondents who reported job security or long-term work as the reason for leaving employment are placing their bets on their current retail cart/kiosk job for the longest employment possible. For some of the 80 respondents who have better educational attainment, career advancement is just as important as job security, and will continue to search for a job that can give both.

Personal Circumstances Affecting Work

Getting pregnant and having children or family members to attend to are just two of the various reasons for 77 respondents who left their previous employment.

Occupational Safety and Health

Respondents who previously worked on carts or kiosks at non-air conditioned places, roadsides, or outdoor markets where they are exposed to pollutants and the elements, especially heat, reported working conditions as the reason for leaving employment. Unsafe or unhealthy working conditions affect workers' productivity and happiness and in a country like the Philippines where most people do not appreciate the hot weather, 82 (20.5%) of the respondents who had experienced working in carts and kiosks outside air conditioned places and left know this very well.

Pursue Further Studies, Business, Other Vocation or Interests

Experience at work or realizations made 50 respondents decide to leave employment and pursue further studies or try setting up their own businesses. Few of the respondents are tending to their own food stall when the researcher met them during the conduct of surveys, while some are working students employed in carts or kiosks. The rest were found by the researcher currently working full-time in carts and kiosks.

Other reasons: Conflicts with Co-Workers

This is not included in the set of factors in the questionnaire but 12 workers who have worked with 1 or more employees in a retail cart or kiosk from their previous employment specified conflicts with co-workers as a reason for leaving employment.

Conclusion and Recommendation

As this study found, compensation is the most common factor among the 400 sample population of workers at retail carts and kiosks contributing to the decision of separation from employment. It has to be noted that compensation as a reason for quitting the job was reported by only 70.25% of the respondents and 29.75% stated other reasons. In addition, most respondents stated multiple reasons for leaving employment, mostly with compensation. Higher compensation does not guarantee longer service by employees. Any other factors that can affect employees' job satisfaction must also be looked into by employers. Proper knowledge of the business and management of its resources, particularly the employees whose vote of confidence is needed for business operations, must be no less mastered. With excellent business management, employees and the business itself will last longer. While it has to be acknowledged that small business owners can only offer so much to employees given their limited resources, making employees feel cared for and appreciated for their work in ways that satisfy their needs can make them stay. Investing in tools and equipment for ease of doing work, facilitation of satisfactory working conditions, and provision of simple fringe benefits as may be allowed by business resources if not wage increases are a few ways that can make employees feel valued. In addition, communication with employees for consultation or feedback will make them feel like valued partners in running the business and contribute to employee engagement. Furthermore, efforts to best promote health and safety in the carts and kiosks especially those located in hazardous areas should convince workers that their health and safety are of paramount importance.

Most of the factors in this study attributed to employee-initiated separations in retail carts and kiosks are avoidable and management plays a crucial role in making employees continue working for the business for as long as possible. For those who left employment to look for a long-term job, management can only do much. Working at larger companies operating at retail carts or kiosks can be seen as a long-term job for some employees and can offer some opportunities for career advancement. Smaller businesses or franchises may not be able to offer the same opportunities or job security. An enterprise employing less than ten people could only need one manager and that could even be the owner itself. With the right credentials and accumulated work experience, people will continue to look for employment opportunities until they get the best job they can have. Career growth and development contribute to satisfaction of self-actualization needs which is manifested

by greater life satisfaction, self-acceptance, positive relations, environmental mastery, personal growth, autonomy, purpose in life, and self-transcendent experiences. (Kaufman, 2018). Lastly, higher positions in an organization certainly mean higher pay.

For unavoidable factors contributing to employee-initiated separations such as personal circumstances and those who plan to pursue other things such as further studies or business, the best that employers can do is to prepare plans for different contingencies of employee separations to ensure continuity of operations. Employers should consider the possibility of employees quitting for any reason by tendering resignation either 30 days before it takes effect as provided by Article 300 of the Labor Code of the Philippines or less than 30 days subject to the employer's approval. In addition, the worst-case scenario that employers should consider preparing for is job abandonment. Interviews during recruitment can also offer hints of future plans of applicants, especially from the younger applicants. The employer then can select the best applicant available that could stay with the business for as long as possible apart from possessing the necessary skills.

All factors of employee turnover discussed in this study must be treated with equal importance and be given prompt action as the underlying causes leading to each of these factors could result in valued employees quitting their job. The objective is to make the employees happy and content in the workplace as long as possible. Small business owners may not be able to give employees the ideal job or salary among other things but to prevent losing skilled and tenured employees and possibly the business itself, employers should invest in their needs.

References

- American Psychological Association. (n. d.). *Descriptive Research*. <https://dictionary.apa.org/descriptive-research>
- Abun, D., Ranay, F. B., Magallanes, T., Encarnacion, M. J., & Alkalde, F. (2020). Employee treatment and work engagement: The Philippines context: Employee Treatment. *Proteus-Cahiers des théories de l'art, Revue indépendante*, 2020, *Employee Treatment and Work Engagement: The Philippines Context*, 11(10), pp.153-175. DOI:10.37896/PJ11.10/017. hal-02994669
- Alla, A., Rajaa, O. (2019). A review of the literature on employee turnover. *American International Journal of Social Science* 8(3), September 2019 doi:10.30845/aijss.v8n3p4
- Al Mamun, C. A. and Hasan, N. (2017). Factors affecting employee turnover and sound retention strategies in business organization: A conceptual view. *Problems and Perspectives in Management*, 15(1), 63-71. doi:10.21511/ppm15(1).2017.06
- Cambridge University Press. (n. d.). *Job satisfaction*. <https://dictionary.cambridge.org/us/dictionary/english/job-satisfaction>
- Cuaresma, J. (2021). *Winning the war for talent: The key to retaining employees*. <https://www.manilatimes.net/2021/10/20/business/top-business/winning-the-war-for-talent-the-key-to-retaining-employees/1818997>
- Cullimore, R. (2018). *Understanding why employees leave: 10 turnover statistics you need to know*. <https://manilarecruitment.com/manila-recruitment-articles-advice/understand-why-employees-leave-turnover-statistics-need-to-know-infographic/>
- Department of Trade and Industry (2020). *2020 MSME statistics*. <https://www.dti.gov.ph/resources/msme-statistics/>

- Effiong, C., Usoro, A. A., & Ekpenyong, O. E. (2017) "The impact of labour turnover on small and medium scale enterprises (Smes) performance in Cross River State, Nigeria." *IOSR Journal of Business and Management (IOSRJBM)*, 19(10), 4057. DOI: 10.9790/487X-1910014057
- Fleming, J. & Zegwaard, K. (2018). Methodologies, methods and ethical considerations for conducting research in work-integrated learning. *International Journal of Work-Integrated Learning*, 19. 205-213. https://www.ijwil.org/files/IJWIL_19_3_205_213.pdf
- Gallup (n. d.). What is employee engagement and how do you improve it? <https://www.gallup.com/workplace/285674/improve-employee-engagement-workplace.aspx#ite-357458>
- Hasnan, L. (2019). *Youth in Philippines prefer working overseas*. <https://theaseanpost.com/article/youth-philippines-prefer-working-overseas>
- Heathfield, S. (2021). Top 10 reasons why employees quit their jobs. <https://www.thebalancecareers.com/top-reasons-why-employees-quit-their-job-1918985>
- Holliday, M. (2021). What is employee turnover & why it matters for your business? <https://www.netsuite.com/portal/resource/articles/human-resources/employee-turnover.shtml>
- Hom, P. W., Allen, D. G., & Griffeth, R. W. (2020). *Employee retention and turnover: Why employees stay or leave*. New York: Routledge.
- Hsu, A. (2021). *As the pandemic recedes, millions of workers are saying 'i quit'*. <https://www.npr.org/2021/06/24/1007914455/as-the-pandemic-recedes-millions-of-workers-are-saying-i-quit>
- iMoney. (2017). *Top 10 companies to work for in the Philippines*. <https://www.imoney.ph/articles/top-10-companies-in-philippines/>
- Kalesi, I. (2020). *What are the reasons employees choose to leave a company?* https://www.elorus.com/blog/reasons_employees_leave_a_company/
- Kaufman, S. (2018). Self-actualizing people in the 21st century: Integration with contemporary theory and research on personality and well-being. *Journal of Humanistic Psychology*. November 2018. doi: 10.1177/0022167818809187
- Kelly, A. (2018). *Job turnovers & millennials*. <https://medium.com/@anthony.kelly/i-want-to-break-free-job-turnovers-millennials-a7974ac2f804>
- Li, L. (2020). *Top 10 reasons for high turnover rate*. <https://www.tinypulse.com/blog/top-10-reasons-for-high-turnover-rates>
- Liu, S., Gyabeng, E., Sewu, G. J. A., Nkrumah, N. K., & Dartey, B. (2019). Occupational health and safety and turnover intention in the Ghanaian power industry: The mediating effect of organizational commitment. *BioMed Research International*, vol. 2019, Article ID 3273045, 10 pages, 2019. DOI:10.1155/2019/3273045

- Mahadi, N., Woo, N. M. F., Baskaran, S., & Yaakop, A. Y. (2020). Determinant factors for employee retention: Should i stay? *International Journal of Academic Research in Business and Social Sciences*, 10 (4), 201 - 213. DOI:10.6007/IJARBSS/v10-i4/7120
- McQuerrey, L. (n. d.). *What are the causes of high labor turnover rate?* <https://yourbusiness.azcentral.com/causes-high-labor-turnover-rate-4287.html>
- Mertler, C. A. (2022). *Introduction to educational research*. Thousand Oaks, CA: SAGE Publications, Inc.
- Nelson, N. (2021). *Identifying and addressing employee turnover issues*. <https://www.wolterskluwer.com/en/expert-insights/identifying-and-addressing-employee-turnover-issues>
- O'Connor, J. (2018). The impact of job satisfaction on the turnover intent of executive level central office administrators in Texas public school districts: A quantitative study of work related constructs. *Education Sciences*. 2018; 8(2):69. DOI:10.3390/educsci8020069
- Orbeta Potestad (2020). On the employability of the senior high school graduates: Evidence from the labor force survey. *Philippine Institute for Development Studies*, 5, December 2020. <https://pidswebs.pids.gov.ph/CDN/PUBLICATIONS/pidsdps2040.pdf>
- Parker, K., & Horowitz, J. M. (2022). *Majority of workers who quit a job in 2021 cite low pay, no opportunities for advancement, feeling disrespected*. <https://www.pewresearch.org/fact-tank/2022/03/09/majority-of-workers-who-quit-a-job-in-2021-cite-low-pay-no-opportunities-for-advancement-feeling-disrespected/>
- Perez, K. (2019). *Why employees quit their jobs and the negative effects it has on an organization*. <https://www.linkedin.com/pulse/why-employees-quit-jobs-negative-affects-has-kassandra-perez/>
- Philippine Statistics Authority (2020) *Reasons for separations initiated by employees in establishments with 20 or more workers, national capital region: 4th quarter 2019*. <https://psa.gov.ph/labor-turnover-survey/statistical-tables/2019%20Q4>
- Picodi (2020). *Minimum wages around the world*. <https://www.picodi.com/ph/bargain-hunting/minimum-wages-around-the-world>
- Republic Act No. 9501 (2008). Republic of the Philippines: Congress of the Philippines. Official Gazette. <https://www.officialgazette.gov.ph/2008/05/23/republic-act-no-9501/>
- Reyes, A., Aquino, C. & Bueno, D. C. (2019). Why employees leave: Factors that stimulate resignation resulting in creative retention ideas. *CC The Journal: A Multidisciplinary Research Review*, 14, October 2019 DOI:10.13140/RG.2.2.17579.39203.
- Safitri, I. W., Musadie, M. A., & Aziz A. L. (2018). Effect of work safety and occupational health (k3) on turnover intention with work satisfaction as mediator variables: A study on pt mulia mekanikal elektrik. *Eurasia: Economics & Business*, 6(12), June 2018. DOI: 10.18551/econeurasia.2018-06.05

- Saridakis, G., & Cooper, C (2016, April 29). Research handbook on employee turnover. Massachusetts. Edward Elgar Publishing.
- Sears, L. (2017). 2017 retention report. trends, reasons &. recommendations.
<http://info.workinstitute.com/retentionreport2017>
- Serrano, S. (2017). 7 reasons your best employees are leaving you. <http://www.sysgen.com.ph/articles/10-reasons-best-employees-leaving/26965>
- Smith, G. (2021). Employee retention: The real cost of losing an employee.
<https://www.peoplekeep.com/blog/employee-retention-the-real-cost-of-losing-an-employee>
- Spencer, J. (2019). Research: Employee retention a bigger problem than hiring for small business.
<https://www.zenefits.com/workest/employee-turnover-infographic/>
- Springboard Philippines (2021). 5 reasons why your employees want to resign.
<https://springboard.com.ph/5-reasons-why-your-employees-want-to-resign/>
- Suárez-Albanchez, J., Blazquez-Resino, J. J., Gutierrez-Broncano, S., & Jimenez-Estevez, P. (2021). Occupational health and safety, organisational commitment, and turnover intention in the Spanish IT consultancy sector. *International Journal of Environmental Research and Public Health*, 18, 2021, 5658. DOI:10.3390/ijerph18115658
- Westfall, B. (2018). *Why employees quit their jobs at small businesses*. <https://blog.capterra.com/why-employees-quit-small-businesses/>
- Yousaf, S. (2019). Dissection of Herzberg's two-factor theory to predict job satisfaction: Empirical evidence from the telecommunication industry of Pakistan. *Lahore Journal of Business*, 8(2):85-128. DOI:10.35536/ljb.2019.v8.v2.a4.

Relationship Between Credit Administration and Asset Quality in Ghana's Financial Sector

Daniel Adofo Kwakye Ameyaw, Reuel Esteban Narbarte,
Isaac Anowuo, Patience Yamoah

Adventist University of the Philippines
kwayaw@gmail.com

Abstract

The killer of financial institutions in this world is the issue of asset quality. Banks operate on the wings of deposit-taking and giving out loans. The loans are classified as financial assets on the statement of financial position. The study examined the asset quality of 349 financial institutions in Ghana, considering the variable of credit administration. Data was gathered using self-constructed questionnaires and financial statements of firms, which were analyzed with SPSS 23 for correlation. The results of the study discovered a negative and moderate significant relationship between credit administration and asset quality. The implication of the result is that there is an inverse relationship between credit administration and asset quality. It means an improvement in credit administration will cause a reduction in NPL and write-offs and improve poor asset quality. To improve the poor asset quality of financial institutions, the credit administration in the financial sector of Ghana must be given emphasis. Credit administration must focus on credit rating, credit control, and credit monitoring to improve asset quality.

Keywords: *Credit Administration, Asset Quality, Financial Sector*

The killer of financial institutions in this world is the issue of asset quality. Banks operate on the wings of deposit-taking and giving out loans. The loans are classified as financial assets on the statement of financial position. Through this process, banks generate their revenues in the form of interest. The core function of banking is to bridge funds from the depositor to the borrower. Loans granted but not liquidated at the scheduled date are considered non-performing and thus have poor quality (Oganda et al., 2019). Asset quality has now become a global challenge, and its effects were felt during the global financial crisis and recession (Kumarasinghe, 2017).

A report by the World Bank (2018) indicated that, for the world economy, the ratio of poor quality assets (non-performing loans) to total assets (total loans granted) was an average of 7.44 %, with Ukraine having the highest ratio of 54.54% and Monaco being the lowest with 0.23%. Regarding continental performance, the European Union had an average ratio of 8.09%, Asia had an average ratio of 4.4%, while North America, South America, Australia, and Africa had average ratios of 4.45%, 2.93%, 4.79%, and 11.63% respectively.

The World Bank's (2018) data on asset quality shows a steady rise in Africa. Ghana is reported to have a 21.591% ratio of non-performing loans to total loans, which is the primary determinant of asset quality in the banking industry. Ghana also ranks fourth on the list of countries with the highest non-performing loans ratio in Africa. This phenomenon of low asset quality in Ghana has affected the financial stability of the Ghanaian economy.

Asset quality reflects the credit quality of the loan portfolio of banks and the banking sector in Ghana. It is essential to understand these factors that affect asset quality because of their implications for the risk management roles of banks and for national banking supervision and banking stability. The study of asset quality is a significant theme for academics, banking professionals, governments, and the global financial system (Ariff & Shawtari, 2019; Bholat et al., 2018; Nugroho et al., 2018).

Tawiah and Asante (2018) postulate that the woe of asset quality is a result of poor credit administration. It is believed that an improvement in the credit administration will reduce loan defaults and improve the asset quality of financial institutions in Ghana. Therefore, this variable is a proper solution for poor asset quality.

The Bank of Ghana in 2018 collapsed and consolidated five banks also due to poor asset quality and other factors (Frimpong, 2018). In the search for a solution to improve the poor asset quality in Ghana, which made these banks insolvent, the Governor of the Bank of Ghana (Addison, 2018) indicated that poor corporate governance must be blamed for this situation. The Governor forgot to consider other inherent factors to poor asset quality. Atuahene (2016) has also studied banks in Ghana by looking at corporate governance and performance, with mixed results. This research paper, having found the gap in knowledge to find a management mechanism for asset quality in the Ghana banking industry, considers the role of credit administration on asset quality. As a result, the research seeks to answer the question:

1. Is there a significant relationship between credit administration and asset quality?

The null hypothesis of the study is:

1. There is no significant relationship between credit administration and asset quality

Credit Administration

Credit administration risk has become one of the main forms of risk financial firms are exposed to as a result of the nature of their business operations (Tawiah & Asante, 2018). Most financial institutions have failed to ensure adequate credit administration regarding the credit facilities given to their customers. This negligence in their credit administration has resulted in high defaults in loan payments and bad debts. Credit administration is a keen test in their business operations for financial corporations. This is because of financial institutions' inability to correctly predict the events that will happen in the business environment (Adegbite & Azeez, 2016).

According to Boye (2016), financial institutions in Ghana have this big challenge of credit administration. Credit administration is explicit risk management and a report of the structure for underwriting authority and the given loans as well as setting limits (Dou et al., 2018). It also involves the allocation of accountability, responsibility, and prioritization of the process of lending. Again, it addresses the appropriate communication of risk information to management as the primary credit risk administration practice. The Basel II Accord recaps that credit administration practice of the financial institution must identify all the risks inherent in their firm's products and services. This assumes that financial institutions' operations and services are not similar; hence each bank should endeavor to identify risks particular to its markets and products. Further, the Basel II Accord presumes banks assess and identify all forms of risks that are associated with their products and activities.

One of the essential functions of bank management is credit administration; It is the procedure to identify, measure, monitor, and control the risk arising from the possibility of default in loan repayments. Since the business of banking is credit, and it is the primary basis on which a bank's quality and performance are judged, then credit risk administration lies at the heart of deposit money banking (Khan & Rahaman, 2018). Credit risk is caused by various reasons which can be from internal and external sources. Cai and Qian (2018) have declared that the leading causes of credit risk documented include poor governance, inappropriate laws, poor management control, poor credit assessment, poor lending practices, volatile interest, inappropriate credit policies, and massive licensing of banks. It also includes the absence of loan concentration limits for various sectors, low capital and liquidity levels, reckless lending, liberal loan sanctioning powers for bank executives without checks and balances, inadequate values of collateral, lack of information on the functioning of various industries and performance of the economy, inadequate supervision by the central bank and government interference (Ajayi & Ajayi, 2017).

Asset Quality

A country's banking system stability and resilience largely tell about the financial stability of the economy (Stewart & Chowdhury, 2019). As a result, the banks must maintain quality assets. The lack of banking stability can be the root cause of financial fragility and may lead to market bank contagion and illiquidity (Calomiris et al., 2019). Swamy (2017) stated that the global financial crisis of 2008 that caused the collapse of some financial institutions and markets gives us the best example that poor assets lead to economic distress. Financial stability is achieved when there are satisfactory performance and functioning of the financial systems (Prima Sakti & Mohamad, 2018). Banks should be able to bridge the gap in the flow of funds between borrowers and lenders efficiently and smoothly. Again, by using appropriate pricing to manage the forward-looking financial risk, they should be able to absorb all the economic surprises and shocks in the financial system. However, achieving financial stability is mostly countered by the risk of non-performing assets (NPA) or poor asset quality (Gafoor et al., 2018).

Asset quality is a part of bank management involving the evaluation of a firm's assets in order to help measure the size and extent of credit risk associated with its operations (Xiong et al., 2018). Asset quality involves determining the risk of an asset and is aimed at the quality of loans that provide income for a bank (Bholat et al., 2018). Asset quality and loan quality are terms with the same meaning, and their management is taken extremely important by the financial sector. The Basel Committee on Banking Supervision stressed that the core principles for effective banking supervision involved twenty-five core principles, of which seven are intended to address the important issues of bank asset quality or credit risk management (Xiong et al., 2018).

According to Bholat et al. (2018), assets are classified as tangible and non-tangible resources that generate revenue for firms. In banking, loans are classified as one of the significant assets that deterioration may lead to the bank's collapse. Therefore, more attention is given to this particular asset as per BASEL III (Xiong et al., 2018). Customers' deposits are classified as liability assets. In

creating a stable bank or financial institution, the managers must attain a balance between the assets and liabilities. Asset quality is the proper performance of the assets to withstand any financial stress test (Singh, 2016). All the assets must be properly valued to reflect the current economic realities.

Credit Administration and Asset Quality

According to Kessey (2015), the banking industry of Ghana has several challenges, which include credit risk management. This is notwithstanding the increase in knowledge and technology in banking. Banks' Credit, and Risk Management Departments, are mandated to manage the credit risks related to banking operations. However, Ghana has a relatively poor asset quality. The study addressed the challenges in the operationalization of credit risk management policies, strategies, and implementation. Using a case study approach with both exploratory and explanatory analysis with the data provided, the results showed that banks in Ghana follow international standards on credit administration to impact asset quality.

Ghosh (2019) did a study based on the impact of credit report systems on asset quality factors of loan delinquency or non-performing loans in North Africa and the Middle East. The crux of the research hinged on the fact that credit risk assessment in credit administration can reduce the information asymmetries in credit extension and the flow of credit to address lousy loan challenges. Data analysis of some selected banks on the impact of the bank reforms in the credit reporting system indicated that it caused about a 40 percent reduction in non-performing loans. The credit bureau did the administrative function and not the public credit registry. The results also showed differentials in the type of bank and the country of operation. The results confirmed the effectiveness of the credit reporting system and its importance during a crisis.

Koju et al. (2018) in India, studied bank management, which they referred to as credit administration and risk. The study employed a panel estimation analysis technique on sample Indian commercial banks. The results show that an administration of credit that increases loan portion over total assets was not going to increase problem loans, affecting asset quality. These findings are important to financial professionals in the banking industry as related to credit administration and policies.

Adekunle et al. (2015) investigated the assertion in Kenya that credit risk management through credit administration was positively related to banks' performance. The study was based on descriptive statistics with the use of probability sampling to get 42 respondents from five banks. The results of the investigation were that debt recovery management did not significantly affect banks' performance. However, the credit administration elements of the appraisal process, lending requirements, and credit policies had a significant influence on bank performance in asset quality. The study recommended a need for intensifying credit administration to impact banks' asset quality.

Duaka (2015) examined credit risk and management of Commercial Banks in Nigeria. Its conclusion was that banks' profitability is influenced inversely by the advances and levels of loans, deposits, and non-performing loans. This exposed them to the countless risks of distress and illiquidity. The bank management must be cautious in formulating a credit policy that will not negatively affect profitability. Credit administrators also need the impact of the credit policy on the operation of their banks. This will help in the proper utilization of deposits and maximization of profit. Improper credit risk management lessens bank profitability, affects asset quality, and increases non-performing loans. These may eventually become a pointer to financial distress.

Almekhlafi et al. (2016) investigated the Yemen banking industry on credit risk management and banks' performance as related to asset quality in the measure of return on Asset (ROA). The study used data from 1998 to 2013, and it was analyzed via panel data analysis. The results showed that non-performing loans or poor asset quality affects profitability negatively. Credit risk management or credit administration effects were similar across the banks in Yemen.

This study is underpinned by the administrative theory and the liquidity management theories of real bills doctrine and anticipated income theory.

Credit Administration Theory. Credit administration is addressed by the administrative theory developed by Henri Fayol (1841-1925) in his book “Administration Industrielle et Generale” in 1916. Administrative theorists established general rules on how organizational structures and relationships can be formalized. Banking credit to customers must be administered systemically and scientifically through credit rating, credit control, and credit monitoring in order to identify and minimize the associated risk. A structured and analytical approach must be involved in credit administration.

Liquidity Management Theories. Real Bills Doctrine and Anticipated Income Theory are used to address asset quality. Real bills doctrine focuses on the short-term, while anticipated income theory focuses on the long-term. The real bills doctrine states that a commercial bank must advance only short-term self-liquidating productive loans to firms. Self-liquidating loans are intended to finance the production and movement of goods through the stages of production, storage, transportation, and distribution.

The anticipated income theory was developed by H.V. Prochnow in 1944 and focused on the practice of extending term loans by U.S. commercial banks. The theory states that, regardless of the character and nature of a borrower’s business, the bank plans the liquidation of the term loan from the anticipated income of the borrower a term-loan range from a period of one to five years. Developing loan management policies that ensure the advancement of self-liquidating loans, whether in the short-term or long-term, will help improve the liquidity position, minimize the incidence of non-performing loans and improve asset quality.

Conceptual Framework



Figure 1. *A conceptual framework for explaining the correlation of Credit Administration on Asset Quality*

Methodology

Research Design

The research design is a blueprint for the entire research project and defines how the research question was answered, how data was collected and analyzed, and finally, highlights the ethical issues encountered in the research process. This quantitative study was based on a correlational research design. The correlational design was used to explore and observe the relationships between the exogenous variable of credit administration on the relationship to asset quality. The research applied the parametric inferential statistical treatment.

Population and Sampling technique

The study was conducted among financial institutions in Ghana with a total population of 762. Random sampling was utilized to select the 349 respondents, of which 11 (3%) were Commercial Banks, 60 (17%) Micro Financial Institutions, 65 (19%) Rural Banks, 11 (3%) Savings and Loans, and 202 (58%) Credit Unions.

Instrumentation

Self-constructed questionnaires with Cronbach Alpha of .778 for credit administration were used for this study. The questionnaires’ items were measured using a 4-point Likert type scale, Likert scale commendation, which ranged from Strongly Agree -4, Agree-3, Disagree-2, Strongly Disagree-1.

Table 1
Scoring System Table for Credit Administration

Numeric Scale	Numerical Likert Scale average weight	Degree of Intensity	Verbal Interpretation
4	3.51 – 4.0	Strongly Agree	Very High
3	2.51 – 3.5	Agree	High
2	1.51 – 2.5	Disagree	Low
1	1.0 – 1.5	Strongly Disagree	Very Low

Table 2
Scoring System for Asset Quality

Numeric Scale	Numerical Likert Scale average weight	Degree of Intensity	Verbal Interpretation
1	2.1 - 3.0	High	Poor
2	1.1 - 2.0	Moderate	Fair
3	0.1 - 1.0	Low	Good

Source: Adopted and modified from Adombilla (2018)

Data Analysis

The statistical analysis for the Pearson product-moment correlation coefficient was computed by using SPSS 23.

Ethical Consideration

The researcher considered ethical principles throughout the research for professional conduct. The confidentiality and anonymity of the respondents and their responses were assured. The respondents were therefore not required to mention their name, identity, or location.

Results and Discussions

Relationship Between Credit Administration and Asset Quality

The study looked at the relationship between credit administration and asset quality and was examined and noted to be *statistically significant*. As shown in Table 1, it resulted in a *moderate negative* relationship ($r = -.357, p = .000$). Therefore, the study *rejects* the null hypothesis that there is no significant relationship between credit administration and asset quality.

The result implies that there is an inverse relationship between credit administration and asset quality. It means an improvement in credit administration will cause a reduction in NPL and write-offs and improve poor asset quality. To improve the poor asset quality, the credit administration in the financial sector of Ghana must have a moderately positive impact. Credit administration must focus on credit rating, credit control, and credit monitoring to improve asset quality.

Table 3
Correlation Between Credit Administration and Asset Quality

		Asset Quality
Credit Administration	Pearson Correlation	-.357**
	Sig. (2-tailed)	0.000
	N	349

**Correlation is significant at the 0.01 level (2-tailed).

The result of the study is confirmed by Kessey (2015), who investigated the several challenges in the banking industry in Ghana, which include credit risk management. It came to light that banks' credit risk management departments are mandated to manage the credit risks related to banking operations, and they must follow international standards on credit administration to impact asset quality as Ghana has a relatively poor asset quality. The study addressed the challenges in operationalizing credit risk management policies, strategies, and implementation.

Conclusions and Recommendations

The credit administration system of the financial institutions was fair, with only credit control, which was reported high, but credit rating and monitoring were fair. It is concluded that an improvement in credit administration will positively impact asset quality. Also, credit administration showed a fair result implying that the financial institutions' rules and procedures on credit administration could not identify and minimize loan risks. According to administrative theory, general rules must be established on formalizing organizational structures and relationships. In line with the administrative theory, credit administration within financial institutions is to be done in a structured and systematic manner and should involve an analytical approach. There should be an improvement in credit administration practices. The credit officers should be trained to ensure very good credit rating, credit control, and credit monitoring. Furthermore, the performance of credit administrators should be evaluated periodically.

References

- Addison, E. (2018) Annual dinner of the chartered institute of bankers (Ghana). Accra Marriot Hotel. Bank of Ghana.
- Adegbite, T.A. & Azeez B.A. (2016). Analysis of the impacts of credit administration on profitability in Nigeria: Banking sector perspective. *International Journal of Marketing and Technology*. Volume 6, Issue 8, PP 39-54
- Adekunle, O., Alalade, S. Y., & Agbatogun, T. (2015). Credit risk management and financial performance of selected commercial banks in Nigeria. *Journal of Economic & Financial Studies*, 3(01), 01. doi:10.18533/jefs.v3i01.73.
- Adombilla, B.B., Diana, A. & Roger, A. (2018). Assessing the impact on the job of secretaries on the use of information communication technology in public institutions: The case of Bolgatanga Polytechnic. *Journal of Culture, Society and Development*, ISSN 2422-8400 *An International Peer-reviewed Journal* Vol.44, 2018
- Ajayi, L. B., & Ajayi, F. I. (2017). Effects of credit risk management on performance of deposit money banks in Nigeria. *International Journal of Research in Management & Business Studies*, 4(3), 50-55.
- Almekhlafi, E., Almekhlafi, K., Kargbo, M., & Hu, X. (2016). A study of credit risk and commercial banks' performance in Yemen: Panel evidence. *Journal of Management Policies and Practices*, 4(1). doi:10.15640/jmpp.v4n1a4
- Ariff, M., & Shawtari, F. A. (2019). Efficiency, asset quality and stability of the banking sector in Malaysia. *Malaysian Journal of Economic Studies*, 56(1), 107-137.
- Atuahene, R.A. (2016). Corporate governance and financial performance: Evidence from the Ghanaian banking sector. *DBA Thesis*, University of Bradford, UK.

- Bholat, D., Lastra, R. M., Markose, S. M., Miglionico, A., & Sen, K. (2018). Non-performing loans at the dawn of IFRS 9: regulatory and accounting treatment of asset quality. *Journal of Banking Regulation*, 19(1), 33-54.
- Boye, A. M. (2016). Credit risk management in financial institutions: A case study of Ghana commercial bank limited. *Research Journal of Finance and Accounting*, 5(23), 67–85.
- Cai, Q., & Qian, Q. (2018). Summary of credit risk assessment methods. In *2018 International Conference on Information Technology and Management Engineering (ICITME 2018)*. Atlantis Press.
- Calomiris, C. W., Jaremski, M., & Wheelock, D. C. (2019). Interbank connections, contagion and bank distress in the great depression. *Contagion and Bank Distress in the Great Depression* (January 1, 2019).
- Dou, Y., Ryan, S. G., & Zou, Y. (2018). The effect of credit competition on banks' loan-loss provisions. *Journal of Financial and Quantitative Analysis*, 1-32.
- Duaka, C.L. (2015). Credit risk management in commercial banks. *Journal of Economics and Finance*, 6(3). 51-56.
- Frimpong, E.D. (2018). *BoG collapses 5 banks into Consolidated Bank Ghana Ltd*. <https://www.graphic.com.gh/business/business-news/bog-collapses-5-banks-into-consolidated-bank-ghana-ltd.html>.
- Gafoor, C. A., Mariappan, V., & Thyagarajan, S. (2018). Does the board structure affect the asset quality of the banks? Evidence from India. *IIM Kozhikode Society & Management Review*, 2277975218767564.
- Ghosh, S. (2019). Loan delinquency in banking systems: How effective are credit reporting systems? *Research in International Business and Finance*, 47, 220-236.
- Kessey, K.D. (2015). Assessing credit risk management practices in the banking industry of Ghana: Processes and challenges. *Global Journal of Management and Business Research: C Finance*, 15(6), 1-11.
- Khan, M., & Rahaman, S. (2018). Credit risk management of southeast bank limited: A study on Shyamoli branch.
- Koju, L., Koju, R., & Wang, S. (2018). Does banking management affect credit risk? Evidence from the Indian banking system. *International Journal of Financial Studies*, 6(3), 67. doi:10.3390/ijfs6030067.
- Kumarasinghe, P.J. (2017). Determinants of asset quality: Evidence from Sri Lanka. *International Journal of Management Excellence*, 9(2), 1113-1121.
- Nugroho, L., Hidayah, N., & Badawi, A. (2018). The islamic banking, Asset quality: “Does financing segmentation matters” (Indonesia evidence). *Mediterranean Journal of Social Sciences*, 9(5), 221.

- Prima Sakti, M.R., & Mohamad, A. (2018). Efficiency, stability and asset quality of Islamic vis-à-vis conventional banks: Evidence from Indonesia. *Journal of Islamic Accounting and Business Research*, 9(1):00-00 DOI:10.1108/JIABR-07-2015-0031
- Oganda, J. A., & Mogwambo, V. A., & Otieno, S. (2019). Effect of non-performing loans on performance of commercial banks in Kenya: A comparative study between National Bank Kenya Limited and Equity Bank Kenya Limited. *The Strategic Journal of Business & Change Management*, 6(2), 2430-2443.
- Singh, V. R. (2016). A study of non-performing assets of commercial banks and it's recovery in India. *Annual Research Journal of SCMS, Pune*, 4, 110-125.
- Stewart, R., & Chowdhury, M. (2019). Does bank stability promote economic resilience? *Evidence From Panel Data*.
- Swamy, V. (2017). Determinants of bank asset quality and profitability: An empirical assessment. *Applied Economics Quarterly*, 63(1), 97-135. doi:10.3790/aeq.63.1.97
- Tawiah, A. A., & Asante, K. (2018). Credit Management in Microfinance Institutions: A Case Study of Some Selected Microfinance Institutions in the Ashanti Region of Ghana. *Research Journal of Finance and Accounting*, 9(2), 16-24.
- Xiong, W., Li, B., Wang, Y., & Stanley, H. E. (2018). The versatility of money multiplier under Basel III regulations.
- World Bank (2018) Ghana GH: Bank non-performing loans to total gross loans. <https://www.ceicdata.com/en/ghana/bank-loans/gh-bank-nonperforming-loans-to-total-gross-loans>

Predictors of Students' Performance in Accounting 1 at Romblon State University

Sherryll M. Fetalvero, Tomas T. Faminial, Errol S. Foja,
Emelyn F. Montoya, Bless Faith F. Andal,
Ma. Jessica C. Fabito, Jerome F. Fesalboni

Romblon State University
fetalverosherryll@gmail.com

Abstract

At Romblon State University, the low cohort survival rate in the BS Accountancy program calls for an urgent review of its admission policies. This study analyzed whether gender, school type, academic track, senior high school report card grade, overall College Admission Test Score (CAT) and its components (Science, English, Mathematics, and Filipino), and abstract reasoning can significantly predict students' performance in Accounting 1. The correlation between accounting grade in senior high school and final grade in Accounting 1 in college was also tested. Data from 79 out of 139 target respondents were analyzed using multiple linear regression. Results showed that the English CAT Score, academic track, and Abstract Reasoning Test Score can predict the performance of students in Accounting 1, but there was no significant relationship between accounting grade in senior high school and final grade in Accounting 1 in college. The significant predictors are reflective of the important intellectual skills and competencies the accounting profession requires such as analytical, problem-solving, and strategic critical thinking skills. The University may consider these factors in updating its admission policy to the program.

Keywords: *predictors of final grade in Accounting 1, College Admission Test scores, abstract reasoning, English proficiency, ABM strand or track*

With the free tuition policy in the State Universities and Colleges (SUCs), there is an increase in student enrolment in Romblon State University (RSU). More students also intend to take up the BS Accountancy program at the University. Despite this increase, the capacity of the University in terms of instructors and classrooms is still limited and there is a need to decide which student is more qualified and most likely to succeed in the program. It is also believed that enrolling under qualified students and failing to recruit the most able candidates in the program leads to misuse of resources and has a long-term negative impact on the program.

Romblon State University currently utilizes the result of the College Admission Test (RSUCAT) and the High School grade point average as criteria for admission. It is assumed that these criteria positively predict students' performance in the university. It is necessary to investigate the predictive validities of these two criteria, to ensure the accuracy of admission decisions. RSU administers locally-developed examinations that measure the aptitude of the students in the following subjects: Math, English, Filipino, and Science. The basic assumption is that a high-school student with a high grade point average and high results on the admission test will achieve high grades at the university.

Investigation into the predictive validity of public national examinations on students' future academic performance in different contexts is well-researched in different countries. Many research findings of studies in the area of predictive validity that have been conducted over the past several years can be found in Cooter et.al (2004), Rothstein (2004), and Geiser and Santelices (2007). For instance, the study of Geiser and Santelices (2007) reveals that the high-school grade point average was the best predictor of freshman grades. They also concluded that the finding has an implication for admissions policy and argues for greater emphasis on the high-school record, and a corresponding less emphasis on standardized tests, in college admissions. Elert (1992) reviewed many research studies that investigated the validity of some predictors in predicting academic success and he reported that high school grades were twice as good a predictor of college success as standardized entrance test scores. In an empirical study of the predictive validity of grades using three decades of longitudinal data, Cooter et.al (2004) demonstrated that small differences in the number grades (which are not pass/fail) are statistically meaningful, and the strength of predictive validity and the ability to identify at-risk students in schools depends upon assessment systems such as number grades, and pass/fail (P/F) systems.

Predictive validity is defined as how accurately test data can predict a criterion score that is obtained at a later time. Predictive validity is crucial when a test is used to predict the likelihood of some future performance. It indicates the extent to which an individual's future performance on the criterion is predicted from prior test performance (Messick, 1989; Crocker & Algina, 1986).

The related literature indicates that, apart from demographic factors such as gender and ethnicity, studies in this field have concentrated on two broad categories: cognitive predictors and non-cognitive predictors (Fan, Li, & Niess, 1998; Schwartz & Washington, 2002). Cognitive predictors cover such areas as high school academic performance and college entrance test scores, while, non-cognitive predictor relates to two main attributes: personality characteristics (such as self-motivation, self-directedness, dedication to studies, and social skills) and environmental factors (such as the size of schools, location of schools, parental education and socio-economic status) (Wolfe & Johnson, 1995; Mulvenon, Stegman, Ganley & McKenzie, 2002; Barnett, Ritter, & Lucas, 2002). This study however is limited to the investigation of cognitive predictors only.

The Department of Accountancy of the College of Business and Accountancy in Romblon State University Main Campus has been facing problems with the cohort survival rate of the BS Accountancy students and the University's percentage of passing the Certified Public Accountant Licensure Examination (CPALE). As a remedy, the department plans to evaluate the present modes of selecting candidates for admission into the accountancy program. This is to determine the credibility of each of the admission criteria.

Considering that high school GPA and university entrance examination scores are very important criteria for admission to higher education and therefore have serious consequences for students, it is crucial to investigate whether high school grade point average and University entrance examination scores accurately predict the performance of students in Accounting 1.

The findings of this study may guide the Admission Unit of the University and the Department of Accountancy in identifying whether high school grades and the university entrance Exam scores are accurate predictors of academic performance of students in Accounting 1. It may help them in the development of future admission policy and hopefully improve the cohort survival rates and CPALE passing percentage.

This study analyzed whether gender, school type, academic track, senior high school report card grade, overall College Admission Test (CAT) Score and its subject components (Science, English, Mathematics, and Filipino), and abstract reasoning are significant predictors of students' performance in Accounting 1 at Romblon State University in Odiongan, Romblon, Philippines. For those who took the Accountancy and Business Management (ABM) track in senior high school, a correlation between their grade in Fundamentals of Accounting and their final grade in Accounting 1 was also determined.

Methodology

Admission test scores such as the total score and the component scores (Science, English, Mathematics, and Filipino), the SHS report card average, and profile variables like gender, type of school graduated, and SHS academic track of 139 BS Accountancy students at Romblon State University from school years 2018-2019 and 2019-2020 were requested from the offices of the University Registrar and Admissions and Testing. Their grades in Accounting 1 were secured from their instructor. A 100-item standardized Abstract Reasoning test was administered to those who were currently enrolled in the program because this test was not part of the RSU-CAT. Ethical considerations were observed in data collection to ascertain the anonymity of the respondents.

After preliminary screening, only 79 respondents (57.66%) aged 16 to 19 years old had complete data which were needed for subsequent analysis. Of these, 64 were females, 61 were from public senior high schools, and 55 were graduates of the ABM track. Data were analyzed using the multiple stepwise linear regression and Pearson product-moment correlation coefficient. Categorical variables like gender (0 = female, 1 = male), type of school (0 = private, 1 = public) and academic track (0 = non-ABM, 1 = ABM) were transformed into dummy variables to make the regression analysis possible as explained in Muijs (2004).

Results and Discussion

Table 1 shows the mean and standard deviation of the numerical variables measured in this study.

Regression Analysis on the Predictors of Final Grade in Accounting 1

Multiple linear regression analysis particularly the stepwise method was used to assess the ability of the variables such as gender, Type of SHS graduated, Academic Track, SHS Report Card Average, RSU CAT Overall Score, and its component subject areas (English, Science, Filipino and Math) and Abstract Reasoning Test Score to predict the Final Grade in Accounting 1. The analysis resulted in three regression models, the third one is shown in Table 4 with English CAT Score ($\beta = 0.34$, $p = 0.001$), academic track ($\beta = 0.32$, $p = 0.001$) and Abstract Reasoning Test Score ($\beta = 0.31$, $p = 0.002$) recording statistically significant beta values. The regression model was significant, $F(3,75) = 15.33$, $p = 0.000$ (Table 3) explaining a total variance of 38% (Table 2) in the grade in Financial Accounting 1.

Table 1*Descriptive Analysis of the Quantitative Variables (n=79)*

Variable	Mean \pm Standard Deviation
Final Grade in Accounting 1	80.96 \pm 6.12
SHS Report Card Average	93.28 \pm 2.06
RSU CAT Overall Score	106.92 \pm 13.44
English CAT Score	25.18 \pm 4.90
Science CAT Score	25.90 \pm 4.81
Filipino CAT Score	26.91 \pm 3.57
Math CAT Score	28.94 \pm 5.91
Abstract Reasoning Test Score	70.87 \pm 13.77
Grade in Fundamentals of Accountancy and Management (for ABM, n=55)	90.56 \pm 3.53

Table 2*Model Summary*

R	R square	Adjusted R Square	Std. Error of the Estimate
0.62	0.38	0.36	4.91

Table 3*ANOVA Table for the Significance of the Regression Model*

Sources of Variation	Sum of Squares	df	Mean Square	F	Sig.
Regression	1108.85	3	369.62	15.33	0.000
Residual	1808.04	75	24.11		
Total	2916.89	78			

Table 4*Coefficients*

Independent Variables	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
Constant	56.57	3.82		14.81	0.000
Abstract Reasoning Test Score	0.14	0.04	0.31	3.28	0.002
English CAT Score	0.42	0.12	0.34	3.62	0.001
Academic Track	4.96	1.43	0.32	3.46	0.001

Dependent Variable: Final Grade in Accounting 1

English proficiency is singled out as a requirement for an applicant to be accepted in the BS Accountancy Program (CMO 3, s. 2007) because English is the medium of instruction in teaching the courses. In Accounting 1 for example, where the topic revolves around the accounting cycle, students are expected to have a good level of English comprehension to understand the process of identifying, analyzing, and recording the accounting transactions of a company. As opposed to the common notion that mathematical ability and performance in accounting subjects are directly and positively related (Shaban, 2015; Buba & Umar, 2015), this was not supported by the findings of the current study may be because students at Romblon State University can use calculators in accounting classes aside from the fact that the mathematical computations in this subject are mostly limited to MDAS. However, the results of the current investigation supported the idea that English proficiency is a predictor of students' performance in accounting (Steenkamp, Baard & Frick, 2009; Buba & Umar, 2015; Ryan, Bhattacharyya, Stratilas & Goela, 2016; Modise, 2017; Sebrina, Serly & Taqwa, 2018; Velasco, 2019).

In the K-12 curriculum, the Accountancy, Business and Management (ABM) strand focuses on the basic concepts of financial management, business management, corporate operations, and all things that are accounted for. As such, it is expected that students from this track would do well in College Accounting. However, CMO 105, s. 2017 allows the eligibility of all Grade 12 graduates beginning Academic Year 2017-2018 to enter college regardless of the track or strand taken in the Senior High School and thus, no Grade 12 student or graduate shall be denied acceptance in applying for college entrance examinations in the higher education institutions. In this study, 24 students were from non-ABM strands. Literature claims however that students who had Accounting as a school subject like the introduction of basic accounting in senior high school displayed higher academic performance in Accounting 1 (Steenkamp, Baard & Frick, 2009; Arquero, Byrne, Flood & Gonzales, 2009; Alanzi, 2015; Papageorgiou, 2017; Marinaccio, 2017; Onay & Benligiray, 2018). These previous findings are supported by the current study.

In CMO 3, s. 2007, among the intellectual skills required of a prospective accountant are analytical, problem-solving, and strategic critical thinking skills. This set of skills is closely approximated by abstract reasoning skills which according to Cattell (1963) is related to fluid intelligence, the ability to quickly reason with information to solve new, unfamiliar problems, independent of any prior knowledge. This ability is considered independent of learning, experience, and education. In this case, abstract reasoning is a significant predictor of performance in Accounting 1.

Correlation Between FAM and Accounting 1 Grades among ABM Graduates

The relationship between grade in FAM and grade in Accounting 1 among ABM graduates was investigated using Pearson product-moment correlation coefficient. The relationship between the two variables was not significant, $r = 0.21$, $n = 55$, $p = 0.12$. Figure 1 shows that their FAM grade back in senior high school explained only a small amount of variance (4.4%) in their final grade in Accounting 1 in college.

As discussed in the previous section, prior exposure to an accounting subject can positively affect one's performance in Accounting. For those who took the ABM track, their previous grade in accounting subject did not significantly predict their grade in Accounting 1 in college. Based on feedback and informal interviews with students, the researcher presupposed that this gap may be due to the qualification of teachers handling accounting subjects in senior high schools. There have been reports that some were not Certified Public Accountants, and others were not even graduates of business courses. Moreover, the topics for the Fundamentals of Accountancy and Management were not fully covered, not even the accounting cycle.

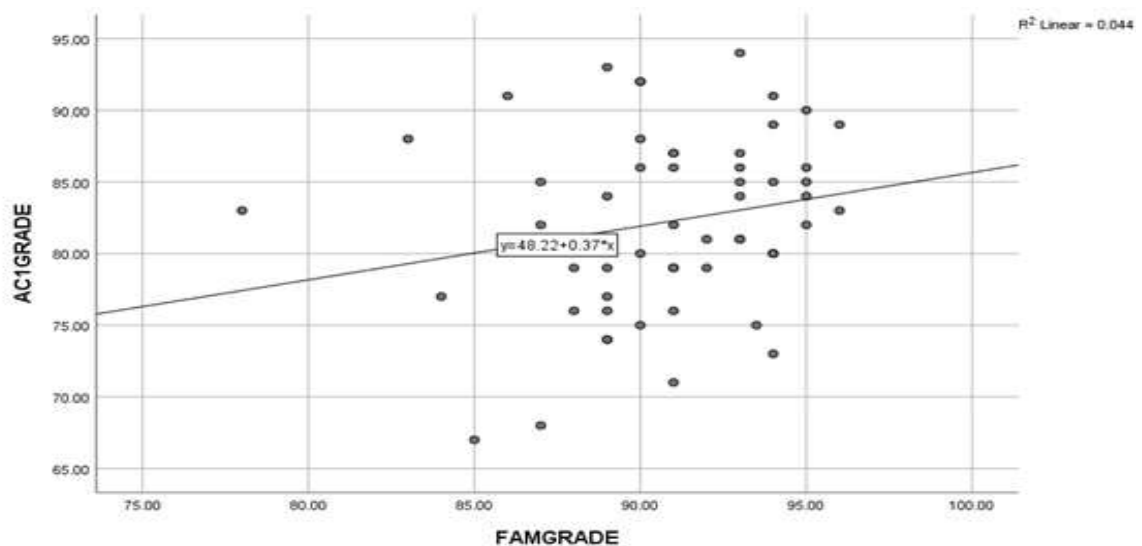


Figure 1. Scatterplot between FAM and Accounting 1 Grades among ABM Graduates

Conclusions and Recommendations

Cohort survival rates in BS Accountancy programs in most State Universities and Colleges in the Philippines are declining as students move to higher curriculum levels calling for the need to identify essential characteristics to ensure students' potential for survival and optimization of the government's resources. This investigation highlights that the English proficiency of BS Accountancy applicants, the articulation of their senior high school track to the BS Accountancy program, and their abstract reasoning skills are factors that can predict the performance of RSU college students in Accounting 1. These factors are reflective of the important intellectual skills and competencies the accounting profession requires such as analytical, problem-solving, and strategic critical thinking skills. However, their accounting grade in senior high school does not predict their accounting grade in college. The University may consider these factors in revising the admission policy to the program. English score in the RSUCAT may be given a higher weight or percentage in the computation of the overall score. A policy may be made on the acceptance to the program of graduates from the ABM strand only. Abstract reasoning items may be included in the RSU CAT and be given the same weight as the English score.

References

- Alanzi, K.A. (2015 March). Determinants of students' performance in cost accounting – Further evidence from Kuwait. *World Journal of Management*, 6(1), 136-152
- Arquero, J. L., Byrne, M., Flood, B., & González, J. M. (2009). Motives, expectations, preparedness and academic performance: A study of students of accounting at a Spanish university. *Revista de Contabilidad-Spanish Accounting Review*, 12(2), 279-300.
- Barnett, J., Ritter, G. W., & Lucas, C. J. (2002). Educational reform in Arkansas: Making sense of the debate over school consolidation. *Arkansas Education Research & Policy Studies Journal*, 2(2), 1-21.
- Buba, M. Z., & Umar, R. T. (2015). Effect of mathematics and English language proficiency on academic performance of business education students in financial accounting. *ATBU Journal of Science, Technology and Education*, 3(1), 58-67.
- Cattell, R. B. (1963). Theory of fluid and crystallized intelligence: A critical experiment. *Journal of Educational Psychology*, 54(1), 1.
- CMO 3 s. 2007. Revised Policies and Standards for Bachelor of Science in Accountancy (BSA), as Amended. CHED.
- CMO 105 s. 2017. Policy on the Admission of Senior High School Graduates to the Higher Education Institutions Effective Academic Year 2018-2019. CHED.
- Cooter, R., Erdmann, J. B., Gonnella, J. S., Callahan, C. A., Hojat, M., & Xu, G. (2004). Economic diversity in medical education: the relationship between students' family income and academic performance, career choice, and student debt. *Evaluation & The Health Professions*, 27(3), 252-264.
- Crocker, L., & Algina, J. (1986). *Introduction to classical and modern test theory*. Holt, Rinehart and Winston, 6277 Sea Harbor Drive, Orlando, FL 32887.

- Elert, G. (1992). The SAT, aptitude or demographics? *E-World*. Retrieved March 17, 2013, <http://www.hypertextbook.com/eworld/>
- Fan, T. S., Li, Y. C., & Niess, M. L. (1998). Predicting academic achievement of college computer science majors. *Journal of Research on Computing in Education*, 31(2), 155-172.
- Geiser, S., & Santelices, M. V. (2007). Validity of high-school grades in predicting student success beyond the freshman year: high-school record vs. standardized tests as indicators of four-year college outcomes. Research & Occasional Paper Series: CSHE. 6.07. *Center for Studies in Higher Education*.
- Marinaccio, G. T. (2017). The effect of high school accounting on the selection of college major, performance, satisfaction, and retention. *Honors Theses and Capstones*, 353. Available online at <https://scholars.unh.edu/honors/353>
- Messick, S. (1989). Meaning and values in test validation: The science and ethics of assessment. *Educational Researcher*, 18(2), 5-11.
- Modise, A.M. (2016). Pedagogical content knowledge challenges of accounting teachers. *International Journal of Educational Sciences*, 13(3), 291-297. <https://doi.org/10.1080/09751122.2016.11890464>.
- Muijs, D. (2004). *Quantitative methods in educational research*. Sage.
- Mulvenon, S. W., Stegman, C. E., Ganley, B. J., & McKenzie, S. (2002). Little Rock School District revisited: Is desegregation working. *In annual meeting of the American Educational Research Association, Chicago*.
- Onay, A. & Benligiray, S. (2018). Internal factors affecting student performance in accounting courses at a vocational school. *Sumerianz Journal of Economics and Finance*, 1(3), 82-90.
- Papageorgiou, E. (2017). Accounting students' profile versus academic performance. *A Five-Year Analysis*, 31(3), 209-229. <https://doi.org/10.20853/31-3-1064>.
- Rothstein, J. M. (2004). College performance predictions and the SAT. *Journal of Econometrics*, 121(1-2), 297-317.
- Ryan, S., Bhattacharyya, A., Stratilas, K., & Goela, N. (2012). English language proficiency and learning among Australian international postgraduate accounting students. *The International Journal of Learning*, 18(5).
- Schwartz, R. A., & Washington, C. M. (2002). Predicting academic performance and retention among African American freshmen men. *NASPA Journal*, 39(4), 354-370.
- Sebrina, N., Serly, V., & Taqwa, S. (2018, July). The determinant factors comprising students' performance in the digital era. *In First Padang International Conference On Economics Education, Economics, Business and Management, Accounting and Entrepreneurship (PICEEBA 2018)*. Atlantis Press.

- Shaban, O. (2015). The relationship between mathematics grades and the academic performance of the accounting students' department (A case study on accounting department students at Al-Zaytoonah University of Jordan). *The European Proceedings of Social & Behavioural Sciences*. <http://dx.doi.org/10.15405/epsbs.2015.05.6>.
- Steenkamp, L. P., Baard, R. S., & Frick, B. L. (2009). Factors influencing success in first-year accounting at a South African university: A comparison between lecturers' assumptions and students' perceptions. *South African Journal of Accounting Research*, 23(1), 113-140.
- Velasco, R. M. (2019). Factors associated with failure in accounting: A case study of the Omani students. *International Journal of Higher Education*, 8(6), 157-170.
- Wolfe, R. N., & Johnson, S. D. (1995). Personality as a predictor of college performance. *Educational and Psychological Measurement*, 55(2), 177-185.

Establishing a Catering Business in Sto Domingo, Santa Rosa City, Laguna

Alexis Louise O. Anaya

Adventist University of the Philippines
2038474@aup.edu.ph

Abstract

The purpose of the study is to determine the feasibility of starting a Catering Service in Santo Domingo, Santa Rosa City Laguna. This aims to acquire information for a proposed business in order to gain a clear rationale of basic factors in marketing which includes the strengths and weaknesses of such a venture. Included also in this study are the opportunities and threats that are presented by the environment. Data collected through observation and survey questionnaires which were distributed to 364 households in Santo Domingo, Santa Rosa City Laguna. A strategic analysis was used to determine if the restaurant could be a legitimate competitor among the many local and well-established catering businesses around Santa Rosa City, Laguna. Strengths, Weaknesses, Opportunities, and Threats were outlined, given weights according to their impact, and used to develop a SWOT matrix. The final step in determining if the catering business could compete in barangay Sto Domingo, Santa Rosa City, Laguna was to perform a competitive analysis against what was determined to be the top local and well-established competitors. Following the strategic analysis, a financial analysis was executed to determine whether the operation offered a profitable investment. This included an examination of startup costs and funding, as well as the creation of an income statement, statement of cash flows, and a balance sheet. A financial analysis was also conducted with good results for capital budgeting, liquidity, profitability, and test of return of capital. These financial forms made it possible to perform a break-even analysis that had the final decision as to whether or not the catering business could be a profitable investment. Lastly, the researcher listed the various ways the business could contribute to society and the economy. The socio-economic responsibility study lists the amount of money that the different stakeholders and stockholders can benefit from the business. Therefore, the researcher concludes that the proposed venture is recommended for implementation.

Keywords: *Catering business, strength, weaknesses, opportunities, threats*

At a compound annual growth rate (CAGR) of 47%, the global catering services and food contractors' market is predicted to increase from \$187.64 billion in 2021 to \$275.90 billion in 2022. The increase is primarily due to companies reorganizing their operations and recovering from the impact of COVID-19, which had previously resulted in restrictive containment measures such as social distancing, remote working, and the closure of commercial activities, all of which created operational challenges. At an annual growth rate of 8.2%, the market is estimated to reach \$378.39 billion in 2026.

The catering services and food contractors market consists of sales of single event-based food services or food services at institutional, governmental, commercial, or industrial locations of others based on contractual arrangements with these types of organizations for a specified period by entities (organizations, sole traders and partnerships) that provide single event-based food services or food services at institutional, governmental, commercial, or industrial locations of others based on contractual arrangements with these types of organizations for a specified period of time.

The main types of catering services and food contractors are food service contractors and catering services. Catering services is the business of providing food service at a remote location or at a specific location, such as a hotel, hospital, pub, airline, cruise ship, park, filming location or studio, entertainment location, or event venue.

Objectives of the Study

The purpose of this research is to look at the demand for catering services and determine whether it is feasible and profitable to provide that demand.

Significance of the Study

The feasibility study can help the people in the following groups. To the Future Entrepreneurs, this study will be useful to anyone interested in starting a catering business because it will provide source information about the industry. It also demonstrates a thorough examination of strengths and opportunities for carrying out such a business in the future.

To the future Researchers, they will be able to demonstrate what they have learnt and produce an output in the form of a research study that will help others as a result of this study. This study will also provide background and further knowledge on how to build a successful catering services business, as well as assist the researcher to be more resourceful and studious in this sector.

Scope and Limitations

This study deals with the market feasibility of establishing a Catering Service business in Santo Domingo, Santa Rosa City Laguna. Note that the short time to conduct the survey and study may limit the information gathered. Furthermore, because of the COVID-19 pandemic's travel restrictions, the poll was performed by distributing the questionnaire via Google forms as well as phone calls.

Related Literature

In different countries the concept is understood differently and stands out in many variations. For example, in Great Britain several types can be distinguished: traditional catering (including small businesses), contract catering (provision of services is based on a signed contract between the provider and the recipient), franchise catering (involves the use of a franchise system), popular catering (action for the purposes of wide audience), systemic catering (including action aimed at specific market), function catering (weddings, banquets, cocktail parties, business meetings).

In contrast, within the meaning of catering, in the US it can mean the following types of catering: banquet hall (where the customer comes to the service provider), off-premise (provides service to private homes, clubs, etc), mobile unit (called "mobile catering" and the basis for this service is a truck, which is specially designed for the distribution of meals).

Catering and food service does not include services such as mobile food service i.e. food trucks and food vending machines. In addition, factors such as hectic lifestyle and challenges related to cooking at home are driving the growth for the catering and food service market. Furthermore, restaurants and hotels are coming up with innovative food service catering which are expected to mobilize the catering and food service market. Catering and food service market is also driven as individuals between 18 and 35 age group are preferring outside food due to their hectic lifestyle.

Due to bulk transportation of food items the cost per person also decreases which is also a driving factor for catering and food service at events. Catering and food service also helps in providing hygienic and healthy food to several institutes such as offices, schools, colleges, airplane, etc. All these factors help in the growth of the catering and food service market during the forecast period 2018 – 2028.

Industry Profile

According to Euromonitor, the Philippines' GDP contracted at its fastest rate ever in 2020, because of the COVID-19 epidemic and severe lockdown measures. The country's Gross Domestic Product (GDP) fell by 9.5 percent. The economy, on the other hand, is expected to bounce back strongly in 2021, owing to expansionary fiscal and monetary measures, rebounding external demand, and the lifting of lockdown restrictions. In 2021, growth is expected to be 7%. Over the long run, the country is predicted to continue high development momentum and remain one of Asia Pacific's fastest-growing economies.

Catering and food service market is expected to grow substantially on the backdrop of increasing demand for ready to eat outdoor food and accessibility across the globe. Due to better food service packaging, catering and food service also provides healthy and hygienic food for the consumers. In addition, due to convenience from catering and food service it is widely being used in schools, colleges, restaurants, offices, cafeterias, etc.

Furthermore, several fast-food companies are accepting catering and food service in order to increase their presence. Moreover, the high cost of maintaining consistency and hygiene of food items by using a large labor force is one of the challenging factors for the Catering Market.

Methodology

The researcher utilized primary and secondary data from reliable sources to acquire the necessary data and information for the study to have meaningful results.

Research Design

This study utilized the quantitative method of research with the use of survey questionnaires and unstructured interviews. This approach helps to determine the present situation of the catering industry, how related businesses operate, and how customers purchase the product. This method basically describes the target market, their potential interaction with the proposed business, and how other doughnut businesses persisted.

Population and Sampling Technique

Because the proposed business will be located in barangay Santo Domingo in Santa Rosa City Laguna, the proposed business's target market will be people of barangay Santo Domingo. Since the product is adaptable and can be consumed by virtually any group a specific age, gender, or other demographic is mentioned.

$$n = \frac{N}{1 + Ne^2}$$

Where:

N – Population

n – Sample Size

e – Margin of Error

Table 1*Historical Number of Population of Sto Domingo 2015-2020*

Year	Individuals	Increase (Decrease)	Growth Rate
2015	4092		
2016	4427	335	8%
2017	4841	414	9%
2018	5398	557	12%
2019	6052	654	12%
2020	6836	784	13%

*Source: psa.gov.ph.***Analysis of Data**

To analyze the results of the survey questionnaire, the researcher gathered and tabulated the results. The data was then analyzed through the use of profitability ratios, liquidity ratios, and capital budgeting techniques.

Results and Discussion**Demand And Supply Analysis**

The study of demand and supply depicts the market share of the proposed business. An excess demand over supply represents unmet market demand which characterizes the proposed business' market share. The unmet need is computed by subtracting the total supply in quantity from the order. The graphs below compare the percentage of satisfied and the unmet demand in peso and the percentage of market share for 2021-2026.

Table 2*Projected Demand and Supply Analysis of Catering Services in Quantity (2021-2025)*

Year	Demand in Quantity	Supply in Quantity	% of satisfied Demand	Unmet Demand in Qty	% of unmet Demand	Business Capacity in Quantity	Market Share
2021	2,279	1,584	70%	695	30%	78	11%
2022	2,454	1,742	71%	712	29%	86	12%
2023	2,629	1,917	73%	713	27%	94	13%
2024	2,804	2,108	75%	696	25%	104	15%
2025	2,979	2,319	78%	660	22%	114	17%

Table 3*Projected Demand and Supply Analysis of Catering Services in Peso (2021-2025)*

Year	Demand in Quantity	Supply in Quantity	% of satisfied Demand	Unmet Demand in Qty	% of unmet Demand	Business Capacity in Quantity	Market Share
2021	45,334,689	31,508,359	70%	13,826,330	30%	78	11%
2022	50,525,942	35,872,267	71%	14,653,675	29%	86	12%
2023	56,025,048	40,840,576	73%	15,184,472	27%	94	13%
2024	61,847,196	46,496,996	75%	15,350,201	25%	104	15%
2025	68,008,265	52,936,829	78%	15,071,435	22%	114	17%

Tables 2 and 3 summarize the potential demand and estimated supply for catering services in the next several years. The tables also include the planned and projected capacity of the proposed business to estimate its market share. The analyses estimate that a market share of 14% and an annual turnover of ₱5,850,000.00 for 2022 is feasible. The yearly revenue is projected to grow an average of 10% per year, which would increase its market share to 6%.

Marketing Study

A catering business marketing plan includes information about the target audience, the business brand, the goals, the competition and the budget the catering business can devote to its marketing efforts. Building knowledge in these areas and putting a written marketing plan in place helps a catering business to attract the right potential customers and the opportunity to convert the prospects into paying catering clients.

Technical Study/Operations Study

The service process flow describes the step-by-step course of a catering services business, starting when a client decides to avail of the services until the end of the event.

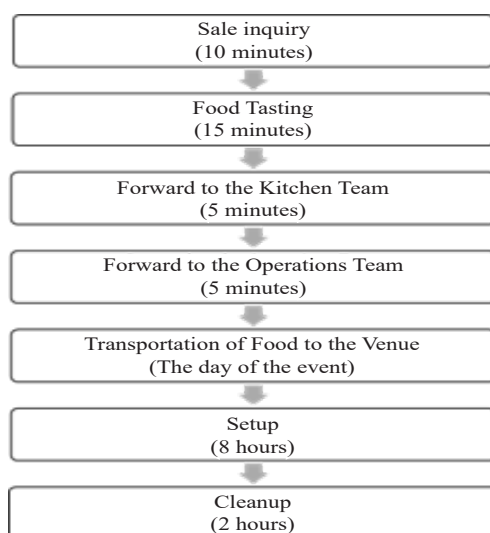


Figure 1. *Service Process*

Organizational Requirements

Anaya's Catering Services shall be established by a single owner. This form of ownership is called a Sole Proprietorship type of business. According to The New York Times in 2007, The most common and simplest form of business is a sole proprietorship. Table 4 shows the permits and license needed to operate the business.

Table 4
Pre-Organizational Requirements and Cost

Requirement	Amount
Budget for Feasibility Study	12,000.00
DTI Business Name Application	2,000.00
Business Permit (Mayor's)	1,110.00
BIR Annual Registration	500.00
Barangay Business Clearance	200.00
Total	15,810.00

Organizational Structure/Chart

Since the business will start with a small capital and upkeep, the business organizational structure shall be relatively simple. There would also be instances an employee would take on multiple responsibilities in the business if their time and workload allow because wearing multiple hats in a starting business is normal. If the business grows and there would be a need for more employees, the organizational structure will be revisited and improved. Figure 2 below shows the organizational chart of the business. The dashed line represents outsourced worker.

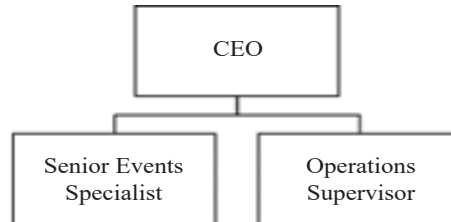


Figure 2. *Organizational chart of the business*

Compensation Package

Employees are at the heart of the business organization so it is vital to take care of them and provide them adequate compensation in return for their work. From the interviews conducted with competitors, the researcher learned that these companies also provide their employees with the basic benefits for employees such as SSS, PhilHealth, and Pag-IBIG, others even add health insurance. Apart from the basic salaries and the employer's share of government-mandated benefits, the company will also provide other benefits to employees. Their pay will be given semi-monthly on the 15th and 30th of every month. Table 5 below presents the monthly salaries and wages of employees for 2022, the first year of operation.

Table 5

Monthly Salaries and Wages 2022

Personnel	Gross Pay	Deductions				Net Pay
		SSS	PHIC	HDMF	Tax	
Operations Supervisor	20,000.00	900.00	300.00	100.00	-	18,700.00
Senior Events Specialist	20,000.00	900.00	300.00	100.00	-	18,700.00
Total	40,000.00	1,800.00	600.00	200.00	0.00	37,400.00

Strategic Framework

Mission. By providing impeccable service, quality delicious foods and a passionate team, impressions deliver a friendly and professional experience that bring our customers visions to life and create powerful memories.

Vision. It shall Be a company with global operations in hospitality; known for its safe working environment; a leader in world class innovations and excellent service.

Values. Commitment. Reliability. Responsiveness.

In any case, the actual and real-life progress of the business will be compared against the strategies listed in the strategic framework. Management will determine if the business reached the goals and objectives stated through the KRAs and KPIs. If any aspect of the strategies are deemed to be ineffective, management must formulate alternative ideas to more effectively achieve the goal.

Financial Analysis

In order to determine if the business will be able to cover all expenses and earn some income, it is crucial to look at the projected statement of comprehensive income and which is shown in Tables 6 and 7 below. This table shows the projection for the first five years of operation.

Table 6*Anaya's Catering Services Statement of Comprehensive Income as of December 31, 2022 to 2026*

	2022	2023	2024	2025	2026
Service Income	5,850,000.00	7,078,500.00	7,786,350.00	8,564,985.00	9,421,483.50
Cost of Sales	3,600,000.00	4,078,800.00	4,621,280.40	5,235,910.69	5,932,286.82
Gross Profit	2,250,000.00	2,999,700.00	3,165,069.60	3,329,074.31	3,489,196.68
Operating Expenses	1,430,088.34	1,527,265.61	1,635,181.98	1,746,866.83	1,880,528.85
Income Before Income Tax	819,911.66	1,472,434.39	1,529,887.62	1,582,207.48	1,608,667.83
Income Tax Expenses	65,592.93	117,794.75	122,391.01	126,576.60	128,693.43
Net Income	754,318.72	1,354,639.63	1,407,496.61	1,455,630.88	1,479,974.41

Table 7*Anaya's Catering Services Statement of Financial Position for the Year Ended December 31, 2022 to 2026*

	2022	2023	2024	2025	2026
Assets					
Current Assets					
Cash and cash equivalents	44,235.75	518,980.97	1,070,978.17	1,662,890.00	9,421,483.50
Trade and other receivables	243,750.00	294,937.50	324,431.25	356,874.38	392,561.81
Prepaid rent	35,000.00	36,050.00	37,131.50	38,245.45	39,392.81
Office supplies	6,343.31	6,533.61	6,729.62	6,931.51	7,139.45
Total Current Assets	329,329.06	856,502.08	1,439,270.54	2,064,941.62	2,718,469.39
Non-Current Assets					
Property, plant and equipment, net	1,190,098.67	1,038,407.33	886,716.00	743,358.00	600,000.00
Total Current Assets	1,190,098.67	1,038,407.33	886,716.00	743,358.00	600,000.00
Total Assets	1,519,427.72	1,894,951.05	209,531.57	236,213.77	266,409.14
Liabilities and Owner's Equity					
Current Liabilities					
Accounts payable	150,000.00	169,950.00	192,553.35	218,162.95	247,178.62
Accrued expenses	4,260.00	4,826.58	5,468.52	6,195.83	7,019.87
Utilities payable	10,849.00	11,174.47	11,509.70	11,855.00	12,210.65
Total Current Liabilities	165,109.00	185,951.05	209,531.57	236,213.77	266,409.14
Total Liabilities	165,109.00	185,951.05	209,531.57	236,213.77	266,409.14
Owner's Equity					
Anaya, capital	1,354,318.72	1,708,958.36	2,116,454.97	2,572,085.85	3,052,060.26
Total Liabilities and Owner's Equity	1,519,427.72	1,894,909.41	2,325,986.54	2,808,299.62	3,318,469.39

Table 8*Positive indication of the liquidity, stability, efficiency and profitability of the proposed business*

	2022	2023	2024	2025	2026
Gross profit margin	38.46%	42.38%	40.65%	38.87%	37.03%
Net profit margin	12.89%	19.14%	18.08%	17.00%	15.71%
Return on total assets	49.64%	71.49%	60.51%	51.83%	44.60%
Return on equity	55.70%	79.27%	66.50%	56.59%	48.59%
Return on investment	126%				
BEP	64%	51%	52%	52%	54%
Average rate of return	126%	100%	9%	8%	4%
Current ratio	1.99	4.61	6.87	8.74	10.20
Quick ratio	1.74	4.38	6.66	8.55	10.03
Total debt ratio	0.11	0.10	0.09	0.08	0.08
Debt to equity ratio	0.12	0.11	0.10	0.09	0.09
Days-sales-outstanding	15.00	15.00	15.00	15.00	15.00
Fixed Asset Turnover Ratio	4.92	6.82	8.78	11.52	15.70
Total Asset Turnover Ratio	3.85	3.74	3.35	3.05	2.84

The ratios shown above in Table 8 is a positive indication of the liquidity, stability, efficiency and profitability of the proposed business.

Socio-Economic Responsibility Study

As a member of society, the proposed business has the opportunity to contribute to the community's well-being. The business will exist not only for the benefit of its owners and employees, but also to serve the community. The proposed firm would have a positive impact on society and the economy as a result of this. Simultaneously, the business will be able to increase brand awareness and engage with potential consumers, partners, and investors.

Conclusion and Recommendation

Based on the study conducted and the established unsatisfied demand and market share for the services, the proposed business of a Catering Business, is feasible and viable. The study's conclusion and findings recommended that the proposed business commence operation by 2022.

References

- Fact.MR (2021, December 30) Catering and food service market. <https://www.factmr.com/report/2149/catering-and-food-service-market>
- Grand view Research, (2020, March). Market Analysis Report. <https://www.grandviewresearch.com/industry-analysis/food-grocery-retail-market>
- ReportLinker (2021, December 21) Catering services and food contractors global market report 2022. <https://www.globenewswire.com/news-release/2021/12/30/2359165/0/en/Catering-Services-And-Food-Contractors-Global-Market-Report-2022.html>

Establishing a Lifestyle Food Restaurant in San Lorenzo, Makati City

Nisaam Ibbar L. London

Adventist University of the Philippines
2039143@aup.edu.ph

Abstract

The purpose of this paper is to produce a feasibility study about establishing a lifestyle food restaurant in the heart of San Lorenzo, Makati City Philippines. The study presents an introduction on the current problem being faced by Filipino consumers due to the generous amount of red meat products being served on their plates. The researcher used two techniques in analyzing data: strategic analysis and financial analysis. In determining if establishing a lifestyle food restaurant can be a legitimate competitor in the area, the researcher used the strategic analysis of data. This analyzes the internal Strengths, Weaknesses, Opportunities, and Threats of the said restaurant to the local and well-established restaurants in San Lorenzo, Makati City. The sample size was administered to 399 individuals which represents the 125,660 population in the selected barangays in Makati City. A five (5) percent margin of error was considered. The survey questionnaire was distributed using the stratified sampling technique. Data was gathered through the creation of a Quick Response code (QR code linked to the google forms created for the survey questionnaire, this is to ensure contactless in the gathering of data. Financial analysis was also performed. The analysis includes the examination of projected financial statements such as comprehensive income, cash flows and financial position. The analysis was based on a five (5) year sales forecast. Different financial ratios will be produced in order to determine whether the restaurant could be a profitable long term investment. Based on the results, a projected 5% to 6% in ratio increased the income after tax was determined. Return of Investment (ROI) was projected to have a ratio of 2.31x.

Keywords: *feasibility study, lifestyle food, strategic analysis, financial analysis*

In a recent study made which was reported by Agence France-Presse (AFP), there was an increase in global trade of red-processed meats. This resulted to an increase in chronic diseases associated with meat consumption. The report was administered from the data lifted from 154 countries. (Agence France-Presse, 2021). Based on various reports, researchers found out that illness and death rates from coronary artery disease, colon cancer, and diabetes of type-2 were linked to processed meat consumption.

Another study from Southeast Asia found that during the epidemic, many people in the region concentrated on their health and are now treating their general health considerably more seriously – starting with the food they eat – than they were previously.

Ai Palette, a Singapore-based business, investigated the pandemic's impact on customer food preferences. According to the data they collected, 91 million from social material and search inquiries in local languages, consumers in Indonesia, Thailand, and the Philippines prioritize health.

According to the report, sales of fresh produce products increased significantly in Indonesia and the Philippines. In the Philippines, where consumers preferred fresh and organic types, a remarkable 444 percent year-on-year rise was seen. This was largely motivated by potential health and environmental risks associated with these food production practices. (Naik, 2021)

Now, how exactly do these growth manifest themselves in Makati—a place where health is believed to be for the wealthy and meat is seen to be present anywhere.

Statement of the Problem

The study's objective is to ascertain the viability of establishing a lifestyle food restaurant in San Lorenzo Makati, Philippines. The data collection approach will involve observational study, as well as a survey issued to potential clients in the area.

Objectives

Following the conclusion of the research, the following questions will be addressed:

- a) Which location can be designated as the proposed restaurant's market area?
- b) Will there be demand for the proposed restaurant?
- c) Will the proposed restaurant be sustainable in the next five (5) years?
- d) Will the planned restaurant profit under the suggested price structure, operating hours, expected restaurant turnover rate, as well as projected controlled and uncontrollable costs?

Significance of the Study

Concerns regarding the current food chain include customer uneasiness about the food they eat, the quality, GMOs, pesticide and antibiotic use, and the health dangers linked with eating too much meat. Consumer interest for this type of alternative cuisine is increasing.

As a response to the increased demand for delectable, relatively healthy foods, and to sustainable and meat-free dining, restaurateurs and chefs are creating less meat-heavy dishes for a variety of reasons.

This research will investigate if it is possible to open such a restaurant and make a profit. Due to the growing popularity of alternative foods, as evidenced by market figures and several studies, restaurants of this type have a chance of success. This idea will be further explored by means of creating a business plan and a profitability analysis.

To the customers – the researcher believed that the customers would benefit from this because the study was made for them in order for the researcher to price the meals in the menu at a reasonable rate.

To the investors – the researcher believed that potential investors would benefit from this study because they will be presented with a business plan of showing how this research will be a profitable investment.

Scope and Limitations

Prior to conducting any research, the market area for the startup company must be established in order to proceed with the exploration phase. As practice, the market area can be defined through the geographic area in which a unit can anticipate capturing around 85 percent of the business.

It is not difficult for an established restaurant business to obtain market area information. Surveys can be conducted to ascertain the origins of clients, and plots on maps can be created to depict the market area or trade area clearly.

On the other hand, predicting the market region for a new restaurant is difficult because no information about the company's clients is known. Nevertheless, this information can be gathered by surveying the public.

Additionally, market area may be easily recognized in this study because the proposed location will be just across the street from a large, enclosed retail mall, and the restaurant's customers will be primarily shopping mall patrons. Thus, the supermarket's market area will be identical to the restaurants. The following discussion will first define the shopping mall's market area and assess its characteristics, before describing the proposed restaurant's market area's future development.

Literature and Related Studies

Globally, the fast increase of chronic disease and diabetes imposes enormous health and economic costs. Since the early 1990s, nutrition authorities such as the American Dietetic Association have published reports on meat's health-damaging effects, but it wasn't until recently that the dangers of meat-heavy diets became a global health scare when the World Health Organization classified meat as a class 1 carcinogen.

Three primary reasons exist for someone to opt to pursue a vegetarian or plant-based diet in some form. These concerns pertain to individual and public health, the environment, and food-producing animals.

Animal products, particularly those generated in large-scale concentrated animal feeding operations (CAFOs), have been discovered to be a source of undesirable compounds such as antibiotics. Antibiotic use in animal feed has been linked to the growth of antibiotic-resistant bacteria in humans, according to research (Yang, et al., 2019).

Individual health benefits of well-planned, nutritionally appropriate vegetarian meals have also been demonstrated in research. They can aid in weight loss and may help reduce your risk of obesity and chronic diseases such as type 2 diabetes, cardiovascular disease, and cancer. (McEvoy, Temple, & Woodside, 2012). This also corroborates on (Huang, Huang, Hu, & Chavarro, 2016) that in comparison to non-vegetarian diets, vegetarian diets proved to provide considerable weight loss benefits. In the published article made by (Chiu, Pan, Lin, & Lin, 2018), it says that while vegetarian diets are connected with a decreased risk of diabetes in Westerners, their effect on Asians is uncertain due to their distinct pathophysiology. They set out to study the relationship between a vegetarian diet and diabetes and discovered that vegetarian diets and converting to a vegetarian diet may protect against the disease.

Concerns about one's health are the key demand driver for organic food consumption. Consumers are becoming increasingly interested in pesticide- and other health-risk-free meals. (Knudson 2007).

According to surveys, many customers choose organic foods for their perceived health and nutritional benefits. Consumers pick organic foods for a variety of reasons, according to one survey some reasons are to prevent pesticides (70%), to maintain freshness (68%), to improve their health and nutrition (67%), and to avoid genetically modified foods (55%). These consumers appear to be willing to pay the normal 10% to 40% price premium associated with organic items. (Davis 2006).

Organic foods can cost more than twice as much as conventional foods, but the increased sales make it worthwhile.

In one of the universities in Wisconsin-Madison, there was a survey conducted to ascertain college students' sentiments toward organic/vegetarian food. The goal of this study was to see if students' awareness of organic foods and opinions about them were linked to their consumption of organic foods and other healthy lifestyle activities. Organic food items have expanded in global awareness as a result of new research, growing market interest, and a longing to be "healthy." The majority of students knew that organic foods could be found in grocery and health food stores, but just a handful knew that they could also be found in restaurants. In this study, nearly half of the students said they either accept organic foods or consume just organic meals. Students who lead a healthy lifestyle are more likely to consume organic foods on a regular basis, according to data research. (Dahm 2009).

Industry Profile

A growing and emerging market like the Philippines is considered a demographic sweet spot for a service-based economy, an analyst said. Prior to the COVID-19 epidemic, the Philippines was on track to becoming an upper middle economy. With a population of 109 million, the market for imported food and beverages remains sizable and continues to offer significant growth potential in the future.

Global agricultural exports to the Philippines totaled \$13.3 billion in 2019, a decrease of less than 1% year over year. ASEAN (35.3%), the United States (21.7%), and the European Union (EU) were the top three suppliers (11.3%). Meanwhile, the Philippines was the ninth (9th) largest market for agricultural exports from the United States, with sales totaling \$2.9 billion, down 2% from 2018. Despite fierce competition, traders have a strong preference for American goods.

Due to urban consumers' increasingly hectic lifestyles, the Philippine food service sector's revenues increased to an anticipated \$14.9 billion in 2019. Dining out was once a significant part of Filipino family bonding and festivities, but customers have switched away from restaurants in the aftermath of the COVID-19 outbreak, preferring to cook food at home.

Additionally, through 2019, total food service sales in the Philippines were estimated to be \$14.9 billion, owing to rising urbanization (currently at 47% with a 2% annual growth rate), nationwide expansion of shopping malls and commercial centers that house a plethora of food service establishments, and a growing consumer demand for convenience as disposable income rises and lifestyles become increasingly hectic. Along with urbanization comes the rise of residential condominiums with tiny dwelling spaces, which encourages families to reduce their reliance on stay-at-home domestic employees who cook for the household and instead choose for dining out and meal delivery.

According to industry analysts, the Philippine dine-in scene will take at least six months to recover once the COVID-19 outbreak subsides. Meanwhile, those establishments that have remained open are utilizing online food platforms such as FoodPanda and GrabFood, adapting to changing consumer preferences such as curbside pickup and cashless online payments such as GCash and PayMaya, and continuing to explore niche markets and trends such as increased demand for plant-based food.

Success and Risk Factor

The vegetarian restaurant's internal environment and external environment are outlined below through SWOT analysis, along with their weighted impact on the mission.

Table 1
SWOT Analysis

Strength	Weaknesses
<ul style="list-style-type: none"> • Prime Location. • Foot traffic is high, near mall establishments. • Trendy and modern concept. • Atmosphere and design are in vibe with nature. • Seasonal Menu (special). • Superb restaurant design concept. 	<ul style="list-style-type: none"> • Crowded place with a lot of competitors. • Restaurants rely heavily on their employees and hold them accountable for their performance and work quality. • The restaurant's price range is higher than the industry average.
Opportunities	Threats
<ul style="list-style-type: none"> • There are numerous options for serving various cuisines at various times of the year. • following the healthy eating trend that is gaining popularity these days • Increasing the number of customers through promotions and activities 	<ul style="list-style-type: none"> • Local competitors and new potential competitors who are launching a business. • Competitors who follow the same 'healthy food' philosophy. • Food costs may fluctuate, and suppliers may raise prices. • Although the restaurant does not offer delivery in its first year of existence, its competitors do.

The restaurant's merits stem from a mix of the menu and the structure itself. By presenting a variety of cuisines, the restaurant may cater to a wide range of tastes and attract new customers. Whether someone is seeking for a vegetarian burrito, salad, or pasta, they will find a selection that will satisfy them. Not only is the menu's variety noteworthy, but so is the nutritional content of the products. Indeed, it is regarded to be the primary cause for patronage at the restaurant. The numerous health benefits associated with vegetarian meals have been described in the literature review, and they may appeal to a variety of San Lorenzo, Makati clients. The structure itself will be intended to have a welcoming, pleasant atmosphere. Visitors are welcome and can come not only to enjoy fantastic food, but also a fantastic atmosphere. Additionally, a branded picture will be created to ensure rapid awareness of the organization. The quality of service provided is critical to a business's success; all staff are trained in customer service and possess a passion for the food they serve. Every consumer will have a positive experience, which encourages them to return.

Methodology

This chapter will discuss how subjects will be chosen, the data gathering tool that will be utilized in survey and observational studies, the procedures that will be followed to collect the data, the sample selection criteria that will be used, and the analysis of the collected data in light of the various research methods. At the conclusion of the session, technique, sample, and procedure limitations will be discussed.

Research Design

Because of the nature of the research, it is required to do both primary and secondary research in order to get the necessary data for the feasibility study. To collect information about customers, management, competition, and site selection, an exploratory research approach will be employed, and a survey will be undertaken to acquire information about consumer spending patterns. and objects which are the pricing of competitors. Also, with the current situation due to COVID-19, this research is also designed to check if it is feasible for online platforms to sellq the products.

Sources of Data and Instrumentation

Primary Data. In order to achieve the study's objectives, firsthand and more accurate information, such as survey questionnaire via google form, and through social media messaging applications' unstructured interviews, were conducted among managers who own vegetarian restaurants around Makati City and various online vegetarian food restaurants which are based in the metropolitan area. The survey questionnaire was validated by one (1) expert from the field, specifically the CEO of Tastihealth Vegetarian Buffet and three (3) from the business academe. Five (5) laymen also made suggestions as to how the survey questionnaire should be answerable with ease without compromising the quality of getting the data.

Secondary Data. The secondary source of data was acquired from business research and articles made for the Israel market because this country was named as the vegan capital of the world (Gross, 2018). Other secondary sources were derived from materials, books and other related studies from the university online library which is the EBSCO research solution.

Population and Sampling Techniques

The study applied a convenience sampling technique, which uses groups of participants that simply happen to be available, for selecting the number of respondents. The researcher selected this sampling technique due to limitations made by the COVID-19 virus and where most of the target market are in a work-from-home setup thus conveniently they can be asked to answer the survey questionnaire only when their time permits. The population of the study will be the residents of Makati City who are household owners around the projected restaurant area. The demographic profile was also identified to determine the number of respondents in each barangay. According to the latest data provided by Philatlas. The total population of the selected target market in Makati City is 125,660 with 5 barangays selected as target market. The margin of error applied was 5%. The following formula for computing the sample size was used.

$$n = \frac{N}{1 + Ne^2}$$

Whereas:

N – # of Population; n – Sample Size; e – Margin of Error

$$\frac{138022}{1 + 138022(0.05)^2} = 398.8441144$$

Table 2

Target Market Population

Target Market	Population	Survey Questionnaire Distributed	Retrieved	Percentage
Bel-air	36,007	25	25	100%
Guadalupe Nuevo	20,533	25	25	100%
Pio Del Pilar	50,722	50	50	100%
Poblacion	16,706	100	100	100%
San Lorenzo	14,054	200	200	100%
Total	138,022	400	400	100%

Source: psa.gov.ph

Data Gathering Procedures

A business plan was produced to assess whether a new lifestyle food restaurant in San Lorenzo, Makati, would successfully generate sustainable revenue. This data collection strategy benefited the researchers significantly because it permitted them to conduct early observations of the industry's present market while also creating rapport with possible participants and obtaining their cooperation

in responding to the online forms. Additionally, this interview method increased response rates in survey research and enabled the researcher to clarify unclear responses, when necessary, as the researcher could contact them at any moment and await their response.

The participating population were selected through distribution of the online survey questionnaire to individuals who happen to be working or living near San Lorenzo, Makati. Individuals who happen to be near Makati City were also selected due to the reason that they can possibly visit Makati City. The researchers developed an online survey questionnaire in google forms. Each google form is then distributed to the participants via posting a link to social media groups.

Ethical Consideration

The researcher ensured that the conduct of the study was done with the prior consent of the officials of the selected barangays and subdivision homeowners association. For better appreciation of the respondents, the purpose and objectives of the study were explained first to them and no confidential information will be taken from them. It was clarified also that participation was voluntary and responding to the question will cause no physical or psychological harm.

Analysis of Data

Completed copies of the questionnaire were collected and analyzed. The data collected will be analyzed qualitatively and quantitatively. A SWOT analysis will be conducted using the competition analysis and market data to ascertain the restaurant's strengths, weaknesses, opportunities, and threats. The purpose of any SWOT analysis is to ascertain the critical internal and external elements affecting the achievement of the objective. These were derived from the company's distinct value chain. Internal elements are frequently seen to be strengths and weaknesses, whereas external factors are considered to be opportunities and threats. The strengths of a business are the resources and capabilities that can be leveraged to create a competitive advantage. Absence of particular strengths may be construed as a weakness. External environmental study may reveal fresh profit and growth prospects. External environment changes may potentially pose a hazard to the organization.

Data gathered from those survey questionnaires were tabulated through google form report. Further processing of the data collected included the use of ratios to determine the profitability, liquidity and stability of the business.

Results and Discussions

Marketing Study

Lifestyle food restaurant is a new healthy, vegan restaurant brand inspired by Filipinos' growing health consciousness. The lifestyle food restaurant uses the freshest vegetarian ingredients to provide clients with dishes that are high in nutritional content and influenced by cultures from across the world. Each food is to be created fresh for each customer, taking into account their unique dietary requirements and tastes. The restaurant provides a tranquil setting for patrons to enjoy their meal, as well as takeout, delivery, and even catering for special events. Menus are revised on a regular basis to reflect emerging consumer behavior trends. The restaurant is concerned not only with the health of its patrons, but also with the health of the environment.

Demand and Supply Analysis in Quantity and in Peso

A close study of the data provided on the projected demand and the projected supply indicates that there is an obtainable portion of the market that can still be serviced by Lifestyle Food Restaurant amusement center.

Table 2 shows the demand and supply analysis of the proposed project for the years 2021 until 2025. Since there is a limitation in the capacity, only a certain percent of the unmet demand will be satisfied. For the year 2021, the market share of the project will be 46%, 38% in 2022, 32% in 2023, 24% in 2024 and 22% in 2025. On average, the proposed project has a 32% market share.

Table 3*Demand and Supply Analysis of Lifestyle Food Restaurant in Quantity 2022 - 2026*

Year	Demand	%	Supply	%	Unmet	%	Capacity	Market Share
2022	6,733,085	100%	3,185,773	89%	3,547,312	11%	156,000	4%
2023	7,000,017	100%	3,085,616	89%	3,914,401	11%	156,000	4%
2024	7,266,950	100%	3,203,280	89%	4,063,669	11%	156,000	4%
2025	7,533,882	100%	3,320,944	89%	4,212,938	11%	156,000	4%
2026	7,800,814	100%	3,438,608	89%	4,362,206	11%	156,000	4%
Average	7,266,950	100%	3,246,844	89%	4,020,105	11%	156,000	4%

Table 4 illustrates the demand and supply of Lifestyle Food Restaurant in peso. The unmet demand is the part of the total demand not met by the supply. Of the total demand, 9% is unmet; however, due to limitations in the capacity, only 9% will be met by the proposed business during the year 2021, 40% in 2022, 30% in 2023, 27% in 2024, and 27% in 2025. The average market share is 34%.

Table 4*Demand and Supply Analysis of Lifestyle Food Restaurant in Peso 2021–2025*

Year	Demand	%	Supply	%	Unmet	%	Capacity	Market Share
2022	1,346,617,050	100%	796,443,205	91%	550,173,844	8%	187,200,000	34%
2023	1,449,003,622	100%	798,403,206	91%	650,600,416	8%	187,200,000	29%
2024	1,556,907,650	100%	857,858,490	91%	699,049,160	8%	187,200,000	27%
2025	1,670,589,929	100%	920,497,599	91%	750,092,330	8%	187,200,000	25%
2026	1,790,322,756	100%	986,470,569	91%	803,852,187	8%	187,200,000	23%
Average	1,562,688,201	100%	871,934,614	91%	690,753,588	8%	187,200,000	28%

Technical Study

This chapter discusses the service that the proposed business will be offering. The requirements of furniture, kitchen machineries and equipment and kinds of dishes to be offered are also presented. Other essential technical information such as building, location, layout and floor plan, capacity scheduling, utilities and other operating costs will also be tackled in this chapter.

Service Process

The lifestyle food restaurant is broken into eight (8) phases:

1. Arrival. Upon arrival, the customer is to scan his/her QR code for contact tracing purposes. Also, contact number will be taken in case of line queue.
2. Seat. Once the table is ready and available, customers will be escorted to their seat. (2 minutes)
3. Order. Menu will be available by scanning the restaurant's QR code which can be seen on the table. (5 minutes)
4. Take Order. Order will be taken from the customer by the waiter/waitress (1 minute).
5. Cook. Dish order shall be prepared by the kitchen personnel (~8-10 minutes)
6. Eat. Customers will eat their orders (~12-15 minutes)
7. Serve. Dish will be served according to the customer's orders (1-2 minutes).
8. Take Payment. Bill will be provided once the customer requests for it (1 minute)

Total 'halt' time per customer is approximately 30 minutes. This will be used in the business capacity computation.

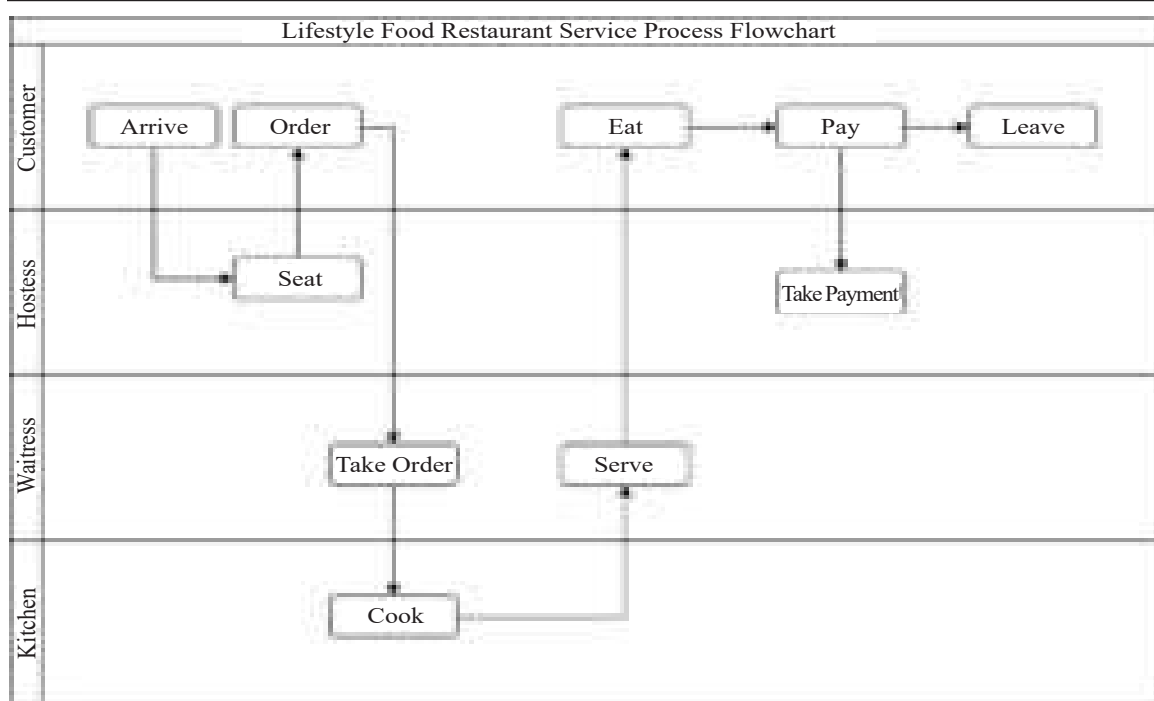


Figure 1. Service Process Flow Chart

Business Capacity

The business capacity is 149,760 customers yearly. The capacity was computed with the conservative assumption wherein the full capacity (100%) was multiplied to 30%. ‘Halt’ per customer was also considered on computing the total business capacity shown in Table 4.

Table 5

Projected Business Capacity in Quantity Year 2022 - 2026

Year	Weekly Capacity in Quantity	Yearly Capacity in Quantity	Weekly Capacity in Peso	Yearly Capacity in Peso
2022	2,880	149,760	720,000	37,440,000
2023	2,880	149,760	745,200	38,750,400
2024	2,880	149,760	771,282	40,106,664
2025	2,880	149,760	798,277	41,510,397
2026	2,880	149,760	826,217	42,963,261

Table 5 shows the yearly capacity in peso where the price per dish was averaged to ₱250 and a consideration of 3.5% for inflation rate. The annual capacity in peso for the year 2022 is ₱37,440,000 and it rose to ₱42,963,261 for the year 2026.

Organization and Management Study

A solid foundation for establishing a business structure can be established via thorough planning and organization. This chapter describes the proposed business’s organizational structure, the number of employees required, their qualifications, their salaries, and the expected timeframe for completing the project.

The structure of an organization will be dependent on the size and available resources of the organization. The role of the human resources in an organization is very essential to its success. Personnel is the most important and powerful resource that the organization has. An organization

may start out with no money, but with creative, resourceful, hardworking, and honest people, it can be profitable.

Organizational Structure

An organizational structure shows the hierarchy of authority and responsibility from the owner down to the line staff. Figure 2 shows the organization structure of the business.

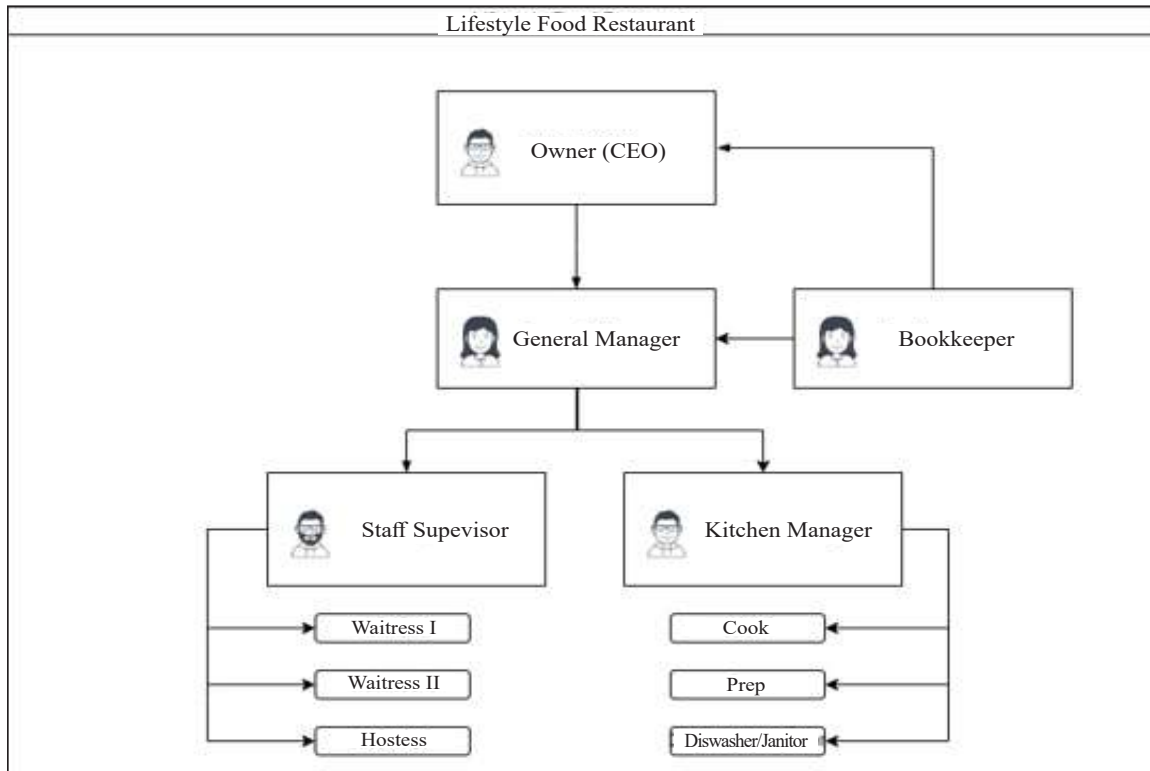


Figure 2. Organizational chart

Compensation Package

The employees are an important in-service process. The employees shall be given a compensation package on a monthly basis salary, benefits such as SSS, Philhealth and thirteenth month pay as prescribed by the Philippine Government. Each employee will receive a minimum wage rate applicable to the National Capital Region ₱ 500 - 537. The summary of the monthly compensation package is presented in Table 5

Table 6
Net Annual Compensation Package for the Year 2022 - 2026

Position	Gross Monthly Rate	Gross Annual Excluding 13th	Gross Annual Including 13th	Annual Deduction	Net Annual Salaries and Benefits
Manager	40,000	480,000	520,000	59,760	420,240
Bookkeeper/Cashier	25,000	300,000	325,000	52,560	247,440
Staff Supervisor	20,000	240,000	260,000	42,360	197,640
Head Chef	35,000	420,000	455,000	57,360	362,640
Assistant Chef	21,000	252,000	273,000	44,400	207,600
Total	141,000	1,692,000	1,833,000	256,440	1,435,560

Table 6 shows that the manager receives ₱ 40,000 monthly, the Bookkeeper/Cashier receives ₱ 25,000, Staff Supervisor ₱20,000, Head Chef ₱35,000 and the Assistant Chef receives ₱21,000 each per month. Included in the gross compensation package are the basic salaries of the employees, plus the employer's contribution of SSS Regular Savings, SSS Mandatory Provident Fund, Pag-ibig and PhilHealth. Adding all of these will be the number of benefits of the employees and the salaries expense of the business. The gross monthly wages are ₱ 141,000 in total.

There are also deductions to the gross monthly wages of the employees. The net monthly compensation is computed through the deduction of employees' contribution of SSS, PhilHealth and Pag-ibig.

The total annual salaries and benefits were computed by adding the basic salaries with the benefits which include: SSS and PhilHealth. Then multiplied by the number of employees to get the gross monthly salary then multiplied by 12 months to get the gross annual salary. The gross annual salary is then added by the 13th month pay which was based on the monthly rate to get the total annual salaries and benefits.

Strategic Management Study

The Strategic Management Study is about the development of plans and strategies that will be applied by the manager as well as the decisions to be made to improve the performance and achieve the goals and objectives of the organization by making the most possible use of the strengths, minimizing the weaknesses, taking advantage of the opportunities, and proper management of threat.

This section presents the Strategic Framework, Strategic Evaluation and Other Strategies and Plans that will be implemented for the Lifestyle Food Restaurant to make it more competitive as compared to other companies in the industry.

Strategic Framework

Mission. To show our customers how important it is to eat healthily and show them how tasty and healthy dishes made of natural and ecological products can be.

Vision. To make our restaurant the best healthy and conscious restaurant in the city, we need to change and grow, but always stay true to our philosophy and values.

Contingency Plans

Listed here are the alternative courses of action to be undertaken in case of accidents or incidents like fire, typhoon, electric interruptions, earthquake, or other disasters that may affect the normal operation of the business. These are the following:

- There are Business Continuity Plan (BCP) sessions that are being conducted for free by the government. These BCP sessions should be availed by business owners and their employees.
- Availing of non-life insurance and any proceeds may be secured to cover the amount of investment.
- Important documents will be scanned to produce soft copy files and upload it to cloud storages. Original and hard copy files will be kept in the vault of the owner.
- Emergency numbers are pre-saved to all employees.
- Do's and don'ts during disasters and calamities including typhoons, earthquakes, etc are oriented to employees once every six (6) months. Moreover, employees are oriented on the basic life support training such as basic first aid, fire and earthquake drills. Assistance from the Local Government Units will be requested for this purpose.

Accidents. The availability of first aid kits that can be used while waiting for professional medical help, is a requirement of the Department of Labor and Employment as part of the occupational health and safety of workers.

Fire Incident. Fire extinguishers must be readily available in a conspicuous place in the working area where there are risks of fire. There must be accessible and clear fire exits with directional signs visible to all.

Earthquake. Ensuring the structural integrity of the building and the installation of machines is necessary to minimize the adverse effects of such incidents. The approval of the Building Permit is a document that confirms the strength of the building and must be checked before signing the Contract of Lease.

Typhoon. The manager must be updated on government warnings and announcements regarding typhoons to have enough time to prepare and minimize adverse effects on the operation.

Power outage. A standby power generator will be rented, in case there are urgent jobs that need to be finished immediately.

Employee Absences. The workers must be knowledgeable on the processes through proper training and job rotation so that the operations will not be affected or disrupted when somebody is- on leave for whatever reasons.

Alternative Plans

If the sales performance will not prosper based on the goals and the original target market, the owner may shift to explore other opportunities. They may shift to selling organic vegetables and other alternative food.

Exit Strategies

If ever the lifestyle food restaurant processing business did not progress as planned, all the equipment will be sold to a restaurant nearby. This may be done through auction or merging of business. Regulatory agencies must be formally informed of the closure to ensure that the record is clear of all regulatory responsibilities and no penalties will be charged against the business in the future.

Financial Study

In this chapter, the data gathered from the preceding chapters will be translated into monetary terms. The major assumptions needed to facilitate the preparation and analysis of the projected financial statements for a five-year period will be presented. The profitability for the proposed project will be determined and its financial standing will be carefully analyzed.

Projected Income Statement

The Income Statement shows the result of operation of the proposed project during the initial five-year period. It summarizes the revenue and expenses for each of the next five years. The performance of the enterprise is primarily measured in terms of the level of income earned by the enterprise through the effective and efficient utilization of its resources.

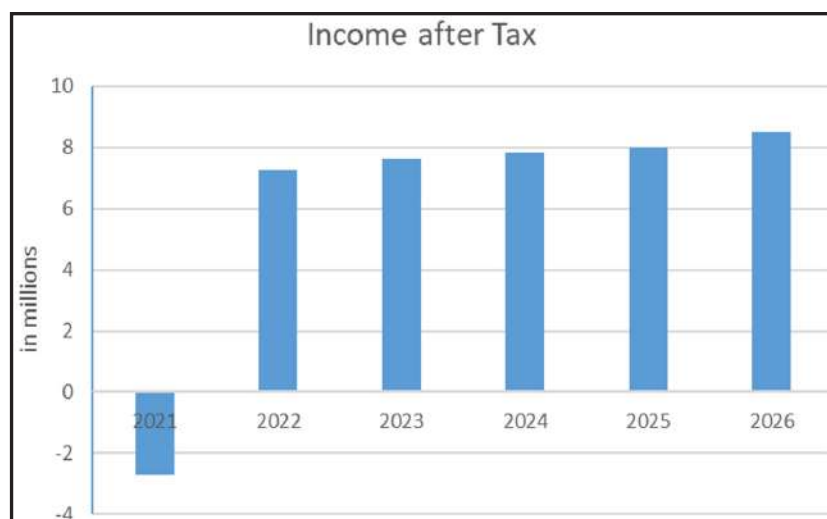


Figure 3. *Projected Income after Tax*

Projected Cash Flow Statement

The Statement of Cash Flow summarizes all operating, investing and financing activities of the proposed business including cash receipts, and cash payments which affects the cash. It provides 5 years information of the business operation. At the second year of operation, the net cash flow is ₱5,505,501.50.

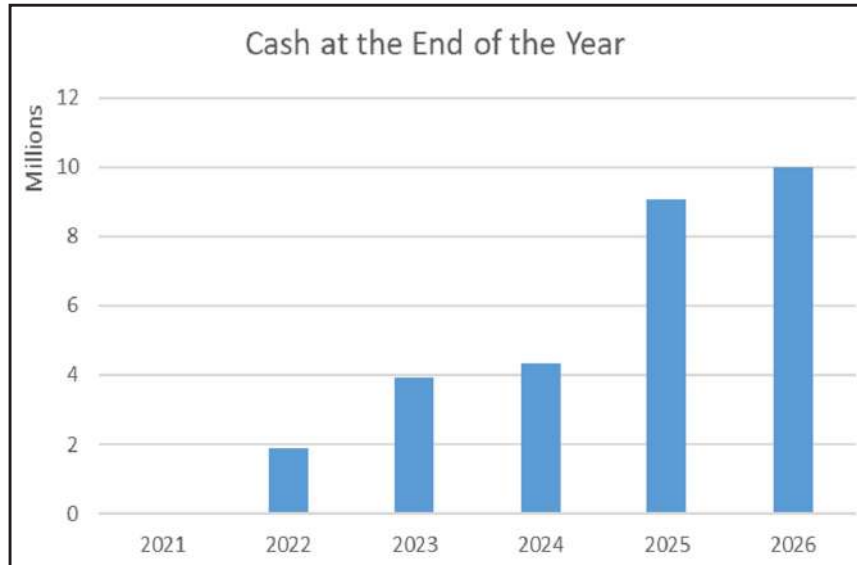


Figure 4. Projected Cash Flow

Projected Statement of Financial Position

A Balance Sheet presents the financial position of the business at the end of each year. It shows assets, as well as liabilities and capital of the said project. Figure 5 gives comparison between the asset, liabilities and owners' equity at every year end.

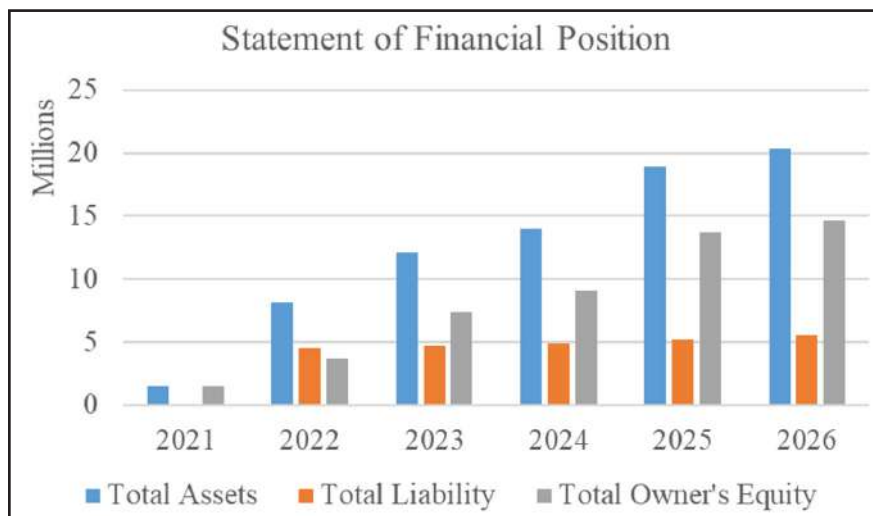


Figure 5. Projected Statement of Financial Position

Socio-Economic Desirability

This chapter is about the significance of the proposed project to the different sectors of society. The utilization and development of their resources must not only be for profit but also for the betterment of the community as a whole.

The researchers identified how the projected business will be beneficial and desirable with conscientious consideration with the customers, employees, owners, community and government.

Customers

Customers are the most important factor in business. Customers have to be served a good quality product, friendly, effective and efficient services, to meet their desires and provide them satisfaction. Customers are treated as king, as they are always right in the business industry. Therefore, the business is open for suggestions, feedback and complaints.

Employees

The “Lifestyle Food Restaurant” will provide employment to the community. Aside from their fixed monthly salary, they will also receive benefits and incentive rewards in return for the effort they exerted for the betterment of their services. The employees will receive salaries and benefits in accordance to the prescribed laws of the Department of Labor and Employment. The employment will be able to support and generate income for their family needs.

Owners

Through the proposed business the owner can support his family’s financial needs. The owner can also enjoy an abundant income since this proposed business is somewhat new in the market and is considered as the new top generating income in the business world. The owner can also enhance his ability in entrepreneurship

Community

The benefit of the proposed business to the community is to provide the people jobs to reduce the unemployment level of the country. The proposed business will also help develop the community to strengthen the bonds between family and friends.

Church

Every business dedicated to helping the work of God will be blessed and will be a blessing to others as well. Tithes would be given out of the income of the business. Ten percent of the monthly revenue will be the tithe of the company. It will help to support and improve any church projects and evangelistic programs.

Government

This new establishment will largely contribute to the government through taxes and other fees to be collected from the proposed venture. Furthermore, the proposed establishment will help the government decrease unemployment and increase the country’s economy. It will also accelerate the national economic growth.

Findings, Conclusion and Recommendation

This study centers on the determination of the viability and feasibility of establishing a proposed venture named Lifestyle Food Restaurant in San Lorenzo, Makati City with total consideration of marketing, technical, organization and management, and financial aspects of management.

Based on the study conducted, it is therefore concluded that the proposed business is feasible and viable. It has a good market share supported by a growing demand for environmentally friendly products. After the completion and fulfillment of all the aspects of management above, the business will profit.

After undergoing a series and various analyses in the proposed business, the researchers highly recommend the establishment of Lifestyle Food Restaurant in San Lorenzo, Makati City in April 2022.

References

- Agence France-Presse. (2021, November 19). *France 24*. <https://www.france24.com/en/live-news/20211118-diet-related-illness-increases-with-availability-of-red-meat-study>
- Chiu T., Pan W.H., Lin MN., & Lin, CL. (2018). Vegetarian diet, change in dietary patterns, and diabetes risk: A prospective study. *Nutrition & Diabetes* 8(1):12. DOI:10.1038/s41387-018-0022-4
- Dahm M.J., Samonte, A.V., & Shows, A.R. (2009). Organic foods: Do eco-friendly attitudes predict eco-friendly behaviors? *J Am Coll Health*. DOI: 10.1080/07448480903295292
- Davis, S. F. (2006). "Organic Food". *Journal of Food Science*.
- Huang, RY., Huang, CC., Hu, F.B., & Chavarro, J.E. (2016). Vegetarian diets and weight reduction: A meta-analysis of randomized controlled trials. *J Gen Intern Med*, 1:109-16. DOI: 10.1007/s11606-015-3390-7
- Knudson, WA. (2007). "The Organic Food Market." *Business Innovation in Agriculture, Food and Natural Resources*. Michigan State University.
- McEvoy C., Temple, N., & Woodside, J. (2012). Vegetarian diets, low-meat diets and health: A review. *Public Health Nutr*. DOI: 10.1017/S1368980012000936
- Naik, S. (2021, November). COVID-19 shifts food trends in Southeast Asia. (F. I. FIA, Interviewer)
- Yang, H., Paruch, L., Chen, X., Eerde, A., Skomedal, H., Wang, Y., . . . Liu Clarke, J. (2019). Antibiotic Application and Resistance in Swine Production in China: Current Situation and Future Perspectives. *Frontiers in veterinary science*, Vol. 6, 136.

A Feasibility of Establishing a Pharmacy in Sunrise Subdivision, Brgy. Inosluban, Lipa City

Theressa Mae F. Faina

Adventist University of the Philippines
2038367@aup.edu.ph

Abstract

Due to the rise of the pandemic in 2019, pharmacy/drugstore has increased demand with consumers hoarding medicines and vitamins. The simultaneous lockdowns all over the Philippines led the Filipinos to have a hard time buying their maintenance, especially when pharmacies are far from their homes. This study analyzes the feasibility of putting up a pharmacy in Sunrise Subdivision, Brgy. Inosluban, Lipa City. There is a need for a nearby pharmacy in the subdivision since the nearest pharmacy is 3 to 5 km away, and the subdivision is located along the highway which makes it hard for the residents and tenants to buy medicines when needed. The primary data used for the research is the questionnaires prepared through google forms. This was distributed through messenger and face-to-face interviews. Other information gathered is from the owners of the pharmacy through unstructured questionnaires relating to the establishment of the pharmacy. Overall, there are a total of 201 respondents coming from the residents of the subdivision. Results from the study show that there are 112 respondents who are regularly buying their medicines and 145 respondents are buying other products from the pharmacy resulting in a 46% average market share on demand and supply. To help the researcher better understand the various aspects of business and to have an overview of the pharmacy operation, the marketing, production and operations, organization and human resource, strategic management, financial, and socio-economic responsibility were examined. This study concludes that establishing a pharmacy is sustainable and recommended for implementation.

Keywords: *Pharmacy, feasibility, pandemic*

Due to the rise of the new coronavirus called severe acute respiratory syndrome coronavirus-2 (SARS-CoV-2) in Wuhan, China in 2019, the World Health Organization declared a public health emergency the following year as it spread all over the world (WHO,2020).

The pandemic outbreak highlighted that pharmacies are crucial suppliers of vaccines in the United States. When all the hospitals are packed with patients, the pharmacy is the go-to source for health supplies. Those with comorbidities will have to go to their local pharmacy instead of going to the hospital. Research comparing people who went to a pharmacy vs those who went to a doctor found a difference of 31 times. The convenience that the pharmacy provides has a beneficial impact on its customers, resulting in their continued patronage. (Goode, Owen, Page, and Sharon, 2019).

Covid-19 raises health awareness among the general public in the Philippines, resulting in an increase in demand for maintenance and vitamins. According to research, 68 percent of people opt to enhance their self-care, 38 percent use medication for better health, 35 percent make sure they buy their medications, and 60 percent are already preparing to improve their wellbeing. As a result, the number of pharmacies open for business in the country is rapidly increasing. (Ken Research, 2021).

However, even though the increase of pharmacies is significant in our country there are a lot of far-flung areas that still have no access to pharmacies, or it is far away from them. For the residents of Sunrise Subdivision in Brgy. Inosluban, Lipa City, it will take one to two rides before reaching a pharmacy. Now that the cases regarding pandemics are starting to go down it is still important to follow health restrictions and traveling in public transportation should still be limited. Therefore, it will be helpful if there will be a pharmacy that will be established in the said subdivision.

The proposed study seeks to decide the feasibility of establishing a pharmacy in Sunrise Subdivision Brgy. Inosluban, Lipa City

Industry Profile

The pharmaceutical market is considered a fast-growing business with its current value at Php176 billion according to IQVIA. Data shows that this market is expanding faster with an average growth rate of 8.3 percent per year. Among the retailers in the Philippines, Mercury Drugstore continues to dominate with its 1,100 branches nationwide. The chain drug stores such as The Generics Pharmacy (TGP), Watsons, South Star Drug, Generika, and even MedExpress is making waves in the market that can be a gamechanger. Currently, TGP is the biggest chain drugstore with 2,000 branches nationwide. According to the 2012 Census of Philippine Business and Industry (CPBI), 6,068 retailers are operating and 954 are wholesalers (Reyes and Tabuga, 2020).

In the Philippines, the demand for affordable but still effective medicine is growing due to the country's big population and continuous economic growth. This creates interest in other pharmaceutical markets in the ASEAN region to invest in pharmaceuticals in the Philippines. A big contribution to this growth is the efforts of the government to aid the industry in providing quality healthcare to all Filipinos (R.G. Manabat & Co., 2019).

Among the ASEAN countries, the Philippines is also considered to have a high cost of medicine, and this causes the consumers to purchase generic medicines over branded ones. By the year 2025, it is expected that generic medicine retail will reach 64% (Ken Research, 2021). In 2020, due to the high cost of medicine the country's health spending or Current Health Expenditure (CHE) reached Php895.88 billion. This is 12.6 percent higher compared to 2019 data of Php795.64 billion. Most of the expenditures of the household were spent on hospitals (43.8%), followed by pharmacies (28.2%), and providers of preventive care (9.0%). While the per capita basis of the health spending of Filipinos was Php8,216.42 in 2020, higher by 10.7 percent compared with Php7,422.69 in 2019 (Philippine Statistics Authority,2021)

Overall, the pharmaceutical industry is contributing a lot to the Philippines economy most importantly in the much-needed employment. The mix of big establishments and small producers/traders allows the industry to be diverse (Reyes, Lavado, & et. Al, 2011)

Methodology

This section presents the residents' response to the study of establishing a pharmacy at Sunrise Subdivision, Brgy. Inosluban, Lipa City. The sources of data, the appropriate research design chosen for the study, population and sampling techniques, data gathering procedures, ethical considerations, and analysis of data were also presented.

Sources of Data

Primary Data. Data used for the study were the constructed and unconstructed questionnaires that were distributed in Sunrise Subdivision, Brgy. Inosluban, Lipa City. The survey questionnaire was prepared in google forms and distributed through a Facebook group of the residents, personal messenger, and face-to-face interviews. While the unstructured questionnaire was distributed to the owners of the pharmacy through face-to-face interviews. The questionnaires were validated by five (5) experts who are Professors, Certified Public Accountants (CPAs), and Statistical Analyst with MBAs. Five (5) laymen also validated the same questionnaire which is a combination of residents of the subdivision and owners of the pharmacy. Their comments and suggestions on the questionnaires are considered for revision.

Secondary Data. Data used are derived from magazines, articles, websites, and other related studies that are helpful for the study. The population for the study is gathered through the help of the barangay health worker.

Research Design

The researcher chose to follow qualitative and quantitative methods for the research to analyze and understand the process of establishing a pharmacy at Sunrise Subdivision, Brgy. Inosluban, Lipa City. The qualitative method was used to assess the results of the questionnaire that was distributed randomly to the identified respondents. This helped the study in understanding the resident's schemes for buying their medicines and to understand the owner's experience in establishing a pharmacy. While the quantitative method was to have a better perspective in establishing the pharmacy. The insights are drawn from the numerical data and analysis to make better decisions that are helpful for the study and the future.

Population and Sampling Technique

In the study, the residents of Sunrise Subdivision, Brgy. Inosluban, Lipa City were selected as target participants in the study. According to the Barangay Health Worker, as of July 2021, there is about 1,058 population living in the subdivision comprising 550 households.

Instrumentation

A self-constructed survey questionnaire and unconstructed interview were used by the researcher for the study that was based on the related literature and studies.

Data Gathering Procedures

The researcher conducts the study through questionnaires in google forms as the major instrument in gathering relevant and useful information for the study. With their approval, the approved survey questionnaire prepared in google forms were distributed through the link shared to household members through Facebook messenger, the resident's Facebook group, and a face-to-face interview.

The researcher also consulted with other pharmacy owners through Unstructured Interview Questions to better assess what is needed in establishing the pharmacy. The consultation and interview with the owners were done through face-to-face interviews.

Ethical Consideration

The researcher assured the respondents of the right to confidentiality and that access to data is only made available to the researcher. All the personal information will remain private, and the researcher will avoid discrimination against respondents that are not related to the study.

Result and Discussion

For a detailed presentation and discussion of data analysis and the result of the study, findings in the study were presented according to the following areas: Marketing Study, Operations/Production Study, Organization and Human Resource Study, Strategic Management, Financial Study, and Socio-Economic Responsibilities.

Marketing Study

The marketing study covered the following: Service Description, Demand and Supply Analysis, Market Share, and various Marketing Plans and Strategies.

Service Description

The pharmacy that is proposed in the study will be named Three F's Pharmacy and will be established inside Sunrise Subdivision, Brgy. Inosluban, Lipa City. Medicines that were proposed to be sold in the pharmacy are the common medicines bought by Filipinos for their household and the common illness here in the Philippines e.g., Analgesics, Cardiovascular Drugs, and others. The pharmacy will offer branded and generic medicines and will apply reasonable prices that will allow target consumers to pay.

Demand

Ensuring the demand of a business will greatly influence the decision-making to make the business sustainable in the long run. With the proposed location of the pharmacy at Sunrise Subdivision Brgy. Inosluban, Lipa City, and the main target market are the residents of the subdivision, the researcher gathered the historical population. It showed an inconsistent increase for the past years. For the year 2018, it showed an increase of 87.50%, 2019 increased by 77.14%, 2020 increased by 42.03%, and 2021 by 12.18% tallying an average of 37.41% of growth rate. This led to a projection of population for 2022 to 2026 of an average gradual increase in residents' population of 150 or 16% every year based on the historical population.

Using the data from the projection of the population, the researcher determined the future demand of the pharmacy. The annual demand that is expected for the next five years has an average of 30,227.69 and a growth rate of 16.05%. While the projected demand for pharmacies in peso amount increased with an average growth rate of 16.05% amounting to an average increase of 33,038,235.73 per year.

Supply Analysis

Pharmacy has been one of the go-to places since the start of the pandemic which led to an increase in retail pharmacies in the country. Major competitors of the proposed business are big pharmacies such as Watson and Mercury which are 5km and 10km respectively. The closest pharmacy located in the same barangay is a Generic pharmacy that is 3km away along the highway. Another competitor in the next barangay is Daddy Jigs which is near a hospital.

The researcher also got the chance to interview owners of start-up pharmacies such as St. Jude Pharmacy and Billy's Pharmacy. The managers shared that there is no season of low sales for pharmacies, just gain enough knowledge about the business because customers usually look at a pharmacy like a hospital.

The projected supply of pharmacies in quantity for the next five years will have an average growth rate of 16.05% and an increase of 14,436.21. From the projected supply in quantity, it will be multiplied by the average amount of medicine. To show the projected supply of pharmacies in Peso for the 5 consecutive years, the supply in peso was raised by an average of 4,596,619.54 and a growth rate of 18.58.

Table 1
Projected Demand and Supply Analysis of Pharmacy in Quantity, 2022 to 2026

Year	Demand in Quantity	Demand in Supply	% of Satisfied Demand	Unmet Demand	% of Unmet Demand	Business Capacity	Market Share
2021	106,695.10	50,955.68	48%	55,739.43	52%	11,520.00	21%
2022	141,206.12	67,437.52	48%	73,768.60	52%	12,672.00	17%
2023	170,362.98	80,545.00	47%	89,817.98	53%	13,939.20	16%
2024	199,519.84	95,287.11	48%	104,232.73	52%	15,333.12	15%
2025	228,676.71	109,211.91	48%	119,464.80	52%	16,866.43	14%
2026	257,833.57	123,136.71	48%	134,696.86	52%	18,553.08	14%
Average	184,049.05	87,762.32	48%	96,286.73	52%	14,813.97	16%

While the projected demand for pharmacies in peso amount has an average of P33,038,235.73 and the supply is P26,038,224.38 for the year 2022-2026. This resulted in an unmet demand of 22% and 32% market share as shown in Table 2.

Table 2
Analysis of Demand and Supply in Peso 2022-2026

Year	Demand in Quantity	Demand in Supply	% of Satisfied Demand	Unmet Demand	% of Unmet Demand	Business Capacity	Market Share
2022	23,382,140.78	17,253,136.63	74%	5,025,700.12	26%	2,023,356.08	34.04%
2023	8,210,188.25	20,749,350.97	74%	6,129,004.14	26%	2,086,518.51	28.84%
2024	3,038,235.73	25,923,908.82	78%	7,460,837.28	22%	2,151,652.67	31.19%
2025	37,866,283.21	30,639,822.14	81%	7,114,326.91	19%	2,218,820.09	31.66%
2026	42,694,330.68	35,624,903.32	83%	7,226,461.06	17%	2,288,084.26	33.38%
Total	165,191,178.65	130,191,121.88		35,000,056.76		11,104,586.15	
Average	33,038,235.73	26,038,224.38	78%	70,000,011.35	22%	2,220,917.23	32%

Market Share. With the results of the demand and supplies analysis, there is an insufficient supply in the target market, but the demand is high. This is an attestation that the pharmacy can be sustainable in the long run.

Marketing Plans and Strategies

To meet the demand and supply for the proposed business, the researcher put up marketing plans and strategies. These are based on the 5Ps marketing mix such as Product/Service, People, Price, Place, and Promotion.

Product/Service. The pharmacy will provide a good quality of both branded and generic medicines for the customers to ensure that they will have a wide variety of choices depending on their budget.

People. Hired staff for the pharmacy are knowledgeable regarding dispensing of medicine.

Price. Medicine in the Philippines is high and variable, but the government has a regulation on pricing the medicines. Drug uniqueness, competitors, and cost of drug production will be considered in pricing the medicines

Place. The location of the proposed establishment will be on a corner lot and near a sari-sari store that is likely visited by the residents.

Promotion. Social Media platforms will be used to promote the pharmacy in the Subdivision. Signages will also be placed at the entrance of the subdivision for the residents to be aware of the pharmacy.

Technical/Operations Study

In this section, the operation process and flow chart of the pharmacy will be explained. This includes the necessary equipment, machinery, furniture, and fixtures needed for the operation, building, and land, the prospect location, layout, floor plan, capacity and scheduling, water disposal, utilities, other costs, and quality control.

Operation Process and Flow Process

Proper dispensing of medication is the last line of defense for patients who are sick. To ensure proper dispensing, and reduce mistake and risk errors, Figure 1 shows the process for pharmacy operation:

The operation process timing illustrated in the figure below depends on the number of customers during the transaction.

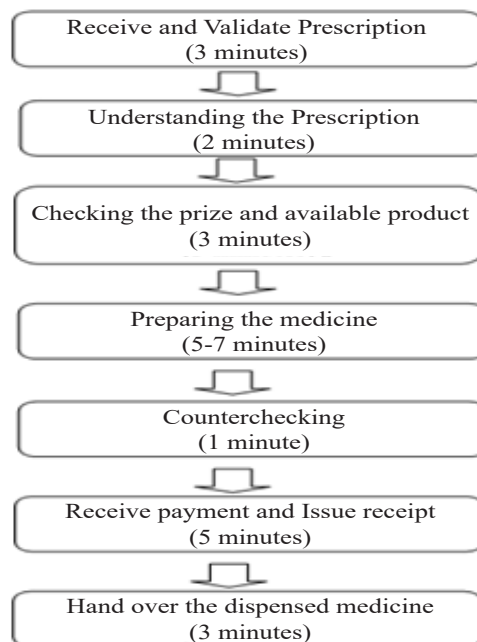


Figure 1. *Process Flow Chart*

Equipment, Machinery, Furniture, and Fixtures.

The pharmacy will need the necessary equipment and machinery such as a bio ref, computer set, cash register, prescription cabinets, customized shop window, and others, for the operation of the pharmacy. Complete fixed assets are estimated to have a total cost of 143,763.00. The researcher determined the useful life of 5 years for the fixed assets to compute the depreciation and the straight-Line Method is used. Aside from the fixed assets, the researcher also considered the furniture and fixtures below Php5,000.00 as an expense and has a total cost of 18,382.00.

Building

For the building structure, a permanent building will be constructed with an area of 15 square meters, which is the required minimum legal requirement for a pharmacy. Land in the area roughly costs 15,816 per sqm having a total cost of Php379,650.00.

The building design of the pharmacy will follow the FDA approval and proper ventilation will be ensured upon the construction to avoid the loss of efficiency and potency of the medicines. The estimated total cost of the building is estimated to be Php300,000 with an expected useful life of 25 years. This will be amortized using the straight-line method of depreciation which will result in an annual depreciation expense of Php12,000.00.

Location

The proposed location of the business is located at Block 10, Corner Lot, Sunrise Subdivision, Brgy. Inosluban Lipa City. This is an ideal location for the business since residents usually pass by and there is no pharmacy within the area. It will be easier for the residents to visit a pharmacy since it is within walking distance.

Layout and Floor Plan.

The proposed business takes into consideration the required square per meter of FDA which is 15 square meters and can accommodate the equipment, furniture, and fixture for the convenience of the staff and possible customers.

Capacity and Scheduling

The pharmacy will be open from Sundays to Fridays. For Sunday, Monday, Tuesday, and Thursday the store hours will be 8 am to 8 pm, while for Wednesday and Friday store hours will be 8 am to 3 pm only. The pharmacy will be closed every Saturday. One hour is allotted for lunch and dinner breaks. An average capacity of 51.44 prescriptions for the years 2021-2026. The maximum annual capacity of pharmacy in quantity and peso has an average of 14,813.97 and 2,187,990.37, respectively. An average inflation rate of 3.12% is considered for the increase in medicine prices per year.

Waste Disposal

Environmental damage can be avoided by properly disposing of both hazardous and non-hazardous medicines. With proper waste disposal, it will be easier to determine when medicine will expire and when it should be disposed of with proper sorting and monitoring. This will keep its potency and usefulness intact.

Cerezo (2019) explains that flushing is a popular method of disposal but not all types of medicines can be filtered with water. According to FDA (Cerezo, 2019), medicine take-back programs are the safest way to dispose of expired, unwanted, or unused medications. This program will identify the medication and assign it to qualified handlers.

Non-hazardous waste will be collected weekly by the garbage collector and handled by municipal waste management services. If the pharmacy will not be segregated properly, fines and penalties may be imposed on the pharmacy.

Utilities and Other Costs

Utilities, such as electricity, water, and internet, as well as other running expenses, may be incurred by the proposed firm during its operation. The projected utility expense has a total amount of P47,400.00.

Aside from the utility expense, operating expenses will also be incurred. These are the office supplies, salaries, training and benefits of staff, advertising and promotion, professional fee of the pharmacist, depreciation, insurance, taxes, licenses, and miscellaneous expense. The projected operating expense has a total amount of P1,438,497.94.

Quality Control

Staff and pharmacists must frequently check medicine supplies and verify that no expired medicine is administered in the pharmacy to ensure the quality of the medicine. This will also keep drugs from running out of stock. The temperature of the pharmacy should also be regulated to prevent pharmaceutical potency from being reduced, resulting in ineffective medicine. The optimal temperature for most drugs in a well-ventilated pharmacy is between 68- and 77-degrees Fahrenheit.

Employees should be well trained in the type of medicine needed and requested by customers. There are customers that will go to a pharmacy with no prescription, thus pharmacists should prescribe medication that is appropriate for their needs. If staff is unsure, they should ask for the assistance of the pharmacist.

Organization and Human Resource Study

This section will focus on the factors that will help the success of the proposed business. The following will be discussed: a form of ownership for the proposed business, requirements, and government compliances to establish a pharmacy, organizational structure, and the staff that will be hired, including the personnel requirements, salary, and benefits.

Form of Ownership

For the pharmacy to be formed, the researcher picks Sole Proprietorship as the form of ownership. This type of ownership is advantageous for a pharmacist who wishes to easily start their own business and maintain complete control. Although a partnership or corporation is better for a pharmacy, a sole proprietorship is suitable for small enterprises or start-up businesses.

Organizational Requirements

According to the Food and Drugs Administration (FDA) (FDA, 2014), there are prescribed requirements for the application for the licensing for establishing a pharmacy. The first requirement is to accomplish the documentary requirements for the issuance of a License to Operate (LTO). Documentary requirements are the application form from FDA, filled out completely, signed by the pharmacist/owner or authorized representative, and notarized. Second is the proof of business name registration, for a single proprietorship, it's the Certificate of Business Registration issued by the Department of Trade and Industry (DTI). The owner should visit the DTI provincial office where the business is going to be established or log on to www.bnrs.dti.gov.ph. Requirements to DTI for a sole proprietorship are the accomplished Business Name Registration Form, Tax Identification Number, list of five business names preferred, and Php250.00 registration fee. The validity of business registration is 5 years. Third, are the credentials of the pharmacist and the pharmacy assistant. For the pharmacist, valid PRC ID, Certificate of Attendance to appropriate FDA Licensing Seminar, and resignation letter of the pharmacist from the previous employer (if previously employed). While for the pharmacy assistant, Certificate of Training for Pharmacy Assistant or NCIII. Fourth is the Risk Management Plan (RMP) of the establishment. Details on RMP show how to identify, characterize, prevent, or minimize risk. Fifth is the location plan, this shall be used for inspection purposes. The sketch must indicate the location and identified landmarks to easily locate the establishment. Sixth is the picture of the drugstore with signage showing the name of the establishment that is registered. Last is the proof of payment for the process and self-assessment toolkit (SATK) that is going to serve as the worksheet for FDA evaluation.

Aside from the requirements stated above by FDA, the owner should also process its Mayor's permit to its local municipality, which in this case is in Lipa City. This is valid for 1 year. Requirements for Mayor's permit here in Lipa City are, the business permit application form, occupational permit, sanitary permit, sanitary ID for the staff, Fire Safety and Inspection permit and registration, and other fees depending on the computation/assessment. If the owner is not yet registered by the Bureau of Internal Revenue (BIR), the owner should visit the Regional District Office and complete BIR

Form 1901. BIR requirements include DTI Certificate, Mayor's Permit, valid Id, and pay Php500.00 for registration for BIR Form 0605. Register the books of accounts, process authority to print (ATP) for the printing of receipts, and claim Certificate of Registration (COR, BIR Form 2303).

Organizational Structure

Since the business is just starting and will be established in a resident's area and has a small capital, there will only have one licensed pharmacist, an assistant pharmacist, and a third-party bookkeeper. When the business grows and staff will be overwhelmed by work, there would be a need for more employees.

Personnel Requirement.

Hiring the most qualified and competent personnel for the business is the primary goal of the owner/pharmacist. All employees will work for only 8 hours a day according to the labor code of the Philippines including the 1-hour lunch break. Since the pharmacy will be operating for 10 hours, only one staff member will be reporting from 8-9 am and 2-3/7-8 pm. If needed, staff will render overtime with pay.

Qualification Standard

The owner shall ensure that the qualifications of the employees will be met according to the guidelines of the FDA.

Compensation Package.

For employees to be motivated and deliver their best abilities to their work, they are given allowances and benefits in addition to their salary and wages. In an interview with the owners of the pharmacy, the researcher discovers that the pharmacy assistant is paid at a minimum wage rate of Php373.00 per day while the pharmacist is at a competitive rate in the province of Php1,153.85 per day. They are also provided with employee benefits such as SSS, Philhealth, Pag-IBIG, and Rice allowances. The employees shall have a Saturday break and are entitled to ten (10) leave credits. Since there are only two staff members working in the pharmacy, the employees are also entitled to OT pay. The external accountant/bookkeeper will be paid monthly. Salaries and wages of owner/pharmacist and pharmacy assistant will be received on the 15th and 30th day of the month.

The organization chart will be revisited and changed if necessary.

Table 3

Annual Salaries and Wages Expenses 2022

Job Title	Basic Pay	SSS	PHIC	HMDF	W/ Tax	OT Pay	Rice Allowance	Net Pay
Owner	360,000.00	9,600.00	7,200.00	7,200.00	16,500.00		8,000.00	418,500.00
Pharmacist	360,000.00	9,600.00	7,200.00	7,200.00	16,500.00	2,163.46	8,000.00	420,663.46
Accountant/ Bookkeeper	120,000.00							120,000.00
Pharmacy Assistant	116,376.00	4,560.00	2,036.58	2,327.52		699.38	18,000.00	143,999.48
Total	956,376.00	23,760.00	16,436.58	16,727.52	33,000.00	2,862.84	54,000.00	1,103,162.94

Due to Republic Act 10963 which is known as TRAIN Law, the personal income tax threshold for individuals is increased to Php250,000 income per year. The salary of the owner/pharmacist will exceed the threshold and will be taxed by 15%. Annual Salaries and Wages expenses for the year 2022 are presented in Table 3. In the table, we can see that there is an increase of 3% in salary

every two years to avoid job switching.

For the employee's benefits, it includes the employer's government-mandated benefits shares such as SSS, PHIC, and HDMF. Also, it includes the 13th-month pay and allowances as shown in Table 4. The accountant/bookkeeper is not entitled to the government mandatories but will be entitled to a bonus of Php5,000.00.

Table 4
Annual Employee Benefits for the year 2022

Job Title	Employer's Share			Allowances	13th Month Pay	Bonus	Net Pay
	SSS	PHIC	HDMF				
Owner	19,560.00	7,200.00	7,200.00	18,000.00	30,000.00		81,960.00
Pharmacist	19,560.00	7,200.00	7,200.00	18,000.00	30,000.00		81,960.00
Accountant/ Bookkeeper						5,000.00	5,000.00
Pharmacy Assistant	8,760.00	2,036.58	2,327.52	18,000.00	9,698.00		40,822.10
Total	47,880.00	16,436.58	16,727.52	54,000.00	69,698.00	5,000.00	209,742.10

Strategic Management Study

To achieve its goals and objectives, management uses strategic management study as a tool. This involves analyzing the competitive environment and internal organization, evaluating strategies, and ensuring that the strategies being implemented in the organization lead to improvement and success.

Strategic Framework

Mission. To provide safe, high-quality, and affordable medicines and other products to the residents of Sunrise Subdivision and the community of Brgy. Inosluban, Lipa City.

Vision. We aim to serve the residents of Sunrise Subdivision and the nearby community of Brgy. Inosluban, Lipa City with patient care and accessible healthcare products within their reach.

Objectives

For the pharmacy to be successful, objectives, key result areas, and performance indicators are prepared by the researcher for its operation. For marketing, the objective is to promote the pharmacy on different platforms for customer awareness. For operations, its objective is to ensure the supplies of medicines are accounted for to generate a timeline for delivery. The objective of human resources is to maintain skillful employees. Lastly, for financials, the objective is to increase profit on operation. Performance indicators depend on what is mandated by law, or from the business owners of pharmacies that the researcher interviewed.

Strategic Evaluation

It is critical to establish whether the proposed tactics will have an impact on the pharmacy's target to meet its goals and objectives. If not, essential adjustments and updates should be made to ensure that the pharmacy's performance is improved. The researcher recommends a quarterly assessment, which can be done both internally and externally.

Internal pharmacy assessment entails assessing product inventories, pharmacy competence, and employee performance. Improved inventory management could help to limit the misuse of pharmaceuticals and prevent medical spoilage. Assessing employee performance based on improvements and comments from customers or peers. When it comes to pharmacy performance, financial data can be used to determine whether the business is profitable, or Key

Performance Indicators can be used to determine how well the pharmacy is performing (KPI).

Customer satisfaction, suppliers, rivals, and government agencies are all included in the external evaluation. Survey questionnaires and transaction frequency can be used to evaluate customers and competition. Suppliers, on the other hand, must ensure that their items are delivered on time.

Other Strategies and Plan

Risk Management Plan. This type of industry needs to identify the potential risk to the safety, efficacy, and quality of products. The proposed business should ensure the protection of the patient, pharmacists, and staff.

Pandemic. Because of COVID-19, every proposed business must adhere to health regulations. Face masks should be always worn, and supplies should be disinfected on a regular basis. Customers' safety should also be ensured by offering alcohol or sanitizers, as well as trays for payment and medicine dispensing for a contactless transaction.

Absent of employees. Working in a pharmacy can be demanding and with only a few employees, everyone should be flexible once one employee is absent. Proper workload distribution should be done fairly to all workers by the owner.

Power Interruptions. Medicines should be stored at the right temperature. It is important to have a generator on standby, in case of power interruption.

Financial Loss. Even with thorough preparation and business security, financial loss may occur in the long run. Before a financial loss affects the firm, the owner should be aware of the indicators, and it is necessary for management to discuss the situation with all personnel. With businesses closing due to the pandemic, owners should evaluate their financial statements.

Alternative Plans. If the pharmacy will not be patronized by the residents of Sunrise Subdivision, the owner should decide to sell other products such as diapers and beauty products. They can also analyze if they should move their location, adjust the pricing of the medicine, or do promotions again.

Exit Strategy. If the proposed business will experience loss, they can either sell the business to other investors or the same industry. Management will ensure that all legal papers are settled upon selling the pharmacy.

Financial Study

Understanding and assessing how much cash is needed in the projected business through financial aspects will allow us to gauge the risk and return. This can be followed by strategizing and planning the critical stages to analyze the probable profit and loss of the business. In this section, the major assumptions, capital investments, source of funds, financial statements, and financial analysis will be presented.

Major Assumptions

To serve as an estimate for future expenditures, and revenues there are several major assumptions that are needed to be considered for the five-year projection of the pharmacy. The data used for assumption can also be found in the previous chapters and interviews from the unstructured questionnaire.

Sales Revenue. Sales revenue is computed based on the business capacity of 40 prescriptions per day multiplied by the average amount of medicine used in this study. The researcher also assumed an increase of 10% in sales revenue yearly.

Cost of Goods Sold. Inventory and purchases are the compositions to compute the cost of goods sold. The researcher assumed a 5% increase in medicine purchases every year and an ending inventory of 45% every year.

Office Supplies. Expenses for office supplies are assumed to increase by 1% every year due to

inflation that can affect the prices of supplies.

Salaries, Allowances, and Benefits of Staff. For staff salaries, every 2 years there is an increase of 3% on their basic salary. The share related to SSS, Philhealth, and PAG-IBIG is also increasing every year depending on the law mandate. Rice allowance will be the same in this 5-year projection. Advertising and Promotion. As part of attracting customers to increase sales, advertising and promotion will be a big help. The researcher assumed a budget of Php3,000.00 per year.

Utility Expense. In the previous chapter, the researcher assumed an electric expense of Php3,200, a water expense of Php75 an internet expense of Php1,200, and waste disposal of Php800 every month. Due to inflation, it is also assumed that there will be an increase in utility expenses of 1% every year.

Depreciation. As seen in the previous chapter, depreciation expense will be computed using the straight-line method. The useful life of the assets business is expected to be 5 years.

Permits and Licenses. It is assumed by the researcher that there will be a 2% increase in taxes and licenses every year for the pharmacy. This includes the licensing fees of the local government units that are based on the revenue of the business.

Miscellaneous. With unexpected expenses that may occur every year, the researcher assumed a 1% increase in miscellaneous expenses.

Capital Investment

Pre-operating Expenses. In starting a business, the researcher expected expenses from the filing of permits and licenses, feasibility study costs, and advertising and promotion. The researcher assumes the pre-operating expenses will be spent in 2021 with a total of Php61,500.00.

Working Capital. The operation cost is needed for the business to keep on moving. The researcher assumed an operating expense for the first year of operation having total working capital of Php791,735.00.

Capital Expenditure. For the proposed business, the researcher estimated a total of capital expenditures of Php492,045.00 including the building, equipment, furniture, and fixtures.

Source of Funds

In year 0s, funding a business is difficult, and it will take a long time for an individual to save a big amount of capital to cover the cost of purchasing equipment, supplies, and other costs needed in establishing the building for the business. According to an article by PayMaya Enterprise (2020), the digital economy has made starting a business much easier and less expensive. Anyone who wants to start a business can do so by determining where and how to obtain finances.

For the initial funds needed for the proposed business, the owner will use their personal investments, meaning their own cash, and avail of business loans in the bank. With the approval of the loan, the owner can suffice the amount needed during the construction of the pharmacy establishment. The owner may also avail of government grants and subsidies in the event of insufficient funds.

Financial Statement

To keep track of the business records and stability, a financial statement shows the financial health of the business, and this can help in the decision-making of the owners. A graphical presentation showing the financial status of the business is shown in Figure 2-4.

Projected Statement of Comprehensive Income. Seeing the future profits or losses can help the business determine if they can exist in the long run.

Figure 2, shows the projection of operation for its first five years of operation. As illustrated, a loss will incur on it Year 0 with an amount of Php826,150.00. However, in the next 5 consecutive years, the business starts to be profitable.

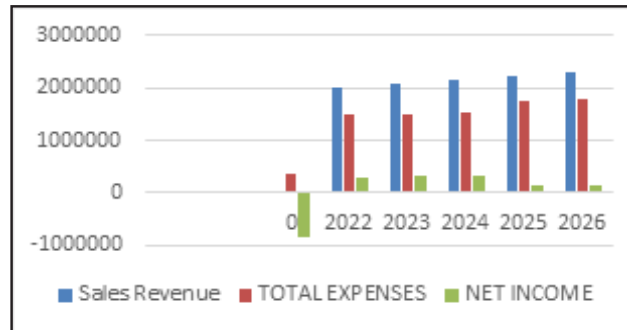


Figure 2. Sales Revenue, Total Expenses, and Net Income

Projected Cash Flow Statement. This financial statement shows a list of the expected cash inflow and outflow for the coming years of the pharmacy. Figure 3 illustrated the flow of activities in operating, investing, and financing respectively. The data shows the five-year projection of cash flows from 2022-2026.

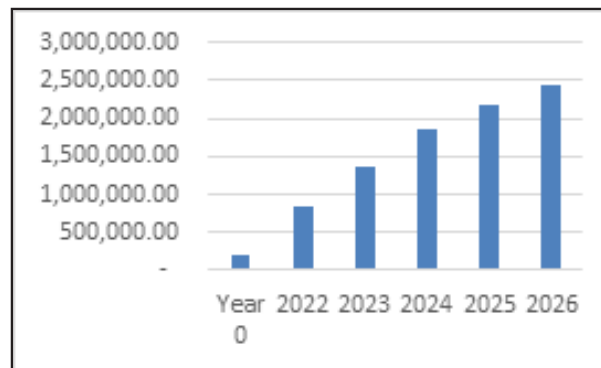


Figure 3. Projected Cash Flow Statement Year 0, 2022-2026

Just like the previous figure it shows that the pre-operating period had a negative cash flow on the operation and investing activities however the financing activity had an initial investment of 1,344,930 resulting in a positive cash flow at the end of the year.

Projected Balance Sheet. To evaluate the financial health of the business during the operation, data in the statement of financial position or balance sheet is needed. This statement is composed of the assets, liabilities, and owners' equity. The projected balance sheet can help the proposed business to estimate the impact of the statement and its expectation for the future. In table 28, year 0 and the projected five-year financial position of the pharmacy are illustrated



Figure 4. Projected Cash Flow Statement Year 0, 2022-2026

Figure 4 shows that the proposed business assets exceed liabilities and the business relies more on capital rather than debts to run the business.

Financial Analysis

Capital Budgeting helps to understand the risk and return on investment in a business to analyze and have a better decision on whether to pursue the business. The researcher used the Net Present Value, Internal Rate of Return, and Possibility Index. A positive NPV, a greater IRR, and PI mean the proposed business will be accepted otherwise reject.

Upon computation, it shows a good outcome in terms of capital budgeting techniques. The amount of 1,241,575.16 NPV shows the profitability of the project, while IRR with 31% proves to be greater than the desired rate of 5% and a PI resulting in an inratio of more than 1. This means the projected business is profitable.

The **profitability ratio** is an analysis technique that focuses on the ability of the business to generate income in five years of its operation. For *Return on Sales*, an efficient return on sales should be above 0% otherwise, a negative percentage means financial trouble for the company. For *Return on Investment*, it measures the profitability from the investment a higher ratio means the business is profitable otherwise not. According to Birken and Curry (2021), a good ROI is 7% or greater annually to cover inflation. While for *Gross Profit Margin*, the higher the percentage, the more efficient the business is in generating profit over the cost. A healthy gross profit margin ratio is 50 to 70%. As computed, ROS is above 0% in turning a profit, ROI shows a high rate and gross profit margin is above 70% ratio, which means that the proposed business will be generating revenue for the first five years of operation.

The Liquidity Ratio is used to determine if a company will be able to pay its debts. This is necessary to ensure that the company's assets can be liquidated. A high current ratio, for example, indicates that the company can pay its debt. For the proposed business, it can liquidate cash to cover its current debts.

The Test of Return on Capital Investment is a tool that can assist a company in analyzing the return on investment while considering the time value of money. Metrics that can be used is the *average rate of return* which determines the annual cash flow that will be generated over the initial cost. Another metric is the *payback period* where the amount of time taken for the cost of investment will be recovered. The result of the computation shows a percentage of 17% ARR and the payback period of the investment will be in 1.63 years for the proposed business.

Socio-Economic Responsibility Study

Acting for the benefit of society can improve the business's impact and reputation. It is now recommended that a new business take on the obligation of actively including the community in its planning.

Customer. Customers are very important to every business to exist and gain revenue. That is why it is important to attract customers and deliver excellent customer service. Three F's Pharmacy staff will extend its help with free medical advice and provide understandable information about the usage of drugs regarding its benefits and risks.

Employees. With a small number of staff for the proposed business, they will receive regular salaries, benefits, and allowances. As discussed in the Organization and Human resource study, employees will receive benefits that are mandated by law.

Suppliers. With the high demand for medicine in the target location where the business will be established, the pharmacy owner will regularly order from the supplier with high-quality medicine.

Owner. The owner of the business is entitled to receive the net income that will be generated.

Community and Society. The proposed contribution for the community would be (a) free blood sugar and bp monitoring in the subdivision and (b) free consultation of medicine.

Church. The employees of the pharmacy will give 10% of their offering as tithes and any amount for the offering. Furthermore, since there is a Lipa Adventist Medical Practitioner in the city of the pharmacy, the owner will coordinate with the team for a medical mission and provide free medicine on their medical mission.

Government. As mandated by the law, there are corresponding licenses and taxes that are obligations that are needed to be paid by every business that is being established. Every year, there is a renewal of permits and licenses that is processed in the Local Government Unit. While for tax due, it can be paid monthly, quarterly, or annually, depending on registration.

Conclusion and Recommendation

In conclusion, the result of the study conducted, based on the projected financial statement for five years and the high demand of customers willing to patronize the pharmacy shows that it is feasible and viable. This is based on the result of financial analysis of positive NPV, 1.63 years payback period and 1.69 profitability index, and other metrics used for the study.

The researcher would recommend some activities for the operation of the pharmacy. First is that the proposed business will start operation in the year 2022. Second, promotion is highly needed for the first year of operation to attract customers. Third, further studies can be done by future researchers with the same business model but in different location

References

- Birken, E.G. & Curry, B. (n/a). *Understanding return on investment (ROI)*. <https://www.forbes.com/advisor/investing/roi-return-on-investment/>
- Cerezo, A.G. (2019). *On world pharmacists day, public urged to properly dispose expired drugs*. <https://news.abs-cbn.com/life/09/25/19/on-world-pharmacists-day-public-urged-to-properly-dispose-expired-drugs>
- FDA (2014). *Guidelines on the implementation of new rules and regulations on the licensing of drugstore/pharmacy/botica and similar outlets following administrative order no. 2014-0034*, dated 13 October 2014. <https://www.fda.gov/ph/wp-content/uploads/2021/03/FDA-Circular-No.-2014-025.pdf>
- Goode, J.V., Owen, J., Page, A., & Gatewood, S. (2019). *Community-based pharmacy practice innovation and the role of the community-based pharmacist practitioner in the United States*. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6789634/>
- Ken Research (2021). *Philippines pharmacy retail industry outlook to 2025 - Philippines pharmacy retail market is expected to grow at a CAGR of 3.0% basis Revenue during 2019-2025: Ken Research*. <https://www.prnewswire.com/news-releases/philippines-pharmacy-retail-industry-outlook-to-2025---philippines-pharmacy-retail-market-is-expected-to-grow-at-a-cagr-of-3-0-basis-revenue-during-2019-2025-ken-research-301367176.html>
- PayMaya Enterprise (2020). *10 ways to fund your startup in the Philippines*. <https://enterprise.paymaya.com/stories/10-ways-to-fund-startup-philippines>
- Reyes, C.M., Lavado, R.F., Tabuga, A.D., Asis, R.D. & Datu, M.B.G. (2011). *A profile of the Philippine pharmaceutical sector*. <https://issuu.com/ryacat/docs/pidsdps1111>

- Reyes, C.M. & Tabuga, A.D. (2020). *A profile of the Philippine pharmaceutical industry*. <http://www.phcc.gov.ph/wp-content/uploads/2020/06/PCC-Issues-Paper-2020-02-A-Profile-of-the-Philippine-Pharmaceutical-Industry.pdf>
- R.G. Manabat & Co (2019). *Philippines pharma: All set for continuous growth*. <https://home.kpmg/ph/en/home/insights/2019/02/philippines-pharma-all-set-for-continuous-growth.html>
- Philippine Statistics Authority (2021). *Health spending registered 12.6 percent growth, share of health to economy went up to 5.6 percent in 2020*. <https://psa.gov.ph/national-health-accounts-press-releases>
- World Health Organization (2020). *Coronavirus disease (COVID-19)*. <https://www.who.int/westernpacific/health-topics/detail/coronavirus>

A Feasibility Study of Establishing a Convenience Store in Caloocan Matnog Sorsogon

Aileenmae G. Silverio

Adventist University of the Philippines

Abstract

The Municipality of Matnog is a third-class municipality consisting of forty barangays in the province of Sorsogon, Philippines. Matnog is at the tip of Luzon and its port hosts millions of people crossing the San Bernardino Strait to Northern Samar annually. It's attractive tourist destinations and road accessibility to different towns and cities make it one of the busiest in the region, however, the municipality has seen very few mini groceries or convenient stores within the town that would cater to the needs of the residents, tourists and travelers. As the convenience store is one of the better opportunities that is available today, the proponent explored the viability of establishing one near the seaport entrance of Matnog which is also located in the central business section of the town. A total of 339 respondents that represented the population were determined through the stratified sampling technique. The households in Matnog Sorsogon are the target market of the study and the researcher used the descriptive research method, which involves surveys, interviews, and observation. Online research, case studies and published related academic articles and studies served as secondary sources of information. The market study only covered the six nearest barangays in the proposed location as representative of the population which revealed that from the unmet demand, a market share of 1.40% for the proposed business proved feasible. The total cost of the investment is PHP 4.17 million and the NPV, IRR, and BCR are acceptable with an average annual net earnings after tax of PHP1.46 million. Payback period is 3 years and 5 months.

Keywords: *Convenience store, mini grocery, seaport*

In a study, NACS (2021a,b,c) revealed that retailers have processed about 165 million transactions per day, which means that half of the U.S. population on average buys something at a convenience store every day. The customers patronize and frequent their favorite convenience store to refresh and refuel with an, “easy to get on the go snacks”. And now, convenience means “essential” for most people especially during this current Covid-19 pandemic. With local businesses temporarily closed or completely overwhelmed and the customers are on edge due to the quarantine restrictions, the role of the convenience stores in the community has changed (Ready Training, 2021). According to Nielsen, in the Philippines, a small convenience store format increased continuously and posted a growth of 20 percent in 2017, a rate higher than the 15 percent growth posted in 2016 (Ordinario, 2018). Many convenience stores performed well prior to the pandemic owing to the consumers’ busier lifestyles, as well as to the smaller households and older populations. The Philippine convenience store has the highest growth in sales at 8% in the grocery market despite that it is the smallest segment in the industry. It has a promising further growth due to the increasing consumption and urbanization, spurred by a vibrant BPO industry and young population, hence, C-stores are sprouting very fast (BizNews, 2018).

In the Philippines, among the primary reasons for Filipino consumers to visit a convenience store is to satisfy food cravings or hunger (Lucas, 2019).

Due to a wide portion of the population looking for everything from a simple beverage to an easy, “go to” meal, convenience stores seem to be the perfect place to go. It better serves the community as it offers existing food retail space that could be utilized. The present modern life with its fast-paced lifestyle makes the convenience stores exceptionally well positioned to take advantage of the platforms that reach consumers that are on the go (Explorer Research, 2021).

Owing to its location and road accessibility to different towns and cities, Matnog, Sorsogon has been a route for tourists and travelers, however, the municipality has seen with very few conveniently located mini groceries or convenient stores within the town and generally, sari-sari stores in Matnog operate from five am to six pm only. The Convenience store is one of the better opportunities that is available today, and so the proponent shall look into the viability of putting up a convenience store near the seaport entrance of Matnog which is also located in the central business section of the town, the busiest highway of the municipality.

Statement of the Problem

The central problem of this study is the evaluation of the viability of establishing a Convenience Store in Caloocan, Matnog, Sorsogon.

Objective of the Study

To examine the viability and feasibility of establishing a Convenience Store in Caloocan, Matnog, Sorsogon is the main objective of this study.

Significance of the Study

This study was conducted to provide relevant information in establishing a Convenience Store in Caloocan, Matnog, Sorsogon. It bears significance to the following groups of people:

To the readers and other researchers, this study shall present a reliable source of information related to the proposed business.

To entrepreneurs, potential investors, the government and the community, this research will produce data about the project’s potential feasibility, profitability and investing opportunities from which information is important to pertinent stakeholders.

Scope and Limitations

The research focuses on the main target market which are the household residents only. The data covered in relation to the initial operation were obtained from the projected population of NNC as

the actual population of PSA from 2016 is not yet available. The population of the selected six out of forty barangays are only considered. The study covered a five-year projection only and the data, projections, and all other details falling on the periods beyond five years were not covered by the study. (PSA, 2019)

Related Literature

Convenience Stores traced its origin way back May 1927 in Dallas, Texas on the corner of 12th and Edgefield Streets when Jefferson Green, owner of the Southland Ice Dock realized that after the closing of the grocery stores people still needed to buy basic necessities like milk, bread and eggs. He made the world a more convenient place by staying open late and stocking the needed items at his ice shop. To draw attention from the costumers, the store's name was changed owing to its extended hours of operation from 7:00 AM to 11:00 PM seven days a week. And so, the shop, Southland Ice Dock Company changed its name to 7-Eleven. (Lewis, 2019).

Convenience stores are called in many names such as corner store, corner shop, or convenience shop. It is a retail business that is small in size and with a stock range of everyday items such as coffee, groceries, snack foods, confectionery, soft drinks, tobacco products, lottery tickets, over-the-counter drugs, toiletries, newspapers, and magazines. (Wikipedia, 2021a). According to the Illinois Department of Commerce, about 2,800 to 3,200 items in as many as to 400 classes or categories should be the ideal stock of small convenience stores (Hose, 2019).

Industry Profile

Convenience store business belongs to the retail industry. Today, it has grown into gas stations and corner stores since the 1950s. Regardless of how some businesses are hit hard because of the pandemic, there is a good future for the convenience stores since the industry is clearly so innovative and adaptable to consumer demands and worldwide concerns. (Gill, 2021).

More than one third (35%) of the brick-and-mortar retail universe tracked by Nielsen in the U.S. is represented by the convenience store industry. As of December 31, 2020, there are about 150,274 convenience stores in the United States according to the latest Nielsen Convenience Industry Store Count. In the Philippines as of December 2017, 7-Eleven has 2,287 stores (7-Eleven Philippines 2021) and in 2020, 7-Eleven topped the lead in the Philippines with \$882 million generated sales, followed by Alfamart with \$329 million (Statista, 2022).

Filipino's number one spending is on food and non-alcoholic drinks comprising about 37%, and utilities and housing are on the second spot only (23%). Owing to the increasing middle class of 18-20 million who patronize the services of nearby convenience stores, the projected spending on food and drinks from 2017-2021 has the strongest growth of 8.8% estimated at PHP6.2 trillion. This trend is also shown in neighboring Asian countries such as China, Indonesia and Vietnam. Moreover, in 2016 Sari-Sari stores (or Mom & Pop) dominated the grocery retail of the Filipino with a 59% market share, 3% sales growth worth over \$26.94 billion. Additionally, in the Philippines, a convenience store is small in size ranging from 100 to 300 sqm which operates for an extended hour up to 24 hrs. (BizNews, 2018). Further, in April 2021, over PHP3.3 billion worth of loans was approved by DTI to assist MSMEs to deal with the impact of the Covid-19.

Methodology

This section of the research study covers the specific procedures and techniques applied to identify, select, and analyze the information on the proposed business which aims to prove the validity and reliability of the study.

Sources of Data

Primary Data. Survey questionnaire and interview from the people directly involved in the research is the process from which the primary data are gathered. The proponent sent questionnaires, conducted unstructured interview and physical observation about their perspective on the proposed

convenience store and the data were encoded in the google form for easier data analysis. The questionnaire and unstructured interview questions were validated by five (5) experts consisting of two academe professionals, one accounting manager and two audit professionals, and Five (5) laypersons to allow suggestions and make the questionnaires clearer to help attain the goal of the research. The unstructured interview questions were distributed to competitors. Relevant suggestions and comments of the validators were considered in the revision of the questionnaires. The assumptions for the costing of the facility, products and services, machines, furniture and supplies were gathered from actual prices posted online from e-commerce websites and vendor website postings.

Secondary Data. The secondary data were retrieved from studies and articles published online related to convenience shops, corner shops, and existing convenience stores.

Research Design

The descriptive research method, which involves interactions, surveys, interviews, and observation were used by the researcher. Survey questionnaires were disseminated to determine the proposed business total demand, supply, market share and other necessary information about the assumed actual operations of the proposed business. The research design enabled the proponent of this research to come up with the possible answer to the problem of the study as well to understand how the businesses operates.

Population and Sampling Techniques

The household residents in Matnog Sorsogon are the target market of the study. According to the 2020 census of the Philippine Statistics Authority (PSA), 41,989 is the population of Matnog Sorsogon. However, due to the non-availability of barangay household population details, the proponent decided to use the data of projected 2020 population by Province, City, Municipality and Barangay produced by the National Nutrition Council (NNC). Based on the projection there would be about 47,809 individuals in 2020. However, considering the nature of the proposed business, the time constraint to conduct the feasibility study and the limitation of movement due to safety protocols brought about by the Covid-19 pandemic, the researcher decided to use the population of the six (6) barangays only near the location of the proposed business. In 2015, the average household in the municipality consists of 4.88 family members (PhilAtlas, 2022), this number was converted conveniently to a whole number of 5 for research purposes. Based on the above details the total population of the six barangays is 11,085 or 2,217 households. The researcher determined the sample size of the target, which is 339 households using the formula below, where the margin of error set is 5%:

$$n = \frac{N}{1 + Ne^2} \quad n = \frac{2,217}{\{1 + [2,217 (.05^2)]\}}$$

Table 1
Population, Questionnaires Distributed and Retrieved

Target Respondents	Population		Questionnaires Retrieved	Questionnaires Distributed
	Number	Percentage		
Caloocan	1449	13%	44	44
Camcaman	1346	12%	41	41
Tablac	1759	16%	54	54
Camachiles	1906	17%	58	58
Gadgaron	2545	23%	78	78
Tabunan	2080	19%	64	64
Total	11085	100%	339	339

Source: National Nutrition Council Page 76

Table 1 shows the population of each barangay and the number of questionnaires distributed and retrieved.

Data Gathering Procedures

The researcher used the stratified sampling technique and divided the entire population into different subgroups or strata (barangay) and then proportionately selected the sample from different barangays. The survey questionnaires were distributed to the respondents (one representative for each household).

Out of 339 survey questionnaires distributed, 339 were also retrieved. The result of which was summarized and tabulated using the google form report summary. Further, unstructured interview questions were also distributed physically and through a unique link generated in Google Forms to owners or managers of existing convenience stores.

Ethical Consideration

The personal information of the respondents and interviewees was treated with the utmost confidentiality by substituting individuals or companies with generic names (e.g. Company A). Each respondent also participated voluntarily in answering the survey questionnaire.

Results and Discussions

This section presents the various analyse done on the data gathered from the survey and interviews as well as the examination of the different functional areas of the proposed business.

Service Description

The convenience store proposed in this research study, mainly is a retail shop which will serve as a one-stop shop that will offer the product mix of snacks, beverages, food items, nonfood grocery items, over-the-counter medicines, e-load or e-payments and consignment of “pasalubong” items. It will be open for extended hours every day (except Saturday) for the convenience of the customers.

Demand Analysis

The researcher used the results of the distributed questionnaires on the demand. The survey showed that 100% of the respondents are willing to patronize the proposed convenience store.

The Statistical Straight-Line Method was used in determining the projection of the sample population.

The average population growth rate projection is 1.9%. The projected annual population will be assumed as the average population in the computation of the demand and supply of the proposed business.

Table 2

Projected Demand of the Convenience Store in Quantity, 2022-2026

Year	Projected Population	Projected Demand in Quantity Per Year	Increase or Decrease	Growth Rate
2022	9,957	5,164,340		
2023	10,152	5,265,477	101,137	1.96%
2024	10,347	5,366,615	101,137	1.92%
2025	10,542	5,467,752	101,137	1.88%
2026	10,736	5,568,890	101,137	1.85%
Total	51,733	26,833,074	404,549	7.61%
Average	10,347	5,366,615	101,137	1.90%

Table 2 shows the demand in quantity based on the daily visit of customer per day per year and it was determined to have an average growth of 1.9%. To compute the growth rate, the researcher divided the increase/decrease by the previous year's demand in quantity.

Table 3

Projected Demand of Convenience Store in Peso, 2022-2026

Year	Projected Population	Projected Demand in Peso Per Year	Increase or Decrease	Growth Rate
2022	9,957	1,910,561,618		
2023	10,152	2,006,416,992	98,855,374	5.02%
2024	10,347	2,106,304,182	99,887,191	4.98%
2025	10,542	2,210,378,829	104,074,647	4.94%
2026	10,736	2,318,802,281	108,423,452	4.91%
Total	51,733	10,552,463,903	408,240,663	19.84%
Average	10,347	2,110,492,781	102,060,166	4.96%

Table 3 presents the projected demand in terms of peso for the five-year period. This is determined by multiplying the projected demand in quantity by the average daily spend per visit. The average increase for the demand in peso for the five-year period is recorded at an average growth rate of 4.96% yearly.

Supply

The location for the proposed business shall be in the center business area of Matnog, Sorsogon which is near the seaport. Although there is no 7-Eleven or Alfamart in the area, the proponent identified several sari-sari stores and mini grocery stores located in each six barangays namely, Store 1, 2, 3, 4, 5 and 6 as direct competitors.

The researcher was able to interview the owners. Based on the interview, it was difficult for them to estimate the number of people who visit their stores, but they estimated the store capacity based on their inventory available for sale. The projected supply in quantity and peso were computed based on the competitor's sales capacity and the average spend per customer. The proponent used 1.9% in the computation of projected supply, consistent with the growth rate of the projected demand in quantity as seen in Table 2. In determining the capacity in peso value, the capacity in quantity is multiplied to the average price of the six competitors and used the average inflation rate of 2.89% from 2016 to 2020 to be incorporated in the prices. The objective is to evaluate if the proposed business is feasible and viable to enter the market.

Table 4

Projected Supply of the Convenience Store in Quantity and in Peso, 2022-2026

Year	Projected Supply in Quantity	Average Price x (1 + Average Inflation Rate)	Projected Supply in Peso
2022	468,749	324	151,952,913.24
2023	477,656	334	159,314,895.13
2024	486,731	343	167,033,558.42
2025	495,979	353	175,126,183.99
2026	505,403	363	183,610,889.99
Total	2,434,517	1,717	837,038,440.77
Average	486,903	343	167,407,688.15

Business Capacity

The proposed business will have an operational capacity that is based on the number of minutes that can be accommodated by the cashier/s per day during the 5 am to 11 pm operations of the convenience store. The cashier shall have a 4.5 minutes of time allotment from the product identification/scanning up to bagging. The number of cashiers is computed as 1.5 of full-time employee equivalent. The excess 50% is based on the pick hours only. The assumption will not change during the next five years to arrive at a conservative result in computing the capacity of the business.

The total minutes per transaction is based on the unstructured interview questions. The projected capacity in quantity and in peso is reflected in Table 5.

Table 5

Projected Capacity in Quantity and Peso

Year	Total Capacity in Quantity (# of Customers)	Capacity in Peso
2022	56160	20,674,153
2023	61776	23,423,815
2024	67954	26,539,182
2025	74749	30,068,894
2026	82224	34,068,057
Total	342862	134,774,100

As the business is new, the business capacity was assumed at 50% only during the first year of operations. The capacity will increase by 10% per year. The assumption was based on interview with existing stores in Matnog.

Demand and Supply Analysis

From the analysis made above about demand, supply and business capacity, the proponent determines the available market of the proposed business. An excess demand over supply represents the unmet market demand which characterizes the market share of the proposed business.

Table 6

Projected Demand and Supply Analysis in Quantity, 2022 to 2026

Year	Demand in Quantity	Supply in Quantity	% of Satisfied Demand	Unmet Demand	Unmet Demand %	Assumed Business Capacity (Quantity)	Market Share
2022	5,164,340	468,749	9%	4,695,591	91%	56,160	1.2%
2023	5,265,477	477,656	9%	4,787,822	91%	61,776	1.3%
2024	5,366,615	486,731	9%	4,879,884	91%	67,954	1.4%
2025	5,467,752	495,979	9%	4,971,773	91%	74,749	1.5%
2026	5,568,890	505,403	9%	5,063,487	91%	82,224	1.6%
Total	26,833,074	2,434,517	45%	24,398,557	455%	342,862	7.0%
Average	5,366,615	486,903	9%	4,879,711	91%	68,572	1.40%

The market share of the proposed business in quantity is 1.4%. The proponent resolved that the small market share is a result of selecting six possible direct competitors only. However, it is quite notable to point out also that the market share percentage is reasonable by getting at least 15.55% rate of the satisfied demand.

Market Share

The projected analysis of demand and supply in Table 7 reflects an unmet demand in the target market. The unmet demand in quantity and peso are 91% and 92% respectively and the average market shares in quantity and peso are 1.4% and 1.38% respectively. Hence, there is an opportunity to enter the market and there is an indication of viability in the proposed business.

Marketing Plans and Strategies

Implementing strategies in marketing to reach long-term financial success and attain competitive advantage in the industry is based on the well-known 5Ps of marketing mix namely, Product/Service, People, Price, Place, and Promotion. The proponent developed the following marketing plans and strategies that would help the proposed business in carrying its operation.

Table 7

Projected Demand & Supply in Peso, 2021-2025

Year	Demand in Quantity	Supply in Quantity	% of Satisfied Demand	Unmet Demand	Unmet Demand %	Assumed Business Capacity (Quantity)	Market Share
2022	1,910,561,618	151,952,913	8%	1,758,608,705	92%	20,674,153	1.2%
2023	2,006,416,992	159,314,895	8%	1,847,102,097	92%	23,423,815	1.3%
2024	2,106,304,182	167,033,558	8%	1,939,270,624	92%	26,539,182	1.4%
2025	2,210,378,829	175,126,184	8%	2,035,252,645	92%	30,068,894	1.5%
2026	2,318,802,281	183,610,890	8%	2,135,191,391	92%	34,068,057	1.6%
Total	10,552,463,903	837,038,441	40%	9,715,425,462	460%	134,774,100	6.9%
Average	2,110,492,781	167,407,688	8%	1,943,085,092	92%	26,954,820	1.38%

Product/Service. The convenience store will be located in a place accessible for the customers. Additionally, since most of the sari-sari stores in Matnog closed at 5 pm to 7 o'clock in the evening, the proposed business will operate until 11 o'clock in the evening. Moreover, it will open early at 5 o'clock in the morning. The proposed business will offer basic and essential goods and services as the proposed business aims to be a one-stop shop for the customers.

People. The Store Cashiers/Merchandisers are the business' most valuable assets. Fast, courteous and ability to solve problems are required and experience related to the business is a plus factor.

Price. The business shall set its price competitively by shortening the supply chain as much as possible. Based on the interview, the competitor's product mark-up ranges from 15% to 25%. The proponent will use a mark-up of 15% only and may adjust using the market-oriented pricing by managing the relationship between the demand and supply.

Place. Matnog, Sorsogon is beginning to gain presence online and in the tourism industry owing to its amazing beaches. It is not only well known locally and nationally for its tourist destinations but as it is located at the tip of Luzon, it has a port that hosts millions of people crossing the San Bernardino Strait to Northern Samar annually, which makes it one of the busiest in the region (Wikipedia, 2021b), a great place for a convenience store.

Promotion. The proposed business will take advantage of social media. The business will create a Facebook page wherein new product arrivals or services are promoted and where announcement for promotional discounts is made. Moreover, the business will add existing Matnog FB Page groups for easier, faster and further customer reach. The business will be promoted also through the Matnog FM radio "Padaba FM", and will also use posters and bulletin boards. Moreover, the business will partner with beach resorts and other local businesses by providing discount coupons to increase crossover for both companies.

Technical/Operations Study

This section discusses the operational process and requirements of the proposed business. Below is the typical service process flow of a convenience store.

1. **Customer Entry.** The customer enters the store premises. A shopping basket is available at the entrance of the store.
2. **Product Loading.** The customer will put their preferred shopping items in the shopping basket.
3. **Queue Line to the Point of Sale.** The customer will go to the cashier for payment once done with product loading.
4. **Product Unloading.** In the cashier counter, the customer unloads the items from the shopping basket.
5. **Product Identification.** The cashier will scan the barcode of the customer's unloaded item/s. Scanned items shall be checked in the POS/computer monitor.
6. **Payment Process.** The cashier shall check the total of the items from the POS/computer monitor and present it to the customer for payment. Once payment is received from the customer, payment will be processed.
7. **Bagging.** The cashier/merchandise will pack the items purchased.
8. **Customer Exit.** Once packaging is done, the customer will now exit the store premises.

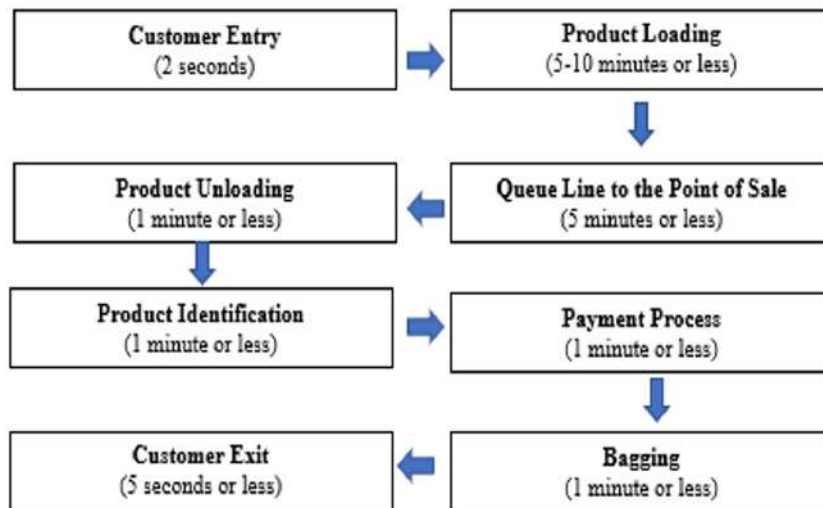


Figure 1. Illustrates the Operations and Service Process Flow

Based on the process flow chart, there are eight (8) stages from customer entry to point of sale in the convenience store. A customer has an average estimated time of shopping to payment for 10-19 minutes.

Machinery, Equipment, Furniture, and Fixtures

The proposed business will require specific types of machinery, equipment, furniture and fixtures and supplies to run the convenience store smoothly. Table 8 shows the fixed assets needed for the business with a total amount of PHP1,105,037.00. Furniture and fixtures will be outright expense amounting to PHP208,167.56, and the monthly supplies necessary for the operations of the business amounting to PHP 46,389.72

Building

The building is old and will require minor to major renovation amounting 600,000.00. A one-piece project which will be finished in a month.

Location

The proposed business location is strategically situated with good foot traffic. The location is 19 meters to the Municipal Hall, 62 meters to the Matnog Municipal Plaza, 150 meters to the Church, 88 meters to Matnog Port/ Ferry terminal and 110 meters to the wet market. The roads are concreted and accessible to all types of vehicles and the area is surrounded by several natural tourist attractions, the nearest beach is 1.16 kilometers away from the proposed business location.

Layout and Floor Plan

A total floor area of 200 square meters can accommodate the complete store layout and floor plan of the proposed business. The layout will cater various product lines and categories of food and beverages, two cashier counters and a space for eating.

Utilities and Other Operating Costs

Electricity, water, and communication facilities like cell phone and internet connection are the basic utilities that will be needed in the operations of the store.

Inventory Quality Control

FIFO and appropriate inventory quality control will be observed every day for the store. Maintaining the best quality products will begin from the purchase stage to the display of products for sale.

Other Forms of Internal Control

Internal controls on the financial records and operations are necessary to maintain accurate and reliable financial records and minimize the risk of fraud.

Organizational and Human Resource Study

Form of Ownership

The proposed business will adapt the sole proprietorship type of ownership as it is practical and easiest to form for a start-up business. The sole owner has 100% control in terms of decision making, investments, liabilities, profits, or losses that will be incurred.

Table 8

Machineries, Equipment, Fixed Assets

Items	Description	Unit Cost	Quantity	Total Cost	Depreciable Life	Annual Depreciation
Computer Desktop	HP22 All-in-One PC, AMD Athlon Gold 3150U Processor, 4 GB RAM, 256	18,999.00	2	37,998.00	5	7,599.60
Industrial Generator	POWERHOUSE 9.5 KVA Diesel Silent Type Generator with Battery for Electric ...	79,750.00	1	79,750.00	5	15,950.00
Laptop	HP Laptop Brand New Original Elitebook 820 G1 Intel Quad/ Dual-Core i7/i5	20,580.00	1	20,580.00	5	4,116.00
Cash Reg/POS	Pos Machine, Cash Register Set Teclast	14,500.00	2	29,000.00	5	5,800.00
Refrigerator Display Merchadizer	Aulis Commercial Beverage Refrigerated Display Cabinet Convenience Store Four-	44,197.00	1	44,197.00	5	8,839.40

{table continues on the next page}

Freezer Merchandizer	Vertical Freezer Cabinet Supermarket Convenience Store Dual Temperature	195,849.00	1	195,849.00	5	39,169.80
Hot Food Display Warmer	Heavy Duty Food Steamer Siopao Siomai House	16,499.00	1	16,499.00	5	3,299.80
Hot Beverage Dispenser	Heavy Duty Commercial 3-Flavor Electronic Controlled Coin Operated Coffee ...	20,900.00	1	20,900.00	5	4,180.00
Split Type Aircon	Hitachi 3HP Royal Wall Mounted Split Type Inverter ...	60,264.00	1	60,264.00	5	12,052.80
Machine and Equipment				505,037.00	5	101,007.40
Building-Improvement				600,000.00	5	120,000.00
Total Capital Expenditures				1,105, 037.00		221,007.40

Organizational Requirements

The business shall register the Business Name “Budget Mart” with the Department of Trade and Industry (DTI). After the registration is accomplished, Mayor’s Permit including its pre-requisite for the issuance will be obtained. NFA and Bureau of Internal Revenue (BIR) registration is next, followed by the mandatory requirements such as SSS, Philhealth and Home Mutual Development Fund. The costs involved in securing permits and licenses are presented in Table 9.

Table 9

Permits and Licenses

Description	Amount
Feasibility Study Budget	10,000.00
Mayor’s Permit	500.00
DTI Business Application Fees	500.00
NFA Permit	1,200.00
Fire Department	250.00
ATP (Receipt)	2,650.00
BIR	100.00
Total	15,200.00

Organizational Structure and Chart

Figure 2 below shows how the information and responsibility flow between levels within the organization.

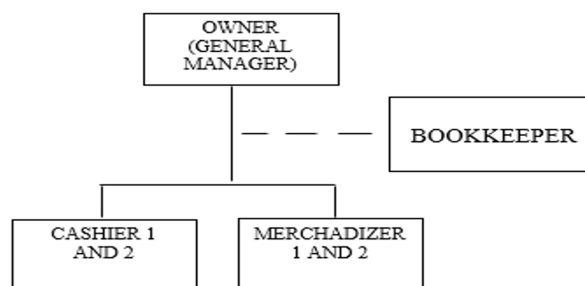


Figure 2. *Organization Structure*

Contingency Plans

If the proposed business did not go well as planned, alternative courses of actions or contingency plans may be considered, such as;

- Business Continuity Plan -preparation of a backup and recovery plan to avoid disruptions in operation in case of accidents, fire incidents, typhoon, earthquake, power outage or employee absences.
- Non-life insurance -to cover the amount of investments.
- Secured Filing System- Critical documents and electronic copies shall be secured in a safety vault.
- Emergency numbers are posted in visible areas.
- Earthquake and Fire Drills are conducted at least once a year.
- Exit Strategies are prepared in case the business did not perform as expected.

Financial Study

Major Assumptions

Revenue. The sales revenue was computed based on an assumed 50% business capacity which is to increase by 10% yearly.

Cost of Goods Sold. The Cost of Goods Sold shall be at 85%. A markup of 15% is the assumed gross profit.

Level of Inventory. The inventory of goods available for sale will have a requirement of at least 50% of the month's capacity to ensure that enough stocks will be available.

Salaries and Benefits. The owner-manager will have no salary but is allowed a monthly withdrawal. The basic salaries of the cashier and the merchandiser are equal amounting to Php9,200.00 for the first year and to increase by 4% yearly. The retainer's fee of the Bookkeeper is at Php3,000 per month and will not increase for the next five years. In addition to the government mandatory benefits, De Minimis benefits will also be given at Php2,800.00 per month. and will remain the same for the next five years.

Rent or Lease. The proposed business rental cost shall be discounted at 50% which will be Php10,000.00 per month only due to the consideration for the major improvements made in the building by the owner. The fee shall be fixed for the next five years.

Advertising/Promotion Expense. The advertising and promotion expenses will have an annual estimated budget of Php6,000.00 or Php500.00 per month. The budget will be used for advertising contests and other marketing promotions.

Supplies. The supplies to be used for operation were estimated at Php46,389.72 per month or Php556,676.64 per year.

Utilities. The total annual utility cost is Php336,804.00 and is estimated to increase by 3% per year. The utilities include minimum water, electricity, internet and communication expense.

SSS, Phil Health, HMDF (Pag-IBIG) Contribution. The mandatory contribution for social, health and HMDF benefits were based on the latest Table of Contribution from each agency.

Transportation Expenses. This will cover the cost of transportation in dealing with clients, suppliers and in coordinating with other concerned parties in the business. It was estimated at Php3,000 per month to increase by 3% yearly.

Depreciation for Fixed Assets. The machinery, equipment and the building improvement were estimated to have a useful life of 5 years. The method of depreciation to be used is the straight-line method.

Permits and Licenses. An estimated Php5,000 per year will be needed for the taxes and licenses.

Accounts Payable/Receivables. The business will pay and sell on a cash payment basis only which will be written in its policy.

Capital Investment

Capital investment is meant to benefit the company for a long term. Cash on hand or personal savings, loan or through selling of personal property or the issuance of stocks can be the source of capital investment. It is generally made to increase capacity (Kenton, 2021). Table 10 shows the capital requirement of the proposed business.

Table 10
Estimated Capital Requirement

Particulars	Amount
Pre-Operating Expenses	223,367.56
Working Capital	2,845,881.05
Total Capital Expenditures	1,105,037.00
Total	4,174,285.61

Source of Funds

The owner and her family will initially fund the required capital for the establishment of the Convenience Store.

Financial Statements and Analysis

The table below shows the major Financial Statements for the five-year period starting 2022-2026.

Table 11
Statement of Projected Comprehensive Income 2022-2026, in Philippine Peso

	2022			2023			2024			2025			2026		
Sales	20,674,153	85.0%		23,423,815	85.0%		26,539,182	85.0%		30,068,894	85.0%		34,068,057	85.0%	
Less: Cost of Goods	3,101,123	15.0%		3,513,572	15.0%		3,980,877	15.0%		4,510,334	15.0%		5,110,208	15.0%	
Less: Operating Expenses															
Pre-Operating Expenses	223,367.56	1.1%			0.0%			0.0%			0.0%			0.0%	
Depreciation-Equipment	101,007.40	0.5%		101,007.40	0.4%		101,007.40	0.4%		101,007.40	0.3%		101,007.40	0.3%	
Depreciation-Building Improvement	120,000.00	0.6%		120,000.00	0.5%		120,000.00	0.5%		120,000.00	0.4%		120,000.00	0.4%	
Rent Expense	120,000.00	0.6%		120,000.00	0.5%		120,000.00	0.5%		120,000.00	0.4%		120,000.00	0.4%	
Salaries and Allowance	660,000.00	3.2%		679,136.00	2.9%		699,037.44	2.6%		719,734.94	2.4%		741,260.34	2.2%	
Retainer's Fee	36,000.00	0.2%		36,000.00	0.2%		36,000.00	0.1%		36,000.00	0.1%		36,000.00	0.1%	
PHIC Contribution	6,604.00	0.0%		6,888.96	0.0%		7,164.52	0.0%		7,451.10	0.0%		7,749.14	0.0%	
SSS Contribution	37,200.00	0.2%		39,240.00	0.2%		41,280.00	0.2%		43,320.00	0.1%		45,360.00	0.1%	
HDMF Contribution	4,800.00	0.0%		4,800.00	0.0%		4,000.00	0.0%		4,000.00	0.0%		4,000.00	0.0%	
Supplies (operation)	556,676.64	2.7%		573,376.94	2.4%		590,578.25	2.2%		608,295.59	2.0%		626,544.46	1.8%	

{table continues on the next page}

Advertising and Promotion	6,000.00	0.0%	6,000.00	0.0%	6,000.0	0.0%	6,000.00	0.0%	6,000.00	0.0%
Bank Charges and Fees	2,400.00	0.0%	2,400.00	0.0%	2,400.00	0.0%	2,400.00	0.0%	2,400.00	0.0%
Transportation Expenses	36,000.00	0.2%	37,080.00	0.2%	38,192.40	0.1%	39,338.17	0.1%	40,518.32	0.1%
Permits and Licenses	-	0.0%	5,000.00	0.0%	5,000.00	0.0%	5,000.00	0.0%	5,000.00	0.0%
Utilities Expenses	336,804.00	1.6%	346,908.12	1.5%	357,315.36	1.3%	368,034.82	1.2%	379,075.87	1.1%
Total	2,246,879.60	10.9%	2,077,837.42	8.9%	2,128,775.37	8.0%	2,181,382.03	7.3%	2,235,715.53	6.6%
Net Profit Before Income Tax	854,243.31	4.1%	1,435,734.84	6.1%	1,852,102.00	7.0%	2,328,952.03	7.7%	2,874,492.96	8.4%
Tax expense	266,272.99	1.3%	261,433.71	1.1%	365,525.50	1.4%	501,185.61%	1.7%	664,847.89	2.0%
Net Profit After Tax	587,970.32	2.8%	1,174,301.13	5.0%	1,486,576.50	5.6%	1,827,766.42	6.1%	2,209,645.07	6.5%

Table 12*Statement of Projected Financial Position 2022 - 2026, in Philippine Peso*

	Year 0	2022	2023	2024	2025	2026
ASSETS						
Current Assets						
Cash and cash equivalents	P 872,620	2,898,362	3,411,729	4,333,352	5,613,059	7,286,022
Inventories	2,196,629	732,210	829,593	939,929	1,064,940	1,206,577
Total Current Assets	3,069,249	3,630,571	4,241,323	5,273,281	6,677,999	8,492,599
Non-Current Assets						
Fix Asset, net	1,105,037	884,030	663,022	442,015	221,007	-
Total Non-Current Assets	1,105,037	884,030	663,022	442,015	221,007	-
TOTAL ASSETS	P 4,174,286	4,514,601	4,904,345	5,715,296	6,899,006	8,492,599
	0.21	0.64	0.70	0.76	0.81	0.86
LIABILITIES AND EQUITY						
Current Liabilities						
Accounts Payables	P -	-	-	-	-	-
Statutory Payables		6,072.00	6,354.08	6,637.04	6,920.92	7,205.76
Tax Payable		266,273	261,434	365,525	501,186	664,848
TOTAL LIABILITIES	-	272,345	267,788	372,163	508,107	672,054
OWNERS' EQUITY						
Capital Net of Withdrawal	4,174,286	4,242,256	4,636,557	5,343,134	6,390,900	7,820,545
TOTAL EQUITY	4,174,286	4,242,256	4,636,557	5,343,134	6,390,900	7,820,545
TOTAL LIABILITY AND OWNERS' EQUITY	P 4,174,286	4,514,601	4,904,345	5,715,296	6,899,006	8,492,599

The projected net profit shows an upward trend. The total sales revenue started at PHP 20,674,153 in 2022 and is projected to increase to PHP 34,068,057 by 2026. The total assets amounted to PHP

4,514,601 in 2022 and are projected to increase to PHP8,492,599 by 2026. The company's average cash of the business is around 75% of total assets. The excess cash will be re-invested to expand the business to generate more revenues.

Financial analysis and capital budgeting metrics are used to evaluate the proposed business merit and look into the long-term position of investment. The researcher calculated the following as basis of the analysis.

Net Present Value (NPV). The estimated NPV of the business venture over five years and assuming an interest rate of 7% is PHP1,088,726, indicating an acceptable proposal.

Benefit-Cost Ratio (BCR). The calculated BCR is 1.26, indicating that the benefits outweigh the costs, hence the proposal is acceptable.

Internal Rate of Return (IRR). The estimated IRR is estimated to have an annual return rate of 16.5%, which seems a sustainable ratio.

Average Rate of Return (ARR). The ARR is computed to be 44.78% over five years, which implies a promising investment.

Payback Period. The estimated payback period of the investment is 3.5 years.

The results are presented in Table 13.

Table 13
Capital Budgeting Metrics

Metrics	2022-2026
Net Present Value	1,088,726
Benefit - Cost Ratio	1.26
Internal Rate of Return	16.50%
Average Rate of Return	44.78%
Payback Period	3 yrs and 5 months

Profitability Ratios. These are ratios that measure the ability of the firm to generate income from the use of its invested capital and assets (Salazar, 2017). The summary of the calculated GPM, NPM, ROI, ROA, and ROR are tabulated in Table 14.

Gross Profit Margin. The gross profit margin is 15% for the five years of operation.

Net Profit Margin. The average net profit margin before and after tax is 7% and 5% respectively.

Return on Investment (ROI). The proposed business has an estimated ROI of 20% in 2022 which gradually increases to 69% in 2026.

Return on Asset (ROA). Likewise, the ROA is projected to be 19% in 2022 which increases to 34% in 2026. The increase from first year to the fifth year suggests that assets are being utilized to generate revenue and profit.

Return on Revenue (ROR). The estimated ROR starts at 4% in 2022, and increases to 8% at the end of the fifth year, averaging 7% annually.

Table 14
Profitability Ratios

Year	GPM	NPM	ROI	ROA	ROR
2022	15%	4%	20%	19%	4%
2023	15%	6%	29%	29%	6%
2024	15%	7%	44%	32%	7%
2025	15%	8%	56%	34%	8%
2026	15%	8%	69%	34%	8%
Average	15%	7%	44%	30%	7%

Liquidity Ratios. This financial ratio shows the relationship or the ability of the company's cash and other liquid assets to pay its current liabilities. (Hayes, 2021). Table 15 summarizes the results.

Table 15
Liquidity Ratios

Year	Current Ratio	Acid Test Ratio
2022	13.33	10.64
2023	15.84	12.74
2024	14.17	11.64
2025	13.14	11.05
2026	12.64	10.84
Average	13.82	11.38

The proposed business liquidity ratios are healthy; that it can pay off its current liabilities by at least 11 to 13 times over. However, excess cash may be used for expansion also.

Moreover, it is critical that the proposed business' breakeven point is also checked. Table 16 below shows the company's breakeven point.

Table 16
Break-Even Point (BEP)

Year	BEP
2022	14,979,197.33
2023	13,852,249.46
2024	14,191,835.80
2025	14,542,546.85
2026	14,904,770.18
Average	14,494,119.93

Break-Even Point. The calculated breakeven point of the proposed business averages at PHP14.4 million.

The financial results of the proposed business suggest that the business is feasible. The study showed that apart from its financial benefits the business will also help the municipality of Matnog. The locals and travelers to Matnog can access a conveniently located convenience store that will cater to their needs at an affordable price and is available for an extended time during operation. The business will offer employment to the locals and its expansion or operations may offer additional source of income for potential investors. The proposed business through its income will give tithes to the church, and the community may benefit from the business' for sponsored outreach programs. The convenience store will also help the government through the remittance of taxes applicable to the business, supporting the vision of a progressive country. In line with the foregoing, the business shall be recommended for implementation.

Conclusions

This feasibility study showed that after considering all the various aspects of the proposed business viability, the proponent concluded that there is a market for establishing a convenience store in Caloocan, Matnog, Sorsogon. The proposed business will address the need for a reliable convenience store that offers affordable prices and an accessibility that will bring convenience for 18 hours a day. The business capital requirement is estimated at PHP4.17 million with an

average gross profit margin of 15% only compared to 23% of the leading convenience store in the Philippines (Pressreader, 2017). The proposed business income and expense ratio on average is 1.07 which is above the closest industry ratio of 1.05 based on the study conducted by Philippine Statistics Authority that was released on Jan. 2019. The average net profit after tax is projected at PHP1.45 million over the period 2022-2026. The amount will surely help the owner-investor to sustain the needs of the family as well as fund the possible expansion of the proposed business. The financial metrics such as capital budgeting and profitability showed promising results which indicates that the proposed business venture is feasible and viable.

References

- 7-Eleven Philippines (2021). *About us*. <https://www.7-eleven.com.ph/about/>
- BizNewsAsia (2018) *PH convenience stores: Highest growth rate of 17% in grocery retail segment*. [https://biznewsasia.com/ph-convenience-stores-highest-growth-rate-of-17-in-grocery-retail-segment/#:~:text=It%20is%20a%20%24153%20billion,%2Dstores\)%20are%20sprouting%20fast](https://biznewsasia.com/ph-convenience-stores-highest-growth-rate-of-17-in-grocery-retail-segment/#:~:text=It%20is%20a%20%24153%20billion,%2Dstores)%20are%20sprouting%20fast)
- Explorer Research (2021). *Convenience store shopper insights*. <https://explorerresearch.com/learn/convenience-store-insights/>
- Gill, K. (2021). *Convenience store industry trends in 2021*. <https://www.itsallgoodsinc.com/insights/convenience-store-industry-trends-in-2021>
- Hayes, A. (2021, March 31). *Liquidity ratio definition*. <https://www.investopedia.com/terms/l/liquidityratios.asp>
- Hose, C. (2019). *Items to sell in a convenience store*. <https://smallbusiness.chron.com/difference-between-grocery-store-convenience-store-19023.html>
- Kenton, W. (2021). *Capital investment*. Investopedia. <https://www.investopedia.com/terms/c/capital-investment.asp>
- Lewis, R. (2019). *7-11 retail company*. <https://www.britannica.com/topic/7-Eleven>
- Lucas, D. (September, 2019). *More Filipinos getting everyday meals from convenience stores*. <https://business.inquirer.net/278309/more-filipinos-getting-everyday-meals-from-convenience-stores>
- NACS (2021a). *What is a convenience store?* <https://www.convenience.org/Research/What-is-a-Convenience-Store>
- NACS (2021b). *Convenience stores and their communities*. <https://www.convenience.org/Topics/Community/Convenience-Stores-and-Their-Communities>
- NACS (2021c). *US Convenience Store Count*. <https://www.convenience.org/Research/FactSheets/IndustryStoreCount>
- Ordinario, C. (July, 2018). *Convenience stores are 'big winners' in PHL's consumer-driven economy*. <https://businessmirror.com.ph/2018/07/04/convenience-stores-are-big-winners-in-phls-consumer-driven-economy/>

- PhilAtlas (2022). *Matnog*. <https://www.philatlas.com/luzon/r05/sorsogon/matnog.html#:~:text=The%20population%20of%20Matnog%20grew,population%20of%2041%2C101%20in%202015>
- Pressreader (2017). *7-Eleven Store Density: Are more consumers paying a premium for convenience?* <https://www.pressreader.com/>
- PSA (2019). *2016 Annual survey of the Philippines business and industry wholesale and retail trade: Repair of motor vehicles and motorcycles sector*. <https://psa.gov.ph/wholesale-retail/aspbi-id/136996>
- Ready Training, Inc. (2021). *Redefining “Essential” for Convenience Stores*. <https://www.readyconvenience.com/articles/convenience-stores-essential/>
- Salazar, D. (2017) *Fundamentals of Accountancy, Business, and Management 2*
- Statista (2022) *Leading convenience stores in the Philippines in 2020, by retail sales value (in million U.S. dollars)* <https://www.statista.com/statistics/714623/retail-sales-value-of-convenience-stores-in-the-philippines/>
- Wikipedia (2021a). *Convenience Store*. https://en.wikipedia.org/wiki/Convenience_store#cite_note-10
- Wikipedia (2021b). *Sari-sari Store*. https://en.wikipedia.org/wiki/Sari-sari_store

Accounting and Consultancy Services Firm in Puting Kahoy, Silang, Cavite: A Feasibility Study

Fevi Iris B. Rabino

Adventist University of the Philippines
2012664@aup.edu.ph

Abstract

The research explored the viability of establishing an Accounting and Consultancy Services Firm in Puting Kahoy, Silang, Cavite, Philippines. The study has considered the different aspects of the business, such as marketing, technical, and financial. Using a descriptive and exploratory research approach, data was acquired from 216 respondents. The target markets are business owners or managers of micro, small and medium enterprises (MSMEs) established in Silang, Cavite. The survey results were further evaluated, resulting in an opportunity from the market's excess demand. Unstructured interviews with similar organizations were conducted to collect further information on business operations. The researcher recognized the need to address the lack of accounting literacy and knowledge of reporting and compliance requirements of managers and business owners. If the proposed business is viable and established, more business owners and managers of MSMEs will be given opportunities to improve their bookkeeping, reporting, compliance, and decision-making. The market study revealed a market share of 50% in its first year of operations, and the financial analysis resulted in favorable results for the five-year projection. The overall study proves the feasibility of establishing an Accounting firm and recommends its conception by 2022.

Keywords: *Accounting, MSMEs, viability*

An article published by the Profitable Venture Magazine emphasized that there are loads of small businesses, mom, and pop businesses, amongst a few without the faintest idea of any accounting skills. The research shows that many small businesses remain small and sometimes close shop because they do not have clients or capital to run the business but fail to keep their books properly. Hence, this gap can be leveraged, especially if one is an accountant who starts an accounting services firm. (Martins, 2021.) In 2018, the Faculty of Accountancy at a University in Malaysia conducted an academic research on the Accounting Literacy among Small Business Owners. The study found that 40% of small business owners are financially illiterate. At the same time, 81% of them are doing their business' finances themselves. This could mean that 32.4% of those handling their finances are ill-equipped to do so. Their research also mentioned that although preparing financial reports is not mandatory for small businesses, it is essential for them to access a reliable accounting system that will help them measure business performance and tax purposes. This function is usually outsourced to accounting firms. (Roslan et al. 2018)

In the Philippines, the Bureau of Internal Revenue (BIR) bookkeeping regulations require the compliance of all businesses registered in the Philippines. The rules mandate new companies to maintain orderly accounting practices and taxation records in the Philippines. (Business Setup, n.d.) Therefore, business owners in the Philippines need financial accounting and bookkeeping services to comply with the regulations while promoting the best practices in their organizations-1. Knowledge of accounting principles is essential not only to monitor the profitability but also for compliance with tax obligations and other reporting requirements and the growth of the business.

The researcher recognized the need to address the lack of accounting literacy and knowledge of reporting and compliance requirements of entrepreneurs, managers, and business owners. They have struggled with these activities due to the dynamic environment and demanding government and regulatory requirements. Through this study, more business owners and managers of MSMEs will be given opportunities to improve their bookkeeping, reporting, compliance, and decision-making. This study also aims to provide educators with relevant and reliable information on the topic which can be used as a reference for further research. The researcher also wants to inspire Accountancy students, entrepreneurs, and investors who dream of having a similar business in the future.

In 2020, the accounting sector in the United States is expected to earn more than 110 billion dollars in revenue. The Big Four worldwide accounting and auditing firms, Deloitte, PricewaterhouseCoopers (PwC), Ernst & Young (EY), and KPMG, are the main firms in the United States. By 2020, these enterprises will have generated over 157 billion dollars in revenue and employed over one million people around the world. The United States accounted for just over 56 billion of their total income. (Statistica, 2022)

Based on the survey conducted by the Philippine Statistics Authority (PSA) in 2019 there were 480 number of establishments belonging to the accounting, bookkeeping, and auditing activities and tax consultancy industry in the country, with a total of 30,555 personnel in employment and Php 245,956, average annual compensation, and the industry generated 31.6 billion in revenues.

The main objective of this study is to determine the viability and feasibility of establishing an Accounting and Consultancy Services Firm in Puting Kahoy, Silang Cavite, that aims to cater to the accounting and consultancy needs of MSMEs located in Silang, Cavite. Specifically, objectives from the point of view of the different functional areas of management are as follows:

Marketing Study:

- a) To identify the key services offered by accounting and consultancy services
- b) To analyze the market demand for the services
- c) To learn the most effective way to acquire and increase the company's client base
- d) To develop a pricing structure for accounting and consultancy service

Operations/Technical Study:

- a) To understand the day-to-day needs of running an accounting and consultancy services firm
- b) To propose the location, building requirements, and the capacity
- c) To discover the tools and software that can enhance productivity and expand capacity
- d) To be knowledgeable on the relevant regulatory bodies and the controls to be implemented

Organization and Human Resource Study:

- a) To decide on the legal structure of the business
- b) To survey the requirements to open an accounting and consultancy services firm
- c) To design the appropriate organization chart for the Company
- d) To interview what similar companies look for during the hiring process
- e) To create a budget for compensation and hiring costs

Strategic Management Study:

- a) To rethink the traditional role of the accounting firm
- b) To evaluate strategies that will go beyond the seasonal business.
- c) To select the company's niche or a specific accounting specialization
- d) To develop Key Performance Indicators to evaluate strategic plans
- e) To document Business Continuity Plans

Financial Study:

- a) To define the significant assumptions that will be used in the financial projections
- b) To estimate the startup costs and capital requirements
- c) To explore the sources of funding
- d) To calculate and analyze the projected revenues and profits of the Company based on the financial statements

Socio-Economic Responsibility:

- a) To describe how the Company can also create programs that will have an impact and benefit to its customers, suppliers, stakeholders, community, and the government

Methodology

The primary data were derived from the results of the self-constructed questionnaire to determine the respondents' perception of establishing accounting and consulting services in Silang, Cavite. The survey questionnaire was distributed using Google forms and physical distribution, and the unstructured questionnaire was distributed to competitors through emails and Facebook messaging. The questionnaires were based on the review of literature, the researcher's knowledge and background as a CPA, the guidance of her adviser and suggestion from five (5) experts and five (5) laypeople.

The secondary data was obtained from relevant books, articles, and research in establishing accounting and consulting companies published from 2016 to 2022. The population used for the study was obtained from the PSA.

Research Design

This study used the descriptive method of research. The technique described the target market's practices and conditions or phenomena. The research aimed to determine respondents' perceptions of outsourcing their accounting and consultancy functions.

Population and Sampling Techniques

The population of the study consisted of Micro, Small and Medium-sized entities based on the number of employees located in Silang, Cavite. The research only focused on establishments in the Manufacturing, Accommodation, Food Services, Real Estate Activities, Professional, Scientific and Technical Activities industries. The respondents were owners, managers, or responsible employees.

The sample size was computed using Slovin's formula, which is:

$n = \frac{N}{1 + Ne^2}$, where N = population size and e = error of tolerance. The sample size of 239 was the result of the computation:

$$n = \frac{592}{1 + 592(0.052)^2}$$

$$n = 239$$

The researcher used non-probability sampling, where the selection for each population sample was based on convenience sampling. The sampling technique allowed the researcher to select respondents because they are the "convenient" data sources.

The formula suggests that there should be at least 239 samples; however, only 216 valid questionnaires were retrieved. The source of the population is the Philippine Statistics Authority (PSA). The researcher mentioned in the distribution of surveys that she will keep the confidentiality of all information shared by the respondents, and these will be for educational purposes only.

Results and Discussions

Marketing Study

The Accounting and Consultancy Services being proposed in this study mainly offers hybrid online accounting services and tax compliance services such as bookkeeping, preparation of financial statements, analysis of operational costs, completion of income tax returns and educating clients to understand the impact of any financial actions. The services offered are particularly for MSMEs who would like to outsource their accounting and consultancy functions which will be more cost-benefit for the company.

Demand and Supply Analysis

Market demand describes the demand for a given product or service and identifies the clients or consumers who want to purchase it. The objective of the demand analysis is to determine the willingness of the target market to spend a specific price on the services offered by the proposed business. On the other hand, supply analysis determines the availability of the benefits to customers.

To determine the forecast of the demand for the services, the projected number of the target market was computed using the Statistical Parabolic Method, which is ideal for increasing and decreasing variables. The formula used is as follows: $Y = a + bx + cx^2$

The marketing study demand and supply was based on the calculated projected number of selected MSMEs for the next five years. An average decline rate of -2% was determined. The researcher used the results of the distributed questionnaires on demand from the 216 valid respondents retrieved, equivalent to a 90% participation rate. For the supply, the researcher determined several competitors based on the responses from the survey questionnaires and Accounting and Consultancy Services located in Cavite and Laguna.

The study of demand and supply depicts the market share of the proposed business. An excess demand over supply represents unmet market demand which characterizes the proposed business' market share. The unmet need was computed by subtracting the total supply in quantity from the order. The graphs below compare the percentage of satisfied and the unmet demand in peso and the percentage of market share for 2021-2026.

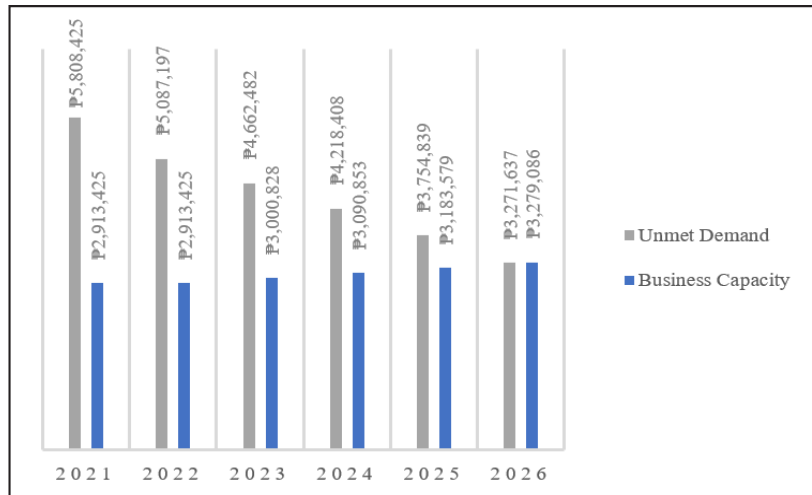


Figure 1. *Unmet Demand and Business Capacity*

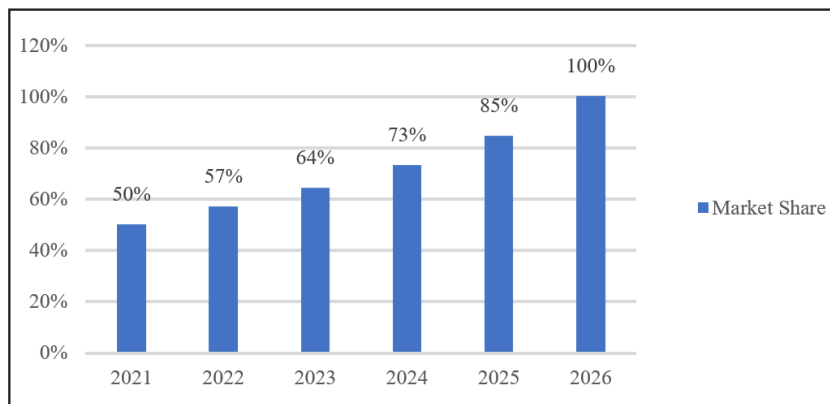


Figure 2. *Market Share*

The results show a 50% market share in 2021 and increased to 100% in 2026. However, this can be attributed to the declining projected demand; hence, the business should start expanding or promoting the services to businesses other than Silang, Cavite. Whether the market share is guaranteed or not, appropriate marketing strategies and tools should take place to attract customers.

Marketing Plans and Strategies

Implementing well-thought of best practices and unique marketing strategies to entice customers is necessary to reach long-term objectives such as acquiring a competitive advantage. This component of the study employs the well-known Five Ps of Marketing.

Product (Service). Clients shall be assured that their business requirements will be thoroughly studied, and the demands will be met. To showcase quality service, associates will be trained carefully in their respective functions.

People. Associates are considered the firm's most valuable assets. Technical, problem-solving, and communication skills are required, and it is necessary to maintain a respectable appearance. Employees hired must be compensated relatively while adhering to the government's minimum criteria. Various advantages, including but not limited to Philippine Health Insurance Corporation (PhilHealth), Home Development Mutual Fund (Pag-ibig), medical allowances, and benefits, will be adopted.

Price. The pricing will be market-oriented and affordable as the target market is MSMEs. The similar rate companies offer ranges from 2,000 up to 8,000 pesos monthly retainer's fee. For the

study, the rate of Php 4,393 monthly retainers fee will be used, based on the pro-rated rates from the survey questionnaires.

Place. Silang, Cavite is one of the wealthiest municipalities in the Philippines, and there are many establishments in the area from the hotel, restaurants, and retail stores.

Promotion. To introduce the new accounting firm to the target market, the firm will invest in digital marketing. A company website will be created, and the firm's presence will be on various platforms such as Facebook and Google maps. The owners would also attend conventions and join relevant organizations to strengthen the network and promote the new firm. Moreover, referral programs or incentives will be implemented to increase the client base, especially during the start-up phase of the business.

Technical Study

The service flow describes the step-by-step course of an accounting and consultancy services process, starting when the clients decide to avail of the service up to the settlement of dues. Note the engagement can be completed on a monthly or annual basis. Hence, the flow of service is based on the activities to complete the engagement and not on daily activities. This will be further illustrated in Figure 3.

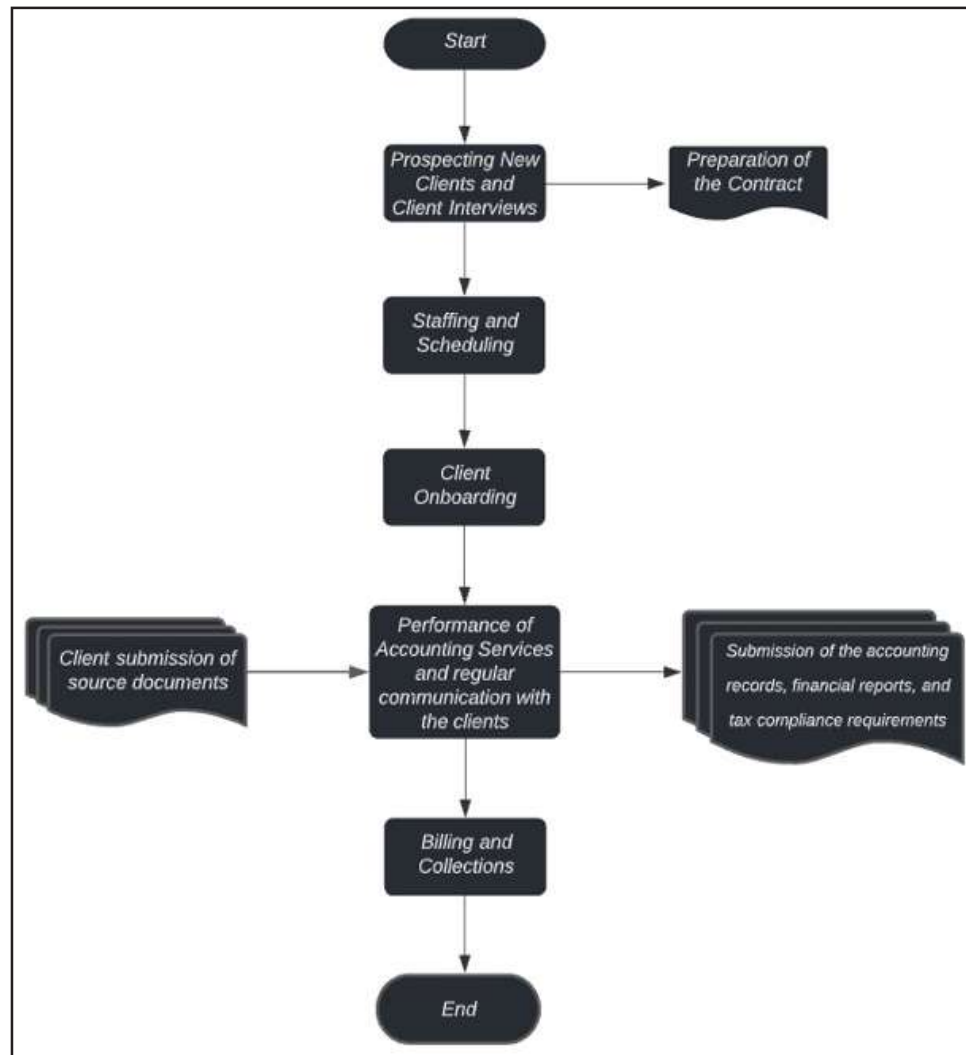


Figure 3. Service Flow Chart

The manager would set up a meeting with prospective clients to discuss the clients' bookkeeping and/or tax-related requirements and detail the services offered by the firm. This discussion involves understanding the nature of the business, the potential challenges, the systems used, etc., to ensure that the services that will be provided meet the client's expectations. Once the firm and the clients have agreed, the firm will use a standard template of the contract which will be modified based on discussions with the client. The firm would also seek for legal review of the contract. The services will only be contract-based, and the contract period terms will either be six (6) months or one (1) year. The agreement with the client would only commence upon the approval and signature of both parties. The firm's manager will be responsible for the staffing and scheduling of the associates. It is expected that there will be around fifty-five (55) clients per month, and the capacity and scheduling of the associates should be managed appropriately. The firm may also temporarily hire students who are taking up accounting courses who are either working students or currently enrolled in on-the-job training.

Before a firm's associate starts performing the bookkeeping, financial reporting, and tax compliance services, a meeting will again be set to introduce the team to the timelines and discuss the support required from the client and other administrative matters. The client will provide the accounting source documents such as bank statements, cash register tapes, supplier invoices, etc. The papers will be electronic and sent to the firm's responsible associate. The associate will then perform the services as agreed in the contract. The services may include Bookkeeping, Accounting, Month-end Reporting, Year-end Reports and Tax Compliance. The manager will review all the reports before submission to the clients and the relevant regulatory bodies. The associate in charge will ensure regular communication with the clients to provide any updates or raise any concerns identified during the process. Monthly, the firm would submit the reviewed accounting records, financial reports and tax compliance requirements to the client. This serves as the output of the services provided. The client will be billed every month-end, which was also agreed in the contract and should be paid within 15 days. An official receipt will be provided to the client.

Necessary equipment, furniture and fixtures will be purchased with a total cost of ₱332,620. A vacant commercial space at Plaza-S, Puting Kahoy, Silang Cavite will be leased. The estimated dimension will be sixty-seven (67) square meters at Php 27,000 per month. The room will be renovated for a more professional office look. The total cost of renovation is estimated to be Php 350,000. The estimates are based on an inquiry from a contractor performing commercial and residential renovations. The office along Tagaytay – Sta. Rosa Road will be easily accessible to potential clients in Silang, Cavite.

The accounting firm office will only be open Mondays to Fridays, 8:00 am to 5:00 pm. The proposed business assumed a 95% capacity only to consider any emergencies or vacation leaves of the associates. The proposed firm will not change the number of its associates for the next five years and the changes are only due to a 3% increase in annual rates. Hence the estimated number of clients will not change. The associates are expected to be productive during the eight (8) working hours. Any significant changes to the business schedule, such as overtime, will be approved by the manager.

The firm would comply with the Public Company Accounting Oversight Board quality controls standards. The firm will create policies regarding the system of internal quality control in its accounting practice. Quality controls include establishing procedures to ensure that services are competently delivered and adequately supervised. The firm would also ensure that its personnel comply with the applicable professional standards.

Organization and Human Resource Study The researcher believes that sole proprietorship is the most appropriate for the proposed business among other business organizations, namely, partnerships, corporations, and cooperatives. Among the advantages of this form of ownership are complete control over the business, it is less costly to form, minimal reporting requirements and there are tax advantages. To ensure compliance with the Philippines' laws and regulations in starting

a business and avoiding potential reputation difficulties, the proposed business should begin by registering with the relevant government institutions, just like any other firm. As the business is a sole proprietorship, it should register its name with the Department of Trade and Industry (DTI). The mandatory permits and licenses should also be obtained from the Barangay and the Mayor's Offices and with the BIR. Moreover, the proposed business should obtain Accreditation in the Practice of Public Accountancy as a firm. based on the rules for BoA accreditation which are governed by R.A. 9298, also known as the Philippine Accountancy Act of 2004. An organizational structure will be created to provide clarity, help manage employees' expectations, enable decision-making, and organize the workflow in the organization. The owner will also be the manager responsible for managing, leading, and administering the firm's overall operations. The organizational chart is presented 3in Figure 4.

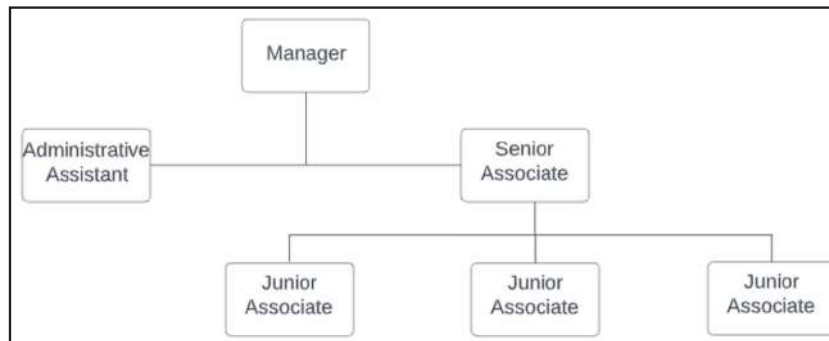


Figure 4. *Organizational Chart*

The Senior Associate and the Administrative Assistant will directly report to the Manager, while all the Junior Associates will directly report to the Senior Associate. However, since the firm is still relatively small and in its start-up phase, all the associates may directly report to the Manager and are expected to proactively collaborate for the firm's success.

A total of six (6) personnel will be required to start the operations of an accounting firm. The number of personnel may vary if the owner decides to expand the business capacity. All employees are hired for full-time positions that agree with the current capacity and demand to function effectively and efficiently.

For an accounting firm, technical knowledge and communication skills are the required qualifications. They should be knowledgeable with the Accounting Standards and the Philippines' Business Tax laws and regulations. They should also be proficient in using Microsoft Office tools.

The Owner or the Manager is responsible for planning and directing all the firm's projects and activities. He/she manages all the personnel who are directly responsible for delivering the bookkeeping, financial reporting, and BIR requirements of the clients and supervising the tasks of the office administrator. He/she is responsible for the recruitment and hiring of the staff, conducts performance evaluations, coordinates training programs for new staff and identifies training needs for the current team. He/she is also responsible for managing the promotional and advertising activities of the firm and for meeting potential clients.

The senior associate is responsible for supervising the junior associates and reviewing all the reports from the engagements according to generally accepted accounting principles (GAAP) and BIR requirements. He/she is also responsible for preparing the financial statements, performing accounting and tax research, and other special projects.

The Junior Associate will prepare the necessary financial forms, documents, and reports of the engagements. He/she will also assist in preparing financial statements and tax computations and filings and ensure compliance with GAAP and BIR. He/she should be responsible for maintaining relevant client records and filing systems, answering telephones, and handling routine correspondence with clients.

The duties of the Administrative Assistant include providing support to the manager and the associates, assisting in all the daily office needs, and managing the firm's general administrative activities. These activities include answering and directing phone calls and providing support to visitors. She is also responsible for organizing and scheduling client appointments. She will also order the necessary order office supplies and research new deals and suppliers.

Salaries, de minimis benefits, bonuses, and commission structures are part of the compensation package. Each employee will receive basic monthly pay and various benefits. The computed annual salary and benefit expenses in 2022 are presented in the tables below.

Table 1
Computed Annual Salary and Benefit Expenses in 2022

Position	Basic Salary	De Minimis Benefits	Withholding Tax	Employee Contr. (SSS, PHIC, HDMF)	NetPay
Senior Associate	₱ 360,000	₱ 21,000	₱ 17,620	₱ 21,900	₱ 341,480
Junior Associate (1)	₱ 240,000	₱ 21,000	₱ 0	₱ 16,800	₱ 244,200
Junior Associate (2)	₱ 240,000	₱ 21,000	₱ 0	₱ 16,800	₱ 244,200
Junior Associate (3)	₱ 240,000	₱ 21,000	₱ 0	₱ 16,800	₱ 244,200
Administrative Asssistant	₱ 192,000	₱ 21,000	₱ 0	₱ 13,680	₱ 199,320
Total	₱ 1,272,000	₱ 105,000	₱ 17,620	₱ 85,980	₱ 1,273,400

According to Republic Act 10963, which is popularly known as the TRAIN Law, the personal income tax threshold for individuals has been increased to P250,000 taxable income per year, the reason why the Junior Associates Administrative Assistant are exempt from tax dues.

Table 2
Personal Income Tax Threshold for Individual -- Taxable Income per Year

Position	Basic Salary	De Minimis Benefits	Withholding Tax	Employee Contr. (SSS, PHIC, HDMF)	NetPay
Senior Associate	₱ 360,000	₱ 21,000	₱ 17,620	₱ 21,900	₱ 341,480
Junior Associate (1)	₱ 240,000	₱ 21,000	₱ 0	₱ 16,800	₱ 244,200
Junior Associate (2)	₱ 240,000	₱ 21,000	₱ 0	₱ 16,800	₱ 244,200
Junior Associate (3)	₱ 240,000	₱ 21,000	₱ 0	₱ 16,800	₱ 244,200
Administrative Asssistant	₱ 192,000	₱ 21,000	₱ 0	₱ 13,680	₱ 199,320
Total	₱ 1,272,000	₱ 105,000	₱ 17,620	₱ 85,980	₱ 1,273,400

Consistent with the law's minimum requirement, the business will be shouldering statutory benefits as part of the employer's share for SSS, PhilHealth, and Pag-ibig. The firm would also provide De Minimis Benefits in the form of rice and medical allowances and a Christmas bonus. Effective planning involves the timing and the necessary steps for a business to begin. Careful planning of time, financial budget, and stages should be followed. The researcher created a Gannt Chart below to illustrate the flow of pre-operating activities in preparation for the proposed business.

Activities	Months										
	1	2	3	4	5	6	7	8	9	10	11
Preparation of Feasibility Study											
Business Formation and Registration											
Office Renovations											
Acquisition of Equipment, Furniture, Fixtures Software and Supplies											
Recruitment and hiring											
Promotions and Advertising											
Business Inauguration											

Figure 5. *Gantt Chart of the Projected Timetable*

Strategic Management

The firm's mission is to deliver outstanding financial and professional services while adhering to the highest standards of ethics and expertise. To meet the clients' current and future demands and assist them in achieving long-term success. To build trust and loyalty among the firm's employees, partners, and clients. The vision is to be known in Cavite, Laguna and Batangas as the accounting firm of choice for offering comprehensive financial and professional services to people and businesses alike and a working environment that allows employees to grow and flourish in the sector. Various objectives have been created for each functional management area to serve as a foundation for the proposed business. Specific goals will be set including the strategies, programs, and other activities that will enable the organization to meet its objectives. The manager will regularly compare actual results to performance indicators to determine whether the strategies mentioned above have been realized and are realistically possible.

A quarterly review of the strategies set will be performed to determine the business's productivity. A root-cause analysis will investigate any significant differences found in the evaluation. Additional activities may be added or modified to improve the programs.

A contingency plan will also be formulated and implemented to decrease business risk, expedite catastrophe recovery, and ensure that business processes run smoothly despite unforeseen events. The plan would include guidelines in cases of natural disasters, financial losses, exit strategies, etc. The Manager will act as the Business Continuity Plan leader backed by the administrative assistant. In the event of natural calamities such as typhoons, volcanic eruptions or earthquakes, the manager should immediately contact the associates to assure their safety. Depending on the local government's advice and the manager's discretion, the work may be suspended. The employees should also participate in fire and earthquake drills. All documents such as client records and documents, working papers, and other critical records should be stored in online cloud storage or OneDrive. The management should be updated with the scheduled power interruption announcements and may allow associates to work from home or in other areas with electricity. In cases of absence or loss of personnel, resigning employees shall be given a 30-day turnover period to allow room to transition tasks to the successor. For emergency day leaves like sick leaves, if the associate's tasks are urgent, another associate should be assigned to complete the deliverable. To secure the confidentiality of the client information and documents, the access to client's data will be restricted to all the associates working on the engagement. General security will also be improved by utilizing firewalls, VPNs, traffic monitoring and restriction, and even routine updates. All the employees will undergo training on the importance of securing data and a regular audit and revaluation will be performed for the processes of securing data. In cases the

firm suffers from financial losses, additional capital will be considered to recover and continue the operations. The significant transactions should also be reviewed regularly and in case the losses came from anomalous activities, investigations should be done. If the operations of the firm turned out to be unfavorable, the manager would consider offering other finance-related services or penetrating a new target market by transferring to a new location. All obligations with associates and suppliers should be paid, and all government requirements should be completed until the firm officially closes.

Financial Study

Several assumptions are used in the five-year business projection of an accounting firm, specifically in the development of financial statements. The service revenue is based on the business capacity. The demand was computed using the findings of the disseminated survey questionnaire and the population projections for the following five years. The service costs are composed of the salaries and benefits of the associates. The computation of service cost was discussed in detail in the study of human resources. A 3% increase in basic pay for each employee was assumed for the five-year projection; supposedly, everything will be in the ordinary course of business. The corresponding employer's share of SSS, PhilHealth, and Pag-ibig shall also increase consistently to their applicable range as mandated by law. Since the initial figures are only approximations, under inflation, the utility expenses are estimated to increase by 3% in the succeeding years. The annual advertising and promotions expense will be P36,000. Due to the nature of the business, the researcher does not find the excessive need for advertisement in contrast to other companies. As discussed in the technical study, the depreciation expense will be computed using the straight-line method. The years of depreciation will depend on the determined useful life for each type of asset. The Taxes are based on the Graduated Income Tax Rates for Individuals Engaged in Business and Practice of Profession, or Sole Proprietorships as prescribed by law. The researcher also used the accrual method in the preparation of the Financial Statements. This financial method means revenue and expenses are recognized and recorded when they occur, hence, the assumption was accounts receivables and accounts payables will be collected or paid the following month.

The researcher estimated that an initial investment Php 1,300,000 will be required to start the operations of the business. This will be used for pre-operating expenses, operational expenses for the first three months, and the capital expenditures for the purchase of furniture, fixtures, equipment, and office renovations. Sole proprietorships typically obtain investment funds by utilizing the owner's assets, such as personal savings, loans from friends and family, or bank loans based on individual creditworthiness. The researcher will be funding the required capital of the business from personal savings and bank loans.

To understand the financial performance and health of the business, the researcher prepared financial statements composed of the statement of financial position, statement of financial performance and statement of cash flows. The results were summarized presented by the graphs below.

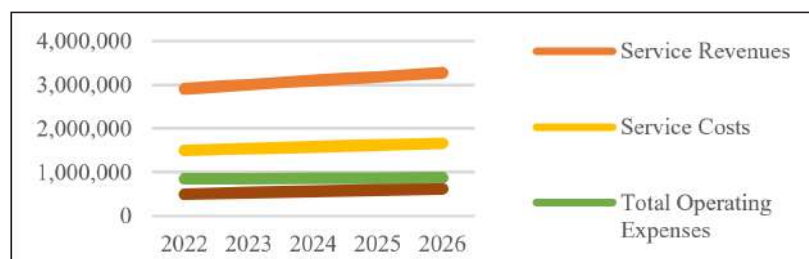


Figure 6. *Financial Performance in Peso from 2022 to 2026*

The graph represents the statement of financial performance from 2022 to 2026 which shows steady growth in income. The result also shows that the estimated gross revenue is more than enough to cover the day-to-day expenditures, even to return reasonable income after the deduction of taxes.

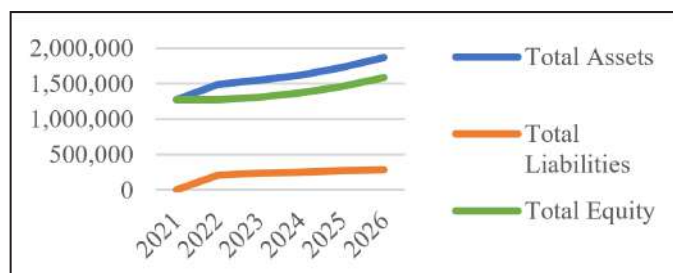


Figure 7. Financial Position in Peso from 2022 to 2026

The graphic presentation above is a snapshot of the Financial Position. It can be determined that the firm has minimal liabilities or obligations and assets are mainly funded by capital.

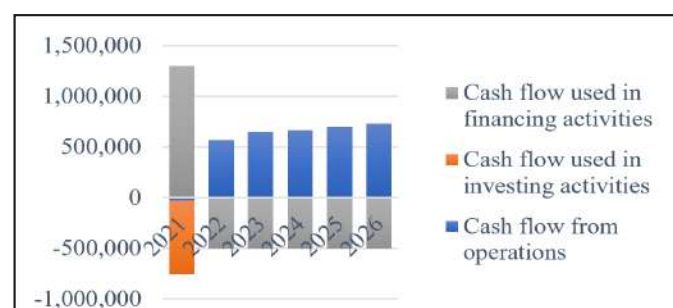


Figure 8. Statement of Cash Flow in Peso from 2022 to 2026

The graph aims to analyze the sources and utilization of cash. Beginning 2022, the firm will be funded by cash flows from its operations. Moreover, a consistent cash flow is utilized for financing activities attributed to owners' withdrawals.

The researcher further performed a financial analysis to establish key performance indicators or KPIs and to assess a company's financial data. The research includes liquidity ratios, activity ratios, profitability ratios and capital budgeting techniques. The key results of the analyses for the five-year projection are shown in the table below.

Table 3

Key results of the analyses for the five-year projection

	2022	2023	2024	2025	2026
Current Ratio	4.04	4.23	4.68	5.18	5.75
Working Capital Turnover	2.72	2.39	2.15	1.92	1.72
Total Asset Turnover	1.96	1.94	1.91	1.84	1.76
Account Receivable Turnover	12	12	12	12	12
Gross Profit Margin	49%	49%	49%	49%	49%
Net Profit Margin	20%	21%	21%	22%	23%
Return on Investment	39%	41%	43%	46%	48%
Return on Equity	39%	41%	41%	41%	39%
Accounting Rate of Return	39%	46%	49%	44%	47%
Payback Period	1.9 years				
Net Present Value	₱1,350,854				
Internal Rate of Return	42%				
Profitability Index	1.66				

The ratios show a positive indication of the liquidity, stability, efficiency and profitability of the proposed business.

Socio-Economic Responsibility Study

The proposed business will serve society by contributing to the municipality's economic growth by creating jobs and providing value-adding and quality services to its clients or the businesses while promoting the importance of maintaining accounting records and financial analysis to its clients. The employees will also be given a competitive compensation package and career growth and development opportunities. The firm would pay all its obligations to its suppliers on time. As a believer in tithing and the Seventh-day Sabbath, the owner would also give tithes to the church, and there will be no operation on Saturdays. Moreover, all dues to the Government will be paid accordingly.

Conclusion and Recommendation

Based on the study conducted and the established unsatisfied demand and market share for the services, the proposed business of an Accounting and Consultancy firm in Silang, Cavite, is feasible and viable. The study's conclusion and findings recommended that the proposed firm operate by 2022.

References

- Business Setup Worldwide. (n.d.). Accounting and bookkeeping services in the Philippines. Business Setup. <https://www.businesssetup.com/ph/financial-accounting-bookkeeping-services-philippines>
- Martins, A. T. (2021, May 20). Accounting firm business plan. *ProfitableVenture*. <https://www.profitableventure.com/accounting-firm-business-plan/>
- Roslan, N., Pauzi, N. F. M., Ahmad, K., Shamsudin, A., Karim, M. S., & Ibrahim, S. N. S. (2018, October 28). Preliminary investigation: Accounting literacy among small business owners. *International Journal of Academic Research in Business and Social Sciences*. <https://hrmars.com/papers/detail/IJARBSS/4709/Preliminary-Investigation-Accounting-Literacy-among-Small-Business-Owners>
- Statista Research Department. (2022, February 7). Topic: Accounting industry in the U.S. Statista. Retrieved from https://www.statista.com/topics/2121/accounting-industry-in-the-us/#topicHeader__wrapper

Establishing a Hazardous Waste Transporter Company in Mexico, Pampanga: A Feasibility Study

Samantha Grace G. Musni

Adventist University of the Philippines
2042571@aup.edu.ph

Abstract

In determining the feasibility of the business, both primary and secondary data were used. Primary data were gathered through survey questionnaires and interview questions. The questionnaires were validated by five laypersons and five experts, from the academe and environmental sectors, to ensure that each question will provide the needed information for the study. Interview questionnaires were sent to managers of similar companies, while the survey questionnaires were distributed to households in Mexico, Pampanga, the target market of the study. It was administered to a sample size of 397, which represents a population of 34,681. This figure was computed by considering a 5 percent allowance of error. Moreover, the questionnaires were distributed using the stratified sampling technique and the entire population divided into different barangays, then proportionately selected the sample from the population. The secondary data were gathered from related materials, including articles, studies, news, laws, and government-issued circulars published on the Internet to support the study. This study centers on the determination of the feasibility of establishing a proposed business “HazClean Environmental Solutions: A Hazardous Waste Transporter” in Mexico, Pampanga with total consideration of marketing, technical, operations, human resource, strategic management, financial and socio-economic aspects of management. The researcher found that there is a demand for the service. For the year 2022, the supply is 67% of the total demand, thereby leaving an unsatisfied demand of 33%. The study revealed that the demand in Peso Value for the first year of operations will be ₱99,409,432, while the supply is ₱67,013,457. After a thorough analysis and evaluation of the viability of the study, it is recommended that the proposed business be implemented in January 2022.

Keywords: *Hazardous Waste Transporter. Supply, Demand*

The use of disposable face masks, gloves, and other protective gear, which were originally seen in hospitals, clinics, and other medical facilities, became rampant when the Coronavirus-19 (COVID-19) was declared an outbreak globally by the World Health Organization (WHO). Different countries enforced safety guidelines, including the mandatory wearing of face masks to limit and control the spread of the deadly virus. In the Philippines, the Department of the Interior and Local Government (DILG) issued Memorandum Circular No. 2020-071 dated April 9, 2020, to urge the provincial and local government units in implementing strictly the mandatory wearing of face masks and other protective equipment in public areas with the intent of preventing the further increase of COVID-19 cases in the country. However, the solution to fight against COVID-19 led to another big problem for the environment.

The rapid increase in disposable face masks and other PPEs became an environmental problem because of improper disposal. Globally, 129 billion face masks are discarded in a month, which can also be translated into 3 million face masks used per minute. According to a global survey of individuals who participated in beach cleanups in 2020, the total individual items of PPE litter collected amounted to 107,219, which is alarming. Based on forecasts, plastic waste accumulating in the oceans will triple in the next 20 years because of additional medical waste piling up (Parker, 2021).

In a separate study by Sangkham (2020), it was found that around 16,659 tons of medical waste were generated per day in Asia alone. The COVID-19 outbreak directly impacted the increase of medical waste, and it has dramatically affected solid waste management because of the improper disposal thereof.

Most face masks are single-used and are not recyclable or flushable. They are commonly made of plastic fibers that will remain in the environment for a long time, fragmenting into micro and nano plastics. In addition, used face masks can be a source of contamination, potentially leading to indirect infection and viral transmission (New Hampshire Department of Environmental Services, 2020).

The face masks worn by the general public are difficult to distinguish and are in the middle of general waste” and “medical waste” in contrast with the face masks used by medical facilities, which thoroughly go under the proper disposal process and are treated separately by waste management companies (Yeh, 2020). According to the Department of Environment and Natural Resources (DENR) of the Philippines (2021), the fight against COVID-19 is not just about educating people to follow the minimum health protocols. The responsibility of each Filipino people extends to the proper disposal of various healthcare items which are possibly contaminated and have now become a threat to the life of terrestrial and aquatic animals because of the add up in the marine litter and eventually destroy the marine ecosystem.

The researcher decided to come up with a feasibility study on the establishment of a hazardous waste transporter company that will mainly cater to the disposal of waste number M501, known as pathogenic or infectious wastes which include healthcare waste and infectious wastes such as disposable face masks, gloves, other protective equipment, and medical wastes. The proposed business will collect and carry hazardous wastes from various households in Mexico, Pampanga, to accredited hazardous waste treaters or facilities.

Statement of the Problem

The central problem of this study is the assessment of the viability of establishing a hazardous waste transporter company in Mexico, Pampanga.

Objectives

The main aim of the study is to determine the feasibility of establishing a hazardous waste transporter company in Mexico, Pampanga.

Further, the objectives from the point of view of the different functional areas of management are specified as follows:

Marketing Study:

- a. To describe the nature of the primary service of the proposed business.
- b. To measure the demand and supply for the services to establish the proposed business's market share.
- c. To determine the support of the target market on the proposed project.
- d. To develop various marketing strategies to encourage customers to avail the services offered by the proposed venture.
- e. To estimate the reasonable price that will justify the proposed venture's service.

Technical Study:

- a. To understand the flow of business operations.
- b. To identify and purchase the necessary vehicle, equipment, tools, and other consumables needed in the operations.
- c. To find a suitable and safe location for the proposed business.
- d. To produce the most practical floor plan (administrative building and designated parking lot or garage for the hazardous waste collecting vehicle) and set-up, which will make the business place more productive.
- e. To set a daily schedule of activities and capacity.
- f. To evaluate the quality controls and other necessary controls for the business to operate effectively and efficiently.
- g. To examine the specific regulations from government regulatory bodies for compliance of the business to operate legally.

Organizational and Human Resource Study:

- a. To decide on the most appropriate type of business organization.
- b. To outline the organizational structure.
- c. To finalize a sufficient number of employees, the positions/designations to be filled up, their respective job descriptions, and the qualification standards to perform the operations effectively and efficiently.
- d. To fix a reasonable and just compensation that will help the employees be motivated to perform their tasks to the extent of their capability.
- e. To present a timetable that projects the pre-operating costs and the time allotted in each activity to guide the owner in establishing the proposed business.

Strategic Management Study:

- a. To establish the mission, vision, and objectives, key result areas (KRA), and key performance indicators (KPI) for the proposed organization.
- b. To assess operations of the proposed business through strategic evaluation.
- c. To prepare contingency plans, alternative plans, and exit strategies if the proposed business cannot meet the expectations and objectives.

Financial Study:

- a. To study realistic financial assumptions to be adopted by the proposed project.
- b. To make a reliable estimate of the amount of total initial investment required.
- c. To look for possible resources of financing that would yield the lowest possible cost.
- d. To exhibit the projected financial statements covering the five-year period.
- e. To analyze the proposed b
- f. profitability, liquidity, and stability of the business.

Socio-Economic Responsibility:

- a. To offer customers the highest quality of service possible.
- b. To provide a reasonable compensation package to employees.
- c. To satisfy the owners and the investors by bringing profits to the business.
- d. To contribute information to students who would also like to conduct a research study on the same or related business.
- e. To support church programs and other projects.

Significance of the Study

This research is conducted to provide the necessary information in establishing the proposed business that may serve as a reference for various sectors and other interested users. Specifically, this study may be of assistance to the following:

The **customers** who want to properly dispose of used face masks and other protective equipment harmlessly.

The **creditors or suppliers** who want to maintain a stable and good business relationship with the proposed venture by regularly engaging in trading.

To the **businessmen or potential investors** interested in this business line and looking for opportunities to invest their funds and profit from.

To the **researchers** who further want to gain knowledge and better understand this business and use it as a reference in their research.

To the **community** to whom this research may offer new information and ideas to improve the proper disposal of hazardous waste produced by households.

To the **government** to whom the proposed business will remit their taxes to provide funding in service of the Filipino people.

To the **church** to whom the proposed venture will give back a portion of the income through tithes and offerings and support various church programs and activities in helping spread the Word of God.

Scope and Limitations

This research covers the area of the municipality of Mexico, Pampanga. The target market of the business is households in the said location. The company may also cater to other potential customers in nearby areas or other cities/municipalities in Pampanga. The households in Mexico, Pampanga, were used as a sample for this study and to test the feasibility of the business. If the company is deemed viable in the said market, it can also be concluded that the business can also expand to cater to the needs of other potential customers. The study is also projected to take five years.

The researcher could not get information about the historical population of the number of households in Mexico, Pampanga because no actual survey was conducted by the municipality, and opted to use the growth rate from the years 2015 to 2020 published by the PSA.

In addition, the researcher was not able to determine the supply of direct competitors because as of writing, there is no existing competitor who caters to the same target market. Only two out of six company representatives whose businesses are located in Central Luzon responded to the request for an interview.

The study was conducted during the COVID-19 pandemic which limited the efforts of the researcher to conduct face-to-face surveys and interviews. In addition, the researcher only relied on related literature and studies published over the Internet, no hard copies of books and other references were used.

Review of Related Literature

Literature Review

The COVID-19 surge demanded people worldwide to consume more medical supplies to use as first-line protection. The increase in the number of cases is directly associated with the pile-up of health care items (Cabico, 2020). These items once used are considered hazardous wastes because they are now infectious. Improper disposal of medical wastes threatens not only the environment but also the health of humans.

A substantial amount of health care waste is disposed of as common solid waste or dumped improperly without proper monitoring and control. Moreover, most of this type of waste in developing countries is burned in unregulated and less-maintained incineration facilities (Mmereki et al., 2016).

Hazardous Waste Transporter's primary role in hazardous waste management is transporting the hazardous wastes from their point of origin or where it is generated to a treatment facility that can recycle, store, or dispose of the waste (The United States Environmental Protection Agency, 2016).

Waste Transporters must own a waste transport vehicle that is compliant with the regulations on proper labeling, inspection, the use, pressure devices, puncture resistance, and thermal protection. The vehicle should be capable of carrying the load without difficulty, must have sealed flooring, and more importantly does not have any exposed spark-producing metals which could come in contact with wastes that have explosive properties. In addition, all required markings to be pasted in the vehicle must be readable up to 10 meters from the car must be complied with (DENR Administrative Order No. 2013-22, 2013).

There must also be a secured and designated holding facility or garage for the waste vehicle to be used in the operations. The parking must include, at a minimum, a bund wall to protect any accidental spills from going to the drainage, a facility for storing water used in washing and disinfecting the vehicles, an emergency response plan and equipment, and a fire protection system (DENR Administrative Order No. 2013-22, 2013).

Related Studies

A large portion of the pandemic-associated plastic litter in the ocean is identified as medical waste, which raises health risks or even the spread of the COVID-19 virus. Global public awareness regarding proper waste management, especially medical plastic waste control in pandemic epicenters and developing countries, should be more serious than before as the situation can become worse after the pandemic (Peng et al., 2021)

If mixed with infectious wastes, the regular household waste collection may lead to contamination of the municipal solid waste and could pose a risk of virus transmission. Hence, sufficient knowledge of the safe disposal of infectious waste will significantly help effective emergency response (Sharma et al., 2020).

In proper disposal of infectious waste, working with a fully certified and permitted hazardous waste transporter may help deliver the waste safely to an appropriate treatment facility (MCF Environmental Services, n.d.)

Industry Profile

The proposed business belongs to the waste management industry, where the management of waste from its origin to the final disposal happens. It also includes the monitoring and regulating of the waste management process from the point of collection, transportation, treatment, and disposal.

In the recent 2019 Annual Survey of the Philippine Business and Industry (ASPBI) for the waste management industry, it was recorded that the total number of workers connected to the waste collection, treatment, and disposal sector is 3,378. In line with this, the average annual compensation registered is ₱260,400 to ₱333,900 per employee. Also, the total revenue produced

by the same sector in 2019 was ₱5.5 billion, while the total expense incurred was ₱5 billion leaving a 500 million net profit.

Moreover, in the Q1 2019 to Q4 2021 National Accounts of the Philippines Report by the PSA (2022), the waste management industry together with the electricity, steam, and water industry contributed a total of ₱650,878 million to the Gross National Income and Gross Domestic Product in 2021.

According to the Research and Markets (2021), the market size for global waste management was valued at USD 392.1 billion in the year 2020 and is predicted to reach USD 715 billion after ten years. The geographical analysis of the said report showed that the Asia Pacific region will show a higher interest in waste management and is expected to have the highest market share during the forecasted period.

Out of 30 accredited hazardous waste transporters who cater M501 wastes in Region III, only three are operating in the province of Pampanga (Environmental Management Board-Philippines, 2020).

The researcher conducted an interview via a phone call and by sending a google form link. The interviewee for company A answered that their prices range from ₱40 to ₱90 per kilo, while the interviewee for company B mentioned that their standard pricing is done by weighing the wastes, and will vary according to location. Approximately, the costs averages from ₱38 to ₱40 per kilo if within the vicinity of the business and ₱35 to ₱80 per kilo if outside Region III.

Success Factor

Generally, the success of the proposed venture depends on the demand for proper hazardous waste management in every Filipino household and the desire to prevent the rising problem of healthcare waste in the country with the continuous support of the Philippine government.

Opportunities. Due to the COVID-19 surge, the consumption of face masks and other healthcare items rises. Hence the medical waste generated from every household increases also. In addition, through the DENR, the Philippine government also reminded the public to discard the used face masks properly to prevent the risk of virus transmission in May 2021 (DENR, 2021). Other environmental organizations may also support the business, and it will create an impact on people and eventually be an effective marketing strategy. Thus, this proposed venture will have a competitive advantage because of the current demand. The business may also expand its market to neighboring municipalities and cities and offer offices, factories, health care facilities, and hazardous waste generating establishments its services. Another opportunity is to expand its service by accepting other hazardous or special waste from households (Waste number M507) such as aerosol products, fertilizers, motor oil, and paint supplies.

Strengths. The specific service to be provided by the proposed business will specialize in collecting and transporting hazardous or infectious waste from households, which is different from the regular collection of municipal solid wastes. According to the 2020 census of the Philippine Statistics Authority (PSA), the municipality of Mexico has a population of 173,403. If this figure is divided by the average household size of 5 (Census of Population, 2020), the estimated number of households is 34,681. Currently, no existing business in the same industry is located in the target area. Thus, if the proposed business is launched, it can cater to a maximum of 34,681 households in the municipality.

Risk Factor

One of the inherent risks associated with this kind of business is the lack of information regarding the proper disposal of hazardous wastes. People may confuse infectious waste with regular garbage because they are already used in dumping it together with the common household wastes.

Threats. There are three other established businesses in the same industry located in Pampanga (Environmental Management Board-Philippines, 2020). In terms of experience and capacity, they

are more recognized than the proposed business. Moreover, the existing competitors can easily offer a more economical rate to households if they submit a proposal to the same market.

Weaknesses. The service may be new and unfamiliar to some people. As of writing, no garbage fees are imposed in Mexico, Pampanga. In effect, some will oppose the idea of a separate collection of infectious waste from their regular trash or will demand a lower cost. In addition, some people are still practicing the traditional dumping of garbage in empty lots or burning it in their backyards to avoid paying waste collection fees (U.S. Environmental Protection Agency, 2016).

Methodology

Sources of Data

Primary Data. The primary data used in this study were obtained through a survey questionnaire constructed by the researcher, unstructured interview questionnaires, and interviews done through phone calls with owners of hazardous waste transporter companies within Central Luzon. The researcher has selected five experts, consisting of three academic professionals and two environmental experts, and five laypeople, to validate the survey and unstructured interview questionnaires distributed to the target market and competitors, respectively. The target market consists of 34,681 households in Mexico, Pampanga.

Secondary Data. Secondary data were gathered and obtained from related materials, including articles, studies, news, laws, and government-issued circulars and memoranda published on the Internet. In addition, other information gathered by the researcher was from the Comprehensive Land Use Plan 2017-2026 issued by the Municipal Planning and Development Coordinator Office of Mexico, Pampanga.

Research Design

The type of method used by the researcher is the descriptive research method, where interactions, surveys, interviews, and even observation are done (Narbarte, 2015). Unstructured interview questionnaires and survey questionnaires were disseminated to determine the demand, supply, market share, and other necessary information about the actual operations of the proposed business. An interview through a phone call was also conducted to obtain ideas about the different practices of other accredited hazardous waste transporters in the region.

Population and Sampling Technique

The households in Mexico, Pampanga are the target market of the study. According to the 2020 Census of Population and Housing produced by the Philippine Statistics Authority (PSA), 173,403 individuals reside in Mexico, Pampanga. However, due to the non-availability of the latest total number of households, the researcher decided to divide the total population by the average household size. In 2015, the average household in the municipality consists of 4.75 family members (PhilAtlas, 2015), this number was converted conveniently to a whole number of 5 for research purposes.

Based on the computation, the total population is 34,681 households in 43 barangays of Mexico, Pampanga. The researcher also determined the sample size of the target which is 397 households where the margin of error is 5%.

Instrumentation

The researcher utilized the following self-constructed instruments in this study:

1. Unstructured interview questionnaire with 31 questions that cover five functional areas of management such as marketing, operations/production, human resources, strategic management, and financial areas.
2. Survey questionnaire with six questions to measure the total demand, the demand specific to the project, and the capacity of the project's supply.

Data Gathering Procedures

The researcher used the stratified sampling technique and divided the population into different barangays and then proportionately selected the sample from each barangay. These were distributed through a unique link generated in Google Forms to respondents (one representative for each household).

Out of 397 survey questionnaires distributed, 397 were also retrieved. The result of which was summarized and tabulated using the Microsoft Excel application. Further, an interview over the phone was also done with an owner of a hazardous waste transporter company.

Ethical Consideration

The personal information of the interviewees was treated with the utmost confidentiality by substituting individuals or companies with generic names (e.g. Company A). Each respondent also participated voluntarily in answering the survey questionnaire.

Results and Discussion

Summary of Findings. This study centers on the determination of the viability and feasibility of establishing a proposed business “HazClean: A Hazardous Waste Transporter” in Brgy. Panipuan, Mexico, Pampanga with total consideration of marketing, technical, operations, human resource, strategic management, financial and socio-economic aspects of management. Below are the findings and results of the study.

Marketing. In determining the demand, the researcher disseminated the survey questionnaires to the target market. It is based on the willingness of the customers to patronize the products offered. The survey questionnaires were distributed to 397 households in various barangays and out of the total respondents, 388 representatives of households are willing to patronize the service.

The average projected demand in the quantity from 2022 to 2026 is 2,431,438, while the supply is 1,279,871 leaving an unmet demand of 1,151,567. The business has a computed average market share of 34%.

Table 1

Analysis of Demand and Supply of the Collection and Transportation of Hazardous Waste in Quantity 2022 to 2026

Year	Demand in Quantity	Supply in Quantity	% of Satisfied Demand	Unmet Demand	% of Unmet Demand	Business Capacity	Market Share
2022	2,385,140	1,252,522	53%	1,132,617	47%	388,700	34%
2023	2,399,719	1,266,050	53%	1,133,670	47%	388,700	34%
2024	2,428,581	1,279,723	53%	1,148,858	47%	388,700	34%
2025	2,457,443	1,293,544	53%	1,163,899	47%	388,700	33%
2026	2,486,305	1,307,514	53%	1,178,791	47%	388,700	33%
Total	12,157,188	6,399,353	263%	5,757,835	237%	1,943,500	171%
Average	2,431,438	1,279,871	53%	1,151,567	47%	388,700	34%

Further, the average projected demand in the peso from 2022 to 2026 is ₱107,679,044, while the supply is ₱72,595,058 leaving an unmet demand of ₱35,083,986. The business also has a market share of 42% which is 8% higher than the market share in quantity because the inflation effect was included in the computation of the projected demand and supply in peso for the five-year period.

Table 2
Analysis of Demand and Supply of the Collection and Transportation of Hazardous Waste in Peso 2022 to 2026

Year	Demand in Peso	Supply in Peso	% of Satisfied Demand	Unmet Demand	% of Unmet Demand	Business Capacity	Market Share
2022	99,409,432	67,013,457	67%	32,395,975	33%	13,738,434.85	42%
2023	103,195,932	69,694,807	68%	33,501,124	32%	14,135,475.62	42%
2024	107,455,325	72,483,444	67%	34,971,881	33%	14,543,990.86	42%
2025	111,874,721	75,383,661	67%	36,491,060	33%	14,964,312.20	41%
2026	116,459,810	78,399,921	67%	38,059,889	33%	15,396,780.82	40%
Total	₱538,395,220	6,399,353	263%	5,757,835	237%	1,943,500	171%
Average	2,431,438	1,279,871	53%	1,151,567	47%	388,700	34%

Based on the computation of the projected demand and supply of the proposed business, the researcher believes that the business has a chance of penetrating the market because the present supply of the collection and transporting of hazardous waste could not satisfy the demand of the target market. To accompany these various marketing plans, and strategies were also developed to successfully introduce the service such as posting advertisements on social media platforms, lower prices, and quality service.

Technical. The researcher identified the various technical information to be used in the business such as the service process, type of vehicle, equipment, building, location, the capacity of the business, controls, and various expenses to be incurred in the operations. The process of the collection and transportation of hazardous wastes is portrayed below:

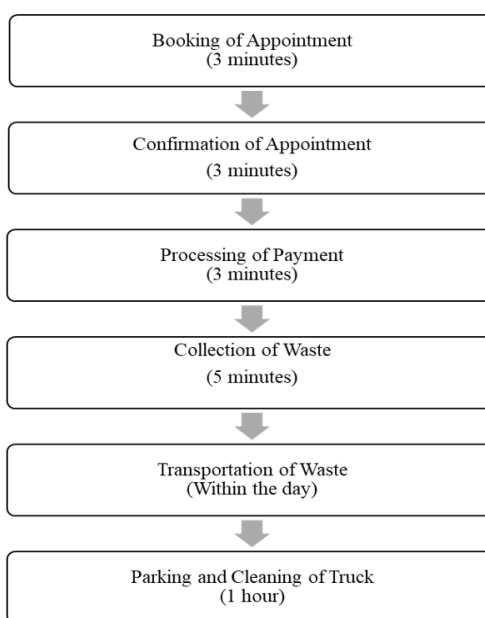


Figure 1. *Service Process Flow of the Collection and Transportation of Hazardous Waste*

In order to run the business smoothly, it will need various equipment including the truck that will be used in the collection and transportation of wastes which is estimated to be ₱1,698,701.50. This amount is inclusive of both depreciable assets costing ₱1,659,989 and non-depreciable equipment, furniture, and fixtures amounting to ₱38,713. Also, the total estimated operating expenses for the first year of operations will be ₱2,684,073.18.

The initial target of waste to be collected is 388,700 kilograms per year. This is computed based on the 65% capacity of the truck to be used in the operations, which is two tons multiplied by the conversion factor to kilograms of 1,000, and the expected number of working days without weekends and regular non-working holidays which is 299 days. On the other hand, the annual capacity in Peso is computed using the average prices determined in the results of the survey questionnaire and the inflation rate of 2.89%, where the computed annual capacity is also prorated.

Table 3

Projected Business Capacity of the Collection and Transportation of Hazardous Waste in Peso from 2022 to 2026

Year	Annual Capacity in K	Annual Capacity in Peso	Increase (Decrease)	%
2022	388,700	13,738,435	385,889	2.89%
2023	388,700	14,135,476	397,041	2.89%
2024	388,700	14,543,991	408,515	2.89%
2025	388,700	14,964,312	420,321	2.89%
2026	388,700	15,396,781	432,469	2.89%
Total	1,943,500	72,778,994	2,044,235	14.45%
Average	388,700	14,555,799	408,847	2.89%

It can be observed that the increase in percentage is equal to the inflation rate because the capacity is assumed to be fixed for the five-year period in order to have conservative figures in the projection.

Organization and Human Resources. The proposed venture will adopt sole proprietorship ownership and a total number of five employees will be hired. The proposed organizational chart is as follows.

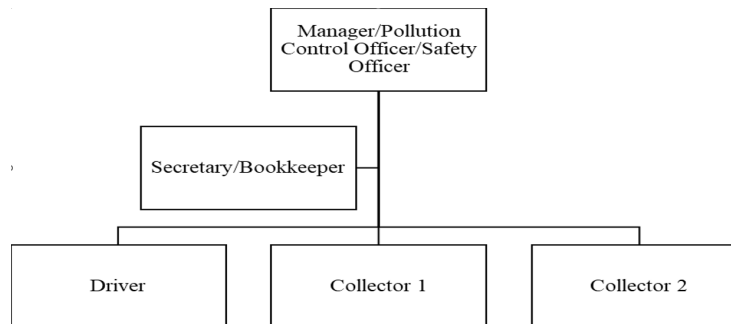


Figure 2. Organizational Chart

As can be seen in the chart, the manager has the highest authority in the business and will handle the roles of a Pollution Control Officer and the Safety Officer simultaneously. As the top management, the manager will give instructions directly to the rest of the employees and will provide the final decision. The second in line who will receive instructions from the manager but will also be relaying some to the rest of the employees is the secretary. Considering the size of the business and the number of personnel, the secretary will also be the bookkeeper of the organization who will prepare the payroll and document the expenses made. The Driver will be responsible for the safe transport of the hazardous waste, while the two collectors will be responsible for the assessment of the waste whether or not it is properly sealed, labeled and collected. The driver, together with the two collectors will receive instructions from the manager and the secretary, in

the absence of the manager. The table below presents the estimated annual salaries and wages, and expenses which will be received by the five employees for the first year of operations amounting to ₱1,179,600.

Table 4
Annual Salaries and Wages for the year 2022

Personnel	Salary	13th and 14th Month Pay	Cash Gift	Hazard Pay	Annual Gross Pay
Manager	₱276,000.00	₱46,000.00	₱5,000.00	₱0.00	₱327,000.00
Secretary	193,200.00	32,200.00	5,000.00	0.00	230,400.00
Driver	138,000.00	23,000.00	5,000.00	41,400.00	207,400.00
Collector 1	138,000.00	23,000.00	5,000.00	41,400.00	207,400.00
Collector 2	138,000.00	23,000.00	5,000.00	41,400.00	207,400.00
Total	₱883,200.00	₱147,200.00	₱25,000.00	₱124,200.00	₱1,179,600.00

On top of this, the employees will also enjoy the benefit of being full-time workers with SSS, PhilHealth, and HDMF benefits.

Moreover, the total estimated time spent on the preparations before the commencement of HazClean Environmental Solutions is at least six months.

Strategic. The mission of the business is to provide a safe and quality collection and transportation of hazardous wastes generated by households in Mexico, Pampanga. It is also envisioned to be the number one hazardous waste transporter in Pampanga by 2027. It also developed specific objectives, key result areas, and performance indicators to address and meet the main goal of the business.

Various strategies and plans were developed such as contingency plans when accidental spills happen, fire and natural disasters occur, in times of a pandemic, and when cases of theft or sudden absence of employees happen. Further, alternative plans and exit strategies such as liquidating all assets and pay the remaining obligations to the employees and creditors were also determined.

Financial. The researcher computed the projected financials of the proposed business using a five-year period from 2022 to 2026, it also included the figures from the second half of the year 2021 to present the pre-operating expenses incurred amounting to ₱53,022.50. Below is the projected net income from 2022 to 2026.

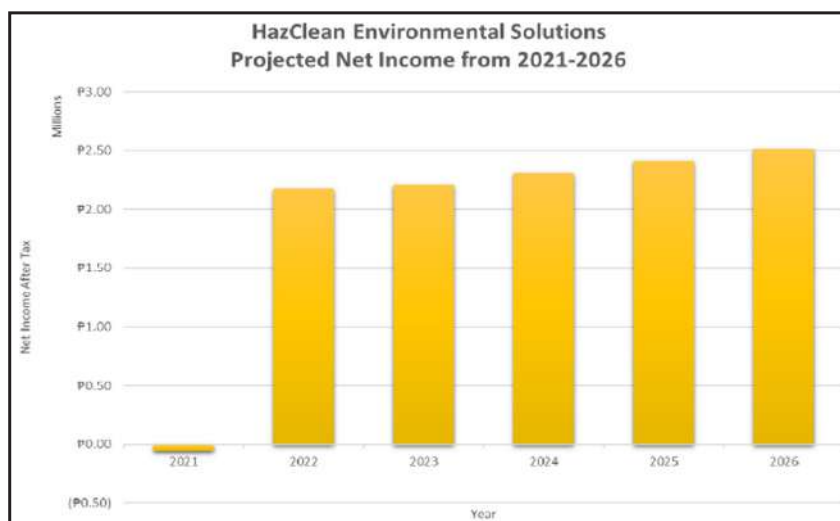


Figure 3. *Projected Net Income of HazClean Environmental Services from 2021 to 2026*

As can be gleaned from the chart above, the net income is gradually increasing from the first year of operations to the end of the last year of the projection. It can be interpreted that the business has a promising future. The next figure is the summary of net cash flows from 2021 to 2026.

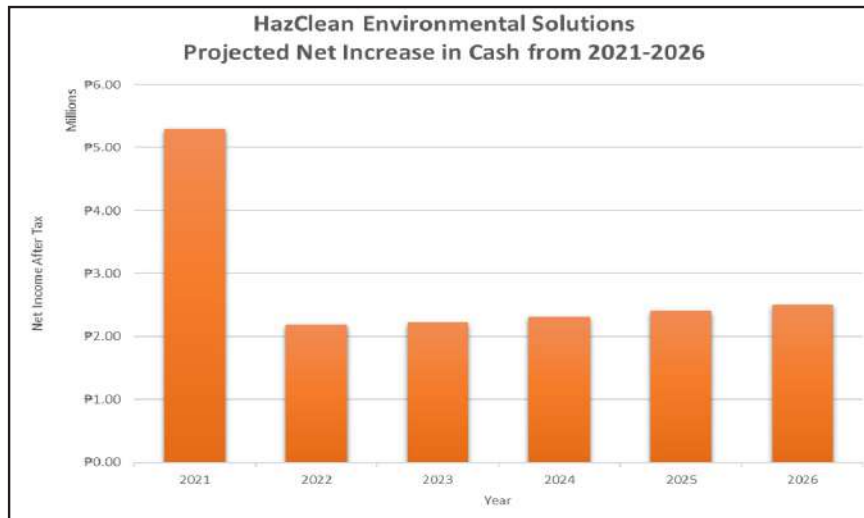


Figure 4. Projected Net Cash of HazClean Environmental Services from 2021 to 2026

The chart shows that the net cash in 2021 is higher because of the major cash inflow, the initial capital of ₱7,055,284 was invested in that year. The commencement of the business started in January 2022 and it can be observed that the net cash has an increasing trend until the year 2026. In connection with the increase in cash, the total assets, liabilities, and equity is presented below.

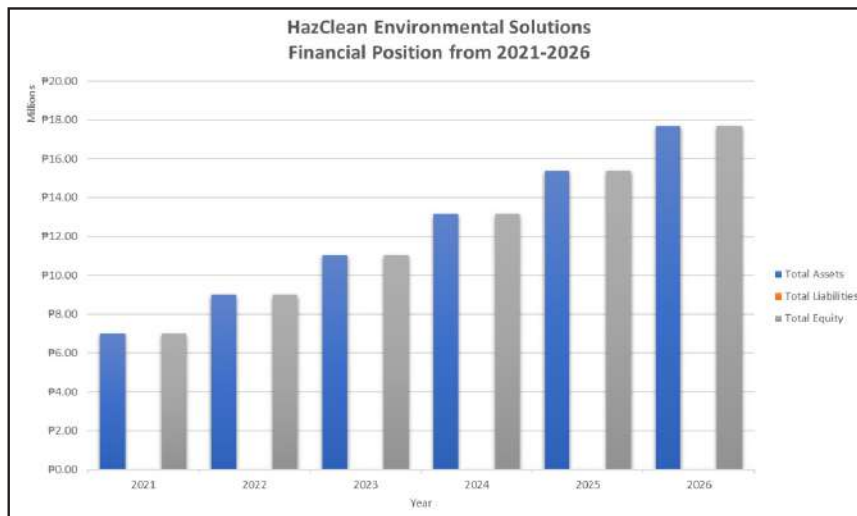


Figure 5. Projected Financial Position of HazClean Environmental Services from 2021 to 2026

It can be noted that the total assets and the total equity from the years 2021 to 2026 are equal. This is because the business uses the cash basis accounting method which recognizes the income and expenses at the time of cash inflow and cash outflow, respectively. Also, the business did not take out loans to finance its operations from the start.

An analysis of the financial statements was also made and the results are as follows: a return on investment of 30.80% in 2022 and it increased to 35.64% in 2026; a payback period of two (2) years and 11 months; and a net present value of ₱4,210,115.56 which is positive and can be considered a good investment.

Socio-Economic Responsibility. HazClean Environmental Solutions belongs to the waste management industry as a registered hazardous waste transporter in the country. Its prime objective is to give a solution to the uncontrollable rise in the improper disposal of the medical wastes consumed by households. The proposed business is found to be beneficial to customers by giving quality yet affordable services, to employees through the salaries, benefits and other incentives received, to suppliers for the regular continuous transactions and deals to be closed with them, to the owner for the net income from the operations, to the community and the church through sponsoring of programs, tithes and offerings, and monetary donations, and to the government, for the additional revenue it will receive through taxes and paying various of licenses/fees.

Conclusions and Recommendations

After a thorough analysis and evaluation of the viability of the study, it shows that there is a good market share according to the marketing study done. The technical study supports that the business is profitable as the benefits exceed the total costs. The organizational and human resource assures quality service to its customers, with trained and capable workers. The financial study proves that the implementation of the proposed project is viable and feasible as it presents profitable results from 2022 to 2026. The proposed business is not only responsible for the needs of its customers which will generate profit, but also for the furtherance of God's work. Therefore, it can be concluded that the proposed business is theoretically feasible.

Based on the findings and conclusions, the researcher recommends that the proposed business entitled "Establishment of Hazardous Waste Transporter Company in Mexico, Pampanga" be implemented in January 2022.

References

- Cabico, K.G. (2020). *In the Philippines, medical waste piles up as COVID-19 cases rise*. <https://earthjournalism.net/stories/in-the-philippines-medical-waste-piles-up-as-covid-19-cases-rise>
- Census of Population (2020). "Region III (Central Luzon)". *Total Population by Province, City, Municipality and Barangay*. PSA.
- DENR Administrative Order No. 2013-22 (2013). *Revised procedures and standards for the management of hazardous wastes* (Revising DAO 2004-36). <https://emb.gov.ph/wp-content/uploads/2018/06/dao-2013-22.pdf>
- Department of Environment and Natural Resources. (2021). *DENR Renews Call for Proper Disposal of Used Face masks*. <https://www.denr.gov.ph/index.php/news-events/press-releases/2438-denr-renews-call-for-proper-disposal-of-used-face-masks>
- Department of the Interior and Local Government - Philippines. (2020). *Memorandum Circular No. 2020-071*. https://www.dilg.gov.ph/PDF_File/issuances/memo_circulars/dilg-memocircular-202049_cfaebca293.pdf
- Environmental Management Board – Philippines. (2020). *List of Hazardous Waste Transporters as of May 2020*. <https://emb.gov.ph/wp-content/uploads/2020/06/List-of-HW-Transporters-May-2020-for-posting.pdf>
- Mmereki, D., Baldwin, A., Hong, L., & Li, B. (2016). *The Management of Hazardous Waste in Developing Countries*. <http://dx.doi.org/10.5772/63055>

- MCF Environmental Services. (n.d.) *4 Best Practices for Medical Waste Disposal and Transportation*. <https://mcfenvironmental.com/what-are-4-best-practices-for-medical-waste-disposal-and-transportation/>
- Narbarte, M. (2015). *A Module on Business Research with Project Feasibility Study Writing The Easier Way*. Adventist University of the Philippines.
- New Hampshire Department of Environmental Services. (2020). *How to Properly Dispose of Disposable Masks*. <https://www.des.nh.gov/blog/december-2020-how-properly-dispose-disposable-masks>
- Parker, L. (2021). *How to stop discarded face masks from polluting the planet*. <https://www.nationalgeographic.com/environment/article/how-to-stop-discarded-face-masks-from-polluting-the-planet>
- Peng, Y., Wu, P., Schartup, A.T., & Zhang, Y. (2021). *Plastic waste release caused by COVID-19 and its fate in the global ocean*. PNAS November 23, 2021 118 (47) e2111530118; <https://doi.org/10.1073/pnas.2111530118>
- PhilAtlas (2015). *Mexico: Province of Pampanga*. <https://www.philatlas.com/luzon/r03/pampanga/mexico.html>
- Philippine Statistics Authority. (2022). *Q1 2019 to Q4 2021 National Accounts of the Philippines*. <https://psa.gov.ph/sites/default/files/4th%20Quarter%202021%20National%20Accounts%20of%20the%20Philippines.pdf?fbclid=IwAR2ImG4VdBVp-BghC0qqRYEUIsq2LrB0s5hB8ZFA6EWjnjd7-nbRUvRnw>
- Sangkham, S. (2020). *Face mask and medical waste disposal during the novel COVID-19 pandemic in Asia*. <https://doi.org/10.1016/j.cscee.2020.100052>
- Sharma, H. B., Vanapalli, K. R., Cheela, V. S., Ranjan, V. P., Jaglan, A. K., Dubey, B., Goel, S., & Bhattacharya, J. (2020). Challenges, opportunities, and innovations for effective solid waste management during and post COVID-19 pandemic. *Resources, Conservation, and Recycling*, 162, 105052. <https://doi.org/10.1016/j.resconrec.2020.105052>
- U.S. Environmental Protection Agency (2016). *Backyard Burning*. <https://archive.epa.gov/epawaste/nonhaz/municipal/web/html/index-3.html>
- Research and Markets (2021) *Waste Management Market by Waste Type, by Service – Global Opportunity Analysis and Industry Forecast for 2021-2030*. <https://www.prnewswire.com/news-releases/global-waste-management-market-2021-to-2030---by-waste-type-service-and-region-301413066.html>
- Yeh, J. (2020). *Where did 5,500 tons of discarded face masks end up*. <https://www.greenpeace.org/international/story/44629/where-did-5500-tonnes-of-discarded-face-masks-end-up>



RESEARCH OFFICE
Adventist University of the Philippines
www.aup.ph/urc/aupresearchjournal