



THE ANALYSIS OF CURRENT OPERATION PROBLEMS AND APPLICATION
OF TRACKING AUDIT IN ENGINEERING COST OF EXPRESS DELIVERY
COMPANY IN KUNMING, PEOPLE'S REPUBLIC OF CHINA

By
Mr. Yue HUANG

A Thesis Submitted in Partial Fulfillment of the Requirements
for Master of Engineering ENGINEERING MANAGEMENT
Department of INDUSTRIAL ENGINEERING AND MANAGEMENT

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Tracking Audit in Engineering Cost of Express Delivery Company
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The purposes of this research were (1) To analyze the problems existing in the current operation and the application of tracking audit in engineering cost, (2) To analyze to compare the similarities and differences of engineering activities that take place within an the express delivery company, and (3) To propose ways to reduce the engineering costs of the express delivery company in Kunming, the People's Republic of China. The key information is 16 people owners of businesses or assigned managers, experienced team members, and employees, with two groups selected from each company. All informants had at least 3 years of experience in managing or operating the express delivery company. The research tool is the semi-structured interview and content analysis,

The results of problems of the express delivery company from 2 groups of key informants, have 12 factors as follows: (1) competition situation, (2) last-mile delivery, (3) business owners lack sufficient funds, (4) regulatory challenges, (5) operational efficiency (6) measures to protect against COVID-19, (7) air and water transportation, (8) environmental concerns, (9) disruptions and external factors, (10) data security and privacy, (11) security and fraud, and (12) the monopoly of shipping.

Results of the application of tracking audit in engineering cost can be summarized in eight factors as follows: (1) logistics communication, (2) customer service, (3) procurement, (4) managing the transportation, (5) warehouse management and storage, (6) feedback, (7) material handling, and (8) packaging and packages. These steps will help reduce transportation costs and achieve long-term success.

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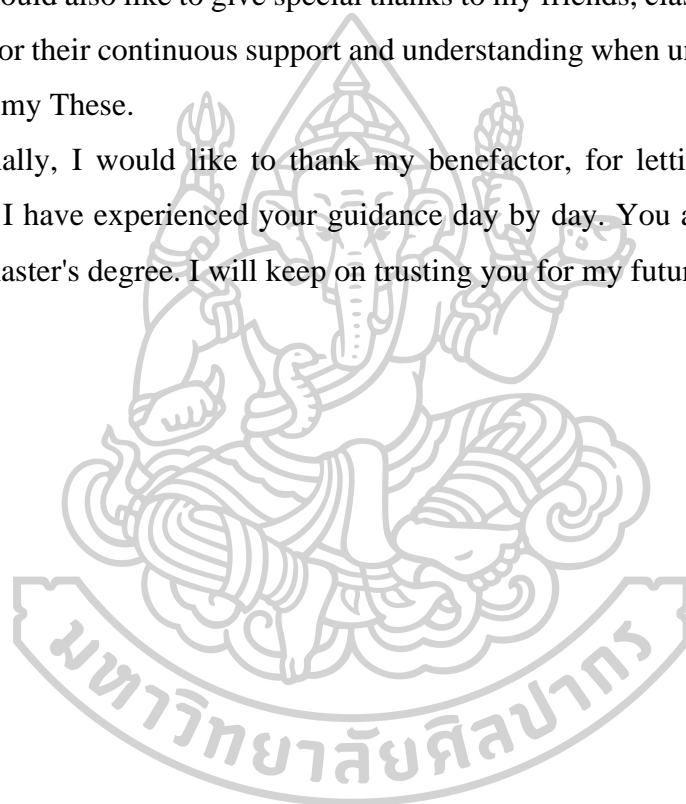


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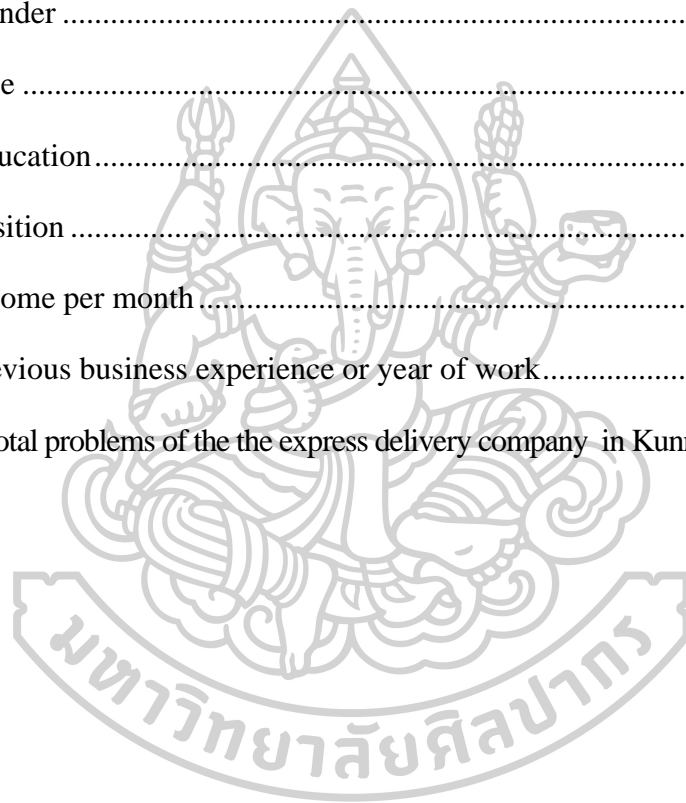
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CHAPTER 1

INTRODUCTION

1.1 Research Background

China's rapid economic growth also caused some problems at the same time, to avoid major investment projects, the engineering construction projects "high low yield" and "jerry-built projects", the audit institution reform in the previous post audit way, advocates the advance, the whole process of tracking audit approaches, the resulting tracking audit. Up to now, the research on the whole process of tracking audits has not stopped. Tracking audits are mostly used in real estate development and construction projects. In the project process, auditors can give audit opinions in time, solve problems in time, reduce risks, and effectively prevent potential huge losses. It can be seen that the whole process of tracking audits plays a very significant role in the actual work (Hao, 2022).

Under the rapid development of the economy and the acceleration of the country's urbanization process, more large-scale construction projects have emerged, and the ensuing increase in project quotations. In the actual construction process, due to various reasons, the project volume is large and uncontrollable factors affect the overall cost level, so there will be many problems, such as the lack of scientific quality management, the inability to find existing defects, and safety hazards in time.

These are the main factors that cause hidden risks in engineering construction and affect the cost level of the entire construction project, which in turn leads to high costs. At the same time, it will also be the main factor that restricts the quality, safety, and cost of project construction (Wenlong, 2017). To ensure the smooth progress of the entire construction project and eliminate unnecessary or meaningless waste of funds, the project cost needs to carry out follow-up audits to effectively control the cost of the construction project. Setting up the project cost tracking audit is not only conducive to defining the audit objectives, and ensuring the audit direction but also to organize the audit management system, which requires the use of necessary correction audit list plan content, the implementation of real-time element distribution in the flow link, the

implementation of necessary scale expansion tasks, and the effective implementation of national regulations (Yiqun, 2016).

The traditional audit work is to collect and sort out the list of materials and equipment consumed in the construction of the project, the settlement of personnel wages, etc. after the completion of the project. During this process, it is also necessary to audit the cost, mainly to analyze whether the use of these funds in place, whether it is in line with the actual needs, the placement of the remaining funds after the completion of the project, etc., audit the construction drawings of the project and conduct corresponding audits and supervision on the project cost.

This is what we often call the completion of the audit, which is not conducive to If the problems existing in the project are discovered in time if the audit of the construction project cost is not enough, it will cause unnecessary losses, have a great impact on the quality of the project, and even affect the progress of the construction project. This kind of audit belongs to the post-project work. Due to the relatively long operation period of the project, illegal activities such as cutting corners and exploiting loopholes in the project process cannot be discovered in time, and it cannot improve the economic benefits of the construction project and maximize economic benefits (Ting Ma & Jie Ma, 2013).

Projects management need to arrange follow-up audits during the progress of the project, to ensure that problems can be found in time during the progress of construction projects. At the current stage of a continuous deepening of urban modernization, construction projects are also showing greater complexity, especially the increasing number of large-scale and large-scale engineering projects, which makes construction management work face huge challenges (Yiqun, 2016). The control of project cost directly affects the efficiency and quality of project cost management to a large extent. For the construction of construction projects, the construction period is long and generally requires enterprises to be able to control all the conditions of the entire project at any time, track, and audit. It can not only provide information and data support but also play a role in monitoring and controlling the project.

Therefore, the follow-up audit in the project implementation came into being. Tracking and auditing can run through the entire process of the entire project, based on

the project. Budget and cost management, by determining the project cost, in the project design stage, carrying out cost determination, estimation, calculation, control, and evaluation, and using various methods to Items controlled (Xia, 2019). Therefore, construction projects should establish an independent project cost-tracking audit mode, establish a sound cost supervision system, and comprehensively analyze the project budget implementation in combination with the implementation effect of the procurement budget, to ensure the smooth progress of the project.

According to the interpretation of follow-up audit, we can define the follow-up audit of construction project cost: it refers to the audit organization and personnel conducting a follow-up investigation at the beginning of the project, discovering the defects in the project implementation process, making reasonable adjustments, and timely Identify problems and propose reasonable solutions to the problems to achieve the cost management objectives of construction projects. In this way, the reasonable supervision and inspection of the project cost can ensure that the project cost can guarantee the quality of the project in the actual application process, thereby ensuring the cost management quality of the construction project (Jiang, 2019).

Engineering projects often encounter various problems, such as illegal construction, inefficiency, and failure to meet expectations. These issues hinder the growth of the industry and lead to increased competition and a declining market. Meanwhile, rising land prices and wages result in higher costs for the real estate industry, which ultimately leads to skyrocketing housing prices that burden consumers. Therefore, it is crucial to rationalize engineering project costs and improve construction efficiency in order to strengthen the long-term market position of real estate projects (Hao, 2022). Despite the importance of tracking model utility ratios, this process is not widely popular in some countries. Instead, many companies rely on traditional financial audits to verify project completion, often for small-scale engineering construction. However, this approach may result in rework, repair work, loss, and compensation, as the construction of engineering projects always carries risks. Thus, a comprehensive tracking audit of engineering costs throughout the entire process is essential to minimize such risks and ensure successful project completion (Jun, 2021).

This research analyzes the composition of the project quality control system, as well as the basic theories and methods of cost audit and supervision, The role of project cost tracking audit is used to evaluate the importance and influence of audit in the whole process of engineering projects. To ensure that the project construction work can be carried out smoothly, and at the same time, control the false situation of the project cost, we will focus on the design links that have a large impact on the project cost to ensure that all links in the construction project can be effectively implemented. The audit estimates the project quantity, determines the project cost and construction cost, and then carries out the project settlement and settlement.

Express delivery companies must monitor and evaluate their performance continuously throughout the delivery process to ensure timely problem resolution. This includes addressing internal organizational issues, as well as improving work processes, transportation, and delivery services for customers. The management of such companies face several challenges, including controlling transportation costs, ensuring timely delivery of products to customers, and dealing with unfavorable external transportation conditions that can cause delays. Overall, organizations must effectively monitor and control all aspects of their operations, providing support and information as needed to ensure successful project management.

This research aims to analyze the problems that exist in the current operation and application of tracking audit in engineering cost, and compare the similarities and differences of engineering activities within the express delivery company. It also aims to predict problems related to the application of tracking audit in engineering cost, and compare tracking and inspection. The research suggests that using tracking audit can be a backup plan for work mode planning and can increase operational efficiency. Currently, the project cost is being monitored through tracking.

1.2 Research Objectives

1.2.1 To analyze the problems existing in the current operation and the application of tracking audit in engineering cost of the express delivery company in Kunming, the People's Republic of China.

1.2.2 To analyze to compare the similarities and differences of engineering activities that take place within an the express delivery company in Kunming, the People's Republic of China.

1.3 Research Scope

This research examined only the costs associated with engineering activities incurred by the express delivery company. Using engineering costs analysis to the problem existing in the current operation for improvement to reduce overall engineering costs of the express delivery company in Kunming, the People's Republic of China. The researcher classified the scope into 4 aspects as follows:

1. The scope of the population is the owners of 1 express delivery business operating in Kunming, the People's Republic of China.
2. The scope of content is to focus on the analysis of the problem existing in the current operation and the application of tracking audit in engineering cost of the express delivery company in Kunming, the People's Republic of China.
3. Area boundaries; The researcher defined the area in this study as the express delivery company in Kunming, the People's Republic of China. There is a company in Kunming for the case study.
4. Scope of time; Data collection between June 2023 and December 2023.

1.4 Expected Results

1. Know the results of analyzing the problems existing in the current operation and the application of tracking audits in engineering cost of the express delivery company in Kunming, the People's Republic of China.
2. Know to results of comparing the similarities and differences of engineering activities that take place within the express delivery company in Kunming, the People's Republic of China.
3. Know the results of the proposed ways to reduce the engineering costs of the express delivery company in Kunming, the People's Republic of China.

1.5 Research Contribution

1. Take the results of the research into strategic planning and improve the engineering cost operation plan of the express delivery company in Kunming, the People's Republic of China
2. The current guidelines or operational strategies to reduce the company's engineering costs, to have long-term competitiveness.

1.6 Definition of Terms

The application of tracking audit in engineering cost means a method designed to help companies track the cost involved in the production of customized and individual jobs or projects. This is a suitable approach for the job order the express delivery company, where the production is done according to the customer's requirement.

The express delivery company refers to the fastest form of shipping. The customer pays an extra shipping cost for this type of delivery, as the shipment will get transported to him anywhere between 24 to 72 hours. Delivery by express is the fastest delivery method.

Cost means expenditures that are incurred or expected to be incurred and that result in a business benefiting or returns in the form of assets or services. The costs incurred by the business can be considered separately by usage. Benefits that can be obtained over time include (1) planning, (2) decision making, (3) cost control, and (4) revenue measurement.

CHAPTER 2

LITERATURE REVIEW

The related literature will be reviewed carefully. The research focuses on analyzing current operational problems and the application of tracking audits in the engineering cost of the express delivery company in Kunming, the People's Republic of China. The researcher has reviewed the concept. Theories and related literature can be summarized as follows;

2.1 Express Delivery Business Context

2.2 Express Delivery Operational Analysis

2.3 Tracking Audits in the Engineering Cost

2.1 Express Delivery Business Context

2.1.1 Introduction

China is known as the commercial center of Asia, one of which is Kunming, located in Yunnan province. It is a promising market for imported goods and services worldwide. Especially products produced by foreign investment entrepreneurs. Which quickly invested in Kunming until becoming the number one important retail market in China.

Kunming is the capital city of Yunnan province. It is China's fourth-largest port after Shanghai, Beijing, and Guangzhou, where the Chinese authorities intend to serve as a gateway to Western trade. After developing the R3A route, the silk road connecting China-Laos and Thailand was established in 1995 under the project "Economic Square," and was officially launched in 2008 onwards, with a distance of approximately 1,240 kilometers from Chiang Rai province to Kunming. It is also a path to develop trade, investment, and logistics for quality, increasing the competitiveness of entrepreneurs, and seeking new markets to increase as well as developing supply chains to support the linkage of countries in the Mekong sub-region. Promote the diverse Lanna culture and social capital. Both are culturally linked with neighboring countries in the Mekong sub-region at the same time.

This area is targeting logistics hubs to trade with allies who want to enter the Chinese market. About 4 million citizens have taken up trading careers in Kunming. While the population of Yunnan is 45 million people, they see trade opportunities and foreign businessmen who want to penetrate this market; in addition to general roadside stalls, Images of cyclists peddling goods can still be seen because it is a traditional selling culture that the Kunming people have done since the past.

Nowadays, this is a world of free trade. The Yunnan authorities saw the potential for trade in the city. Kunming has been renovated into a "new city" along with the installation of important infrastructure such as the airport. A large electric train project that is expected in the next 2 years, all construction plans will be completed. For the "port city" of this support for trade that will flow continuously. The business in Kunming that has grown exponentially over the past 10 years is mining hydropower plants, pharmaceuticals, real estate, and retail.

From 2004 until now Kunming has been moving towards "New Kunming" to become a city of economic and commercial importance in the region. Kunming places the most significant emphasis on human resource development. In 2010, Kunming traded with 205 countries with a total trade value of 1.7 billion US dollars with Latin America. While the total trade value with Asian countries is 5,060 million US dollars, Kunming's major international trade markets are spread across Asia. The top 5 trading partners are ASEAN countries, European Union, Peru, India, and Australia.

The Kunming municipal government has formulated the 2011-2015 Logistics Modernization Development Plan for Kunming and has prepared a budget of 1.12 trillion yuan to develop Kunming into an inter-China distribution center. Inland and ASEAN or the government in Kunming are called "Network 1234", with the number 1 referring to the logistics connection between the central cities of Yunnan Province to reach each other within 1 hour. Number 2 means the link of 2 oceans, namely the Pacific Ocean and the Indian Ocean Number 3 means the connection of 3 regions, namely East Asia Southeast Asia, and South Asia, and number 4 means connecting and expanding logistics management around the 4 directions.

2.1.2 The construction plan

The construction plan, known as the "1951 Construction Plan," includes one international inland port city economic zone and nine major logistics routes that connect both domestically and internationally. In particular, five large strategic logistics joints and one international port logistics information center, which contains the following information (Ministry of Commerce Department of International Trade Promotion, 2017)

1) Kunming City logistics zone 5 districts, As follow:

1.1) the Jinning Logistics zone, The Jining economic and technological development zone is situated in the western part of Jining city, on the western side of the Beijing-Hangzhou Grand Canal. The core area of the zone comprises of two towns - Tuanli and Maji. The area is served by Jining Qufu Airport, which currently operates 12 domestic airlines. The Jinan Railway Bureau has built a rail-water intermodal logistics park with an annual throughput of 10.6 million tons in the area. The development zone is crossed by Xinshi (Xinxiang-Rizhao) railway, and Ridong (Rizhao-Dongming) and Jixu (Jinan-Xuzhou) expressway. There are four main industries in the development zone: equipment manufacturing, modern services, new energy and materials, and commercial logistics.

1.2) Wangjiaying logistics zone, Wangjiaying central station of China United International Rail Containers Co., Limited, Kunming Area, is collaborating with Qingbaijiang Area, Jinan Area, and Qinzhou Port Area, while also coordinating with other platforms such as national areas, comprehensive bonded zones and cross (border) cooperation zones. The China-Laos Railway has achieved its phased goals of increasing the volume, optimizing the stock, and improving the quality of its services, which has paved the way for building a "golden" route connecting Southeast Asia and Northeast Asia. With the first international freight train operating on the China-Laos Railway, goods from provinces and cities such as Sichuan, Chongqing, Shanghai, Guangdong and others, are being assembled in Kunming and transported to South Asian and Southeast Asian countries.

Other services such as international cold chain trains, the Lancang-Mekong Express, and market purchase trade, have also been launched successfully. As of March 4, the China-Laos Railway has handled about 1.7 million passenger trips,

1444 international freight trains and transported over 39 thousand metric tons of cargo, worth about 1.13 billion yuan.

The Management Committee of the Kunming Area of China (Yunnan) Pilot Free Trade Zone has recently signed cooperative agreements with Jinan Area, Qingbaijiang Area, and Qinzhou Port Area. The agreements aim to establish a regional container distribution center that will integrate railway logistics to assemble goods from provinces such as Yunnan, Sichuan, Shandong, Guangxi, and others. This will connect with the China Railway Express and the China-Laos Railway for efficient transportation of goods.

1.3) Airport logistics zone

The airport features a vast logistics zone that provides support for cargo transportation and operations. This zone includes multiple facilities for handling cargo, customs clearance, warehousing, and other related services. Kunming's strategic location in Southwest China makes the airport a critical hub for trade between China and neighboring Southeast Asian countries. The logistics zone at Kunming Changshui International Airport plays a crucial role in facilitating trade, especially under initiatives such as the Belt and Road Initiative (BRI), which promotes connectivity and economic cooperation between China and other countries.

1.4) Songming logistics district

Songming County is situated in the central part of Yunnan Province, and northeastern Kunming, at the intersection of the temperate, warm temperate, and north subtropical zones. It is the origin of the three rivers, namely Panlong River, Niulan River, and Nanpan River. The county shares borders with Malong County in the east, Yiliang County in the south, Guandu District in the southwest, Panlong District in the west, and Xundian County in the north. Songming County is located at the western edge of Yunnan Guizhou Plateau, with more mountains and less land, covering an area of 1357.29 square kilometers. The terrain slopes from northwest to southeast, and the mountains and rivers spread in the north-south direction, making it a mountain valley of the Yunnan-Guizhou Plateau. The county has a mixed climate, typically of temperate, warm temperate, and north subtropical zones.

1.5) the Anning logistics zone.

The Anning Logistics Zone is an important logistics and transportation center located near Kunming in Yunnan Province, China. It is strategically situated in proximity to the Kunming Changshui International Airport (KMG) and serves as a crucial part of the regional logistics infrastructure. The logistics zone is specifically designed to facilitate warehousing, distribution, and other logistics-related activities. Being located so close to the airport, it is ideal for the efficient transportation of goods, particularly for air freight.

The Anning Logistics Zone is a crucial part of efforts to improve trade connectivity and logistics efficiency in the region. Equipped with modern facilities and infrastructure, its primary goal is to provide support to businesses involved in import-export operations, manufacturing, and other industries that require efficient logistics services. The zone's extensive networks make it a significant hub for regional trade and logistics operations, playing a vital role in the economic development of Yunnan Province and the broader Southwest China region.

2) Fourteen exhibition centers: Luosiwan international trade center, logistics center Panlong, District agricultural logistics center, and the Dounan international flower trade logistics center. Tobacco delivery center steel material delivery center and tea delivery center, including warehouses and freezing rooms such as food warehouses, rubber, cold storage, pharmaceuticals, and electrical appliances.

Therefore, the 5 logistics zones mentioned above It is located along two main transportation routes, which are very important for China's economic development strategy in linking it with other countries in Asia. Luosiwan International Trade City Project, The Luosiwan International Trade City Project is the most important project in the southwestern area of the People's Republic of China. Luosiwan is a large wholesale center and a transport hub in the southwestern part of the country. Located between the new city of Kunming (Chenggang) and the old city of Kunming. The project started construction in 2008 and is China's second-largest wholesale market. Modeled from the wholesale market of Yiwu. Zhejiang province is the country's largest. The construction plan in various parts is a wholesale center, an exhibition center, a

warehouse, and a complete logistics management system within the same area (Waitayasewi, 2019).

Luosiwan is managed by one of the most advanced technology systems in China. This project has a total area of 12,000 mu, or approximately 5,000 rai, and is constructed in various buildings. Covering an area of 12 million square meters, the project has invested more than 58 billion yuan (about nine billion US dollars). This wholesale center is very important to Kunming. An electric train station was built to transport passengers from the old city of Kunming to trade in the center. And there is an intercity bus station near the center to create convenience for service users.

The Luosiwan international trade city project is divided into 3 phases. Phases 1 and 2 have been completed and are in operation. Phase 3 construction started on August 18, 2010, and is expected to be completed soon. Recently, because China has unlimited labor. And this project has full support from the central government. Because it will be a restructuring of the economy, industry, and services in the western area of the People's Republic of China. It is also one of the projects that promote and support Kunming as the hub of the region.

The third phase of the project is the construction of buildings totaling 5 million square meters. On an area of about 1,250 rai, an investment of about 15,000 million yuan will be divided into three buildings, the main area of the shopping center. The new business center (Central Business District: CBD) and residential, when completed, is expected to receive a large number of responses from Chinese entrepreneurs.

The survey revealed that over 100,000 small and medium-sized enterprise entrepreneurs engage in daily buying and selling, while tourists visit every day. It is expected that there will be approximately 4-5 hundred thousand more customers, with 2 types of customers: people from different cities. Within Yunnan itself, who came to buy products to be distributed to various cities? and businessmen from other provinces across the People's Republic of China. Travel to buy products to be distributed to their own residence.

The fact that Luosiwan, wholesale market is a large wholesale center. There are a variety of product categories and quality. Operating in this way can meet

the needs of buyers in each category as well as being efficient in management, which can help reduce costs for entrepreneurs. At the same time, it is ready to be a distribution center and gathering manufacturers both from China and countries around the world. Including diverse customer groups, whether an entrepreneur, consumers in general, and tourists, because this center has an ideal location. There is convenience in transportation, which is the advantage of this wholesale center.

For the part related to Thailand. Thailand and China have concluded a Thai-China Free Trade Agreement (Thailand-China Free Trade Area), which contributes to Thailand gaining more trade benefits with China. Whether, it's about exporting products, or importing raw materials, especially in some industries in Thailand. They still have to rely on raw materials imported from China. There may be a production base or parts factory in China. However, Thailand still faces the problem of high import tariffs.

In terms of logistics between each other, R3A has been linked between 3 countries, namely Thailand-Laos-China, to expand and promote trade/investment in transportation because Kunming is an important link and route of this highway.

2.2 Express Delivery Operational Analysis

2.2.1 Introduction

The express delivery company began to play a role and became widely known. Transport and service business trends have received a lot of attention in the past fifteen years. It not only helps drive major industrial businesses but also helps transport goods and services of small entrepreneurs diversify services from B2B (Business-to-Business) to B2C (Business-to-Customer) businesses.

Express delivery operations in China need to be in a more intense business environment. Especially in trade and service, reducing operating costs, improving service levels, and increasing business sales opportunities is a priority. Developing an efficient transportation system is crucial to enhancing competitiveness. Presently, transportation development aims to ensure prompt delivery and reduce transit duration of goods. It is an indicator of the efficiency of the transport of both the transport employer and carrier but at the same time, customers also have the habit of ordering

products more often and the number of products ordered is reduced to want to reduce the cost of keeping inventory causing the transportation to be less than full cars in each trip more. It has had a huge impact on modern-day transportation providers. Makes the administration more difficult.

2.2.2. Current situation operation problems

This increase in operating costs of carriers also affects the cost of carriers as well. Therefore, it is important to find ways to increase efficiency that are appropriate and mutually beneficial for all parties. It is necessary to work in many countries. The concept of cooperation is used to improve transport efficiency because it is an efficient and sustainable transport development model.

China has also begun to pay attention to the concept of cooperation in freight forwarding in the development of transportation systems. However, the development of cooperation has not been as successful as it should be. It may be because many organizations in China still adhere to the same concepts and work processes that have been practiced in the past with the nature of working alone. In addition, there are quite a few collaborations with other organizations, so developing logistics efficiency through cooperation concepts has not yet been successful (Shan et al. 2021).

2.2.3 Attractive China's transportation business

Nowadays is an era of disruption, and the operation in the business sector is fast. In addition, many businesses in China have applied innovation to reduce operating costs. Focus on the speed of service delivery, operational efficiency, and customer satisfaction. These are all reasons that make the transportation business one of the businesses that entrepreneurs are interested in investing in, which can be summarized into 3 main points as follows:

- 1) Consumer behavior is increasingly on online channels.

In the past, the establishment of a service business often resulted in the establishment of new businesses continually. For this year, the express delivery business has stepped up instead. To facilitate the growth of e-Commerce, it's necessary to provide online delivery services for products and services. Nowadays, many people prefer to shop and make orders online. Even in China, convenience stores have introduced a "24-hour Speed" service to deliver goods quickly.

2). The trend of retail and private transport is increasing.

At present, it has to be admitted that a large shipping business-like China Post still holds a market share of up to 55 percent and is number 1 in this industry. However, the growth of the E-Commerce the business has also made small logistics businesses come into play. It has been estimated that the market value of this group of transportation businesses averages 827 billion baht and has a growth rate of 20-30 % per year, because of consumer behavior in the digital age. In modern times, the business focuses on transportation to the convenience of customers, speed, and suitable prices. Therefore, all forms of business must adapt to agility under changing environments. Finally, it will result in a business being able to compete.

3) Create a career and distribute more income to the local people.

The growth of various businesses has resulted in the utilization of resources in the area for maximum benefit. People in the community have jobs and bring innovation or new knowledge to apply in operations to achieve efficiency. When more and more people turn to buy products and services through online channels.

The provision of transportation and cargo handling services, including joining as a partner with those online businesses will inevitably increase. This means that the number of delivery drivers or riders must be hired as well to support enough to meet the needs of consumers.

The growth rate of this profession is higher and more widespread. The opportunities for people in different areas to participate, which is another way to create jobs and generate income for people.

2.3 Tracking Audits in the Engineering Cost

2.3.1 Introduction

Production cost is an important factor that determines whether a product is cheap or expensive. Because the cost of production has many components that are the main factors in production, including materials, labor costs, and various utilities, reducing production costs. Therefore, it is very important to make the product cost

lower. or increase profits which has a positive effect on competitive efficiency in the industrial market. In particular, value engineering (VE) is the application of engineering principles to help analyze various processes. in operation. The main objective is to reduce production costs.

2.3.2 Cost of transportation

Can be classified into 4 types as follows:

1) Fixed cost is the cost or expense that does not change according to the volume of transport. Whether to produce or not to produce. This cost will occur in a fixed amount and will have to be paid at the same rate, such as rent, land, building, insurance, vehicle registration, and depreciation salary venue rental license fees, etc.

2) Variable cost. The cost has changed on change. According to the volume of transportation services, the cost of this type is also very high. If producing fewer transportation services, this cost is less, variable costs, such as fuel, repairs, and lubricants, etc. are not provided at all.

3) Total cost is the cost or expense that combines fixed costs and variable costs together. It cannot be separated from the cost of transporting goods or each service. How much is each type, such as rail transport?

4) Backhaul cost is the cost or expense that combines the nature of the opportunity cost of transportation of goods or services sent to the destination on the return trip; he did not carry anything back. It is assumed that waste has occurred, and it is considered to be non-economical transportation must be taken into account for the cost of the return trip.

2.3.3 Strategies to reduce transportation costs

The cost of transportation is one of the important costs because transportation is nowadays important to almost all types of businesses, causing in many businesses. The cost of production affects the total cost of products and services. The cost of the transport operator will be more or less depending on the factors involved in pricing the freight. Therefore, entrepreneurs need to plan various strategies to increase efficiency. and reduce transportation costs as follows:

1) Alternative energy strategies by changing the energy used in transportation from diesel or gasoline to biodiesel or CNG, the use of CNG gas is 60-70% more economical than oil consumption.

2) Strategies to change new modes of transportation or as a means of multimodal transport. Which is a combination of 2 or more modes of transportation under a contract or a single person responsible for transportation, which is the structure of the transport system. It can be divided according to physical characteristics into 5 types: road transport, rail transport, water transport, air transport, and pipeline transport or multimodal transport integration. In order to be able to keep up with the needs of customers, taking into account the transportation costs of the model various to be the most economical.

3) Distribution center strategy. Finding a location for collection and distribution centers various strategies that can be distributed and forwarded to nearby provinces or neighboring countries by organizing in the distribution center will help reduce transportation costs. Due to direct delivery to customers in other provinces without a collection center.

Many trucks are often transported back empty or not fully loaded, which can be resolved by setting up an efficient distribution center. A distribution network should be in place to collect goods and fill trucks or arrange vehicles that match the delivery location and quantity of goods.

4) Strategies for transporting goods both round trips and back. The transportation industry can improve efficiency by reducing idle runs during the delivery of goods, they will hit the car running empty back, resulting in a useless increase in the cost of assembly. The costs incurred are non-value-added costs, and these costs must be borne by the operator. Which is an important part of increasing the operating costs.

5) Strategies for using information technology systems. To help reduce logistics costs and increase the efficiency of the transportation management system (Transportation management system; TMS), which is a tool for planning transportation to achieve the goals of the transportation business, which is the fastest and most economical cost-one component of the TMS system is transportation management, which is

responsible for planning transportation operations, and another component, transportation efficiency, which assists in making decisions about cargo.

An arrangement of routes for maximum efficiency under various limitations is the heart of transportation. Businesses need to focus on delivering products quickly and keeping shipping costs as low as possible.

Therefore, transport operators need to consider a variety of factors that will help reduce transportation costs. The objective is not to affect the total cost of business, see Fig. 1, model of strategies to reduce transportation costs.

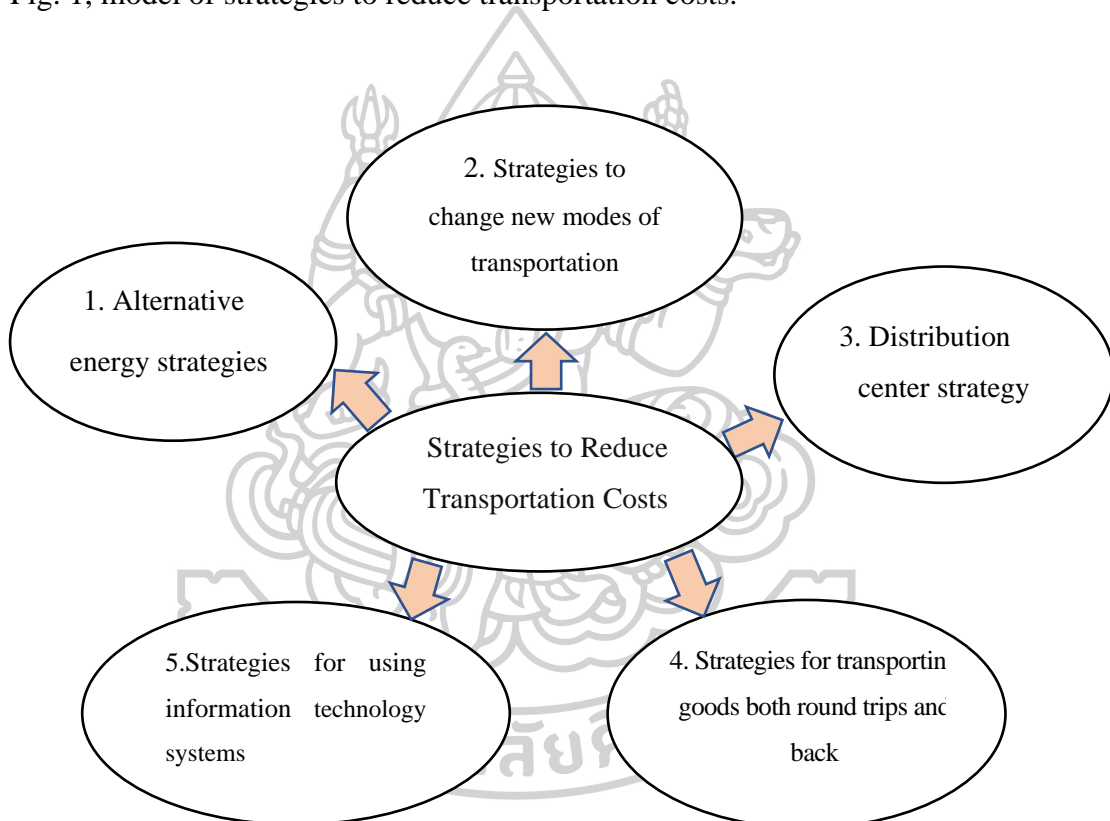


Figure 1 Model of strategies to reduce transportation costs

Source: Researcher (2023)

CHAPTER 3

RESEARCH METHODOLOGY

In this chapter, the research focuses on **the analysis of current operation problems and application of tracking audit in engineering cost of the express delivery company in Kunming, the People's Republic of China.**

The related literature will be reviewed carefully. The rest of this chapter is organized as follows.

Section 3.1 Describes research method.

Section 3.2 Explains research tools.

Section 3.3 Describes the research design for qualitative research.

The research design can be developed on the basis of the research objectives.

3.1 Research Method

This research methodology is divided into 3 parts as follows:

Firstly, the study reviews related works on engineering cost operations in an the express delivery company and analyzes current operational problems.

Secondly, we will suggest a different method for tracking audit in engineering costs and delve into its components. This method involves interviewing the business owner or manager and team members or employees to operate and understand their perspective on the application of tracking audits in engineering costs.

The research data is primary data obtained from the semi-structured interview form for the owner or manager of the express delivery company in Kunming, the People's Republic, and secondary data obtained from literature reviews.

Finally, the data through content analysis to comparing their similarities and differences of engineering activities that take place from the perspective of owners business and manager, and team members or employees within an the express delivery company with 8 related elements: (1) Logistics communication, (2) Customer service, (3) Procurement, (4) Transport management, (5) Warehouse management and storage, (6) Feedback (7) material handling and, and (8) Packaging and package, after which

summarizing the cost of application of tracking audit in engineering cost of the express delivery company in Kunming, People's Republic of China and perform unit cost analysis for some activities. Finally, to summarize the form of application of tracking audit in engineering cost of the express delivery company in Kunming. Then, the results are summarized.

3.2 Research Tools

3.2.1 Questionnaire about tracking audit in engineering cost.

The questionnaire will be created for literature review. It will be a semi-structured interview about the application of tracking audit in engineering cost, including of the express delivery company, related elements: (1) Logistics communication, (2) Customer service, (3) Procurement, (4) Transport management, (5) Warehouse management and storage, (6) Feedback, (7) material handling, and (8) Packaging and package.

The semi-structured interview will have audit tools from experts in accounting, tracking audits in engineering cost and service business management. The researcher utilized a questionnaire they had created and presented it to three academic experts for their review. The experts assessed the appropriateness of the language used in the questions and checked for consistency with the research purpose, a process known as item-objective congruency (IOC). There are 3 experts: (1) Assoc. Prof. Panitsupa Thampramuan, Ph.D. in marketing, Lampang InterTech College, Lampang Province, Thailand. She is an academic performance evaluator at the Higher Education Commission, Ministry of Higher Education, Science, Research, and Innovation, and has previously served as the Director of the Research and Development Institute at Thepsatri Rajabhat University, Lop Buri Province, Thailand. (2) Asst. Prof. Kajornsak Wongviraj, Ph.D. in management sciences. Faculty of Management Sciences, Lampang Rajabhat University, Lampang Province, Head of research plan for the network of researchers at Rajabhat University, Northern Group, as well as the National Research Council. And (3) Asst. Prof. Chutimun Sasong, Ph.D. in management, Faculty of Management Science, Department of International Business Administration. Chiangmai Rajabhat University, Chiang Mai Province. She has expertise in qualitative

research and participatory action research. It received funding from the Office of the Science Promotion and Innovation, and the Commission for Science Promotion and innovation research from Program Management Unit on Area Based Development (PMUA), National Research Council of Thailand.

To ensure reliability, the researcher analyzed the internal consistency model, using Rovinelli and Hambleton's (1976) criteria. The questions with IOC values between 0.50-1.00 were chosen, while those with values below 0.50 were reviewed or removed entirely. The semi-structured interview consisted of eight questions and had an IOC score of 0.89-1.00. For the consistency of the questions in this research, see Table 1.

Table 1 Content validity of the scale

Scale	Content validity
The semi-structured interview consisted of questions for in-dept Interview	Average total 0.89
Part 1 Demographic Gender, Age, Status, Education, Position, Income/Month, Previous business experience or years of work.	1.00
Part 2 Questions for the business owner and experienced team members and employees	
1. Can you please describe the type of communication-related to logistics that you currently have in place?	1.00
2. What is your customer service model?	0.66
3. What is the company's procurement process?	1.00
4. What is the transport management process?	1.00
5. What is the warehouse management and storage process?	1.00

Table 1 Content validity of the scale (continued)

Scale	Content validity
6. Could you provide some information on the feedback received by express delivery company?	0.66
7. How do you determine the material handling process?	1.00
8. Can you please provide instructions on how to use Packaging and Package?	1.00
<p>Part 3 Suggestion about tracking audit in engineering cost</p> <p>The ways to reduce the engineering costs of the express delivery company in Kunming, the People's Republic of China. Please provide your perspective and explanation.</p>	0.66

3.2.2 In-depth interview technique

In this research, the unit of analysis is the owner or manager and team members or employees of the express delivery company, who will be the key informants for one company, because they have experience in operations for more than 3 years and are willing to volunteer to join and participate in this research. Based on the findings in the owner or manager and team members or employees survey. This part of the research was conducted by interviewing the owners or managers and experts from the express delivery companies. He is considered to be a really knowledgeable person from working with the team in the company, including business networking, and has the ability to business management strategy planning and control the operations of the business in order to meet the set goals. The objective was to gather insights about tracking audits related to engineering costs and combine them into concrete suggestions. Interviews are semi-structured form . The researcher has created a question from the literature review, related concepts, and theories, which means that the same question pattern is used for all interviewees, but in addition to the pre-selected questions also, new ones could be made along the interview and open talk was allowed.

To conduct the research, purposive sampling was used to select 16 individuals from 8 different companies—specifically business owners or managers and team members or employees, with two groups selected from each company. All informants had at least 3 years of experience in managing or operating in the express delivery company. The researcher collected data through two methods: interviews and coordinated organizing group representatives to facilitate group discussions or handle telephone inquiries. After that, make an appointment to conduct an interview and summarize the content into categories according to the research question and objectives of the research.

Next, that compares the similarities and differences between the theory of tracking audit in engineering cost and the actual operation of the express delivery company.

3.2.3 The tracking audit in the engineering cost program

To obviously compare the proposed modes of tracking audit in engineering cost and the actual operation of the express delivery company tracking audit in engineering cost flowchart modeling methodology is easy, and this programming is suitable for delivery business service. Therefore, it was chosen for this study.

3.3 Research Design for Qualitative Research

Accessing data through in-depth interviews with key informants is an important tool for qualitative research. Key informants may include the company owner, manager, team members, or employees of the express delivery company.

3.3.1 To review the literature, concepts, theories, and research related to tracking audits in the engineering cost of the organization. There are 8 related components in summary: (1) Logistics communication, (2) Customer service, (3) Procurement, (4) Transport management, (5) Warehouse management and storage, (6) Feedback, (7) Material handling, and (8) Packaging and package to be used as a measure of the questions in the interview.

3.3.2 Examine the information that has been reviewed in the literature. There are 2 types of examination: (1) Document analysis, and (2) Archival analysis.

3.3.3 Data collection and data access by asking and talking with 2 groups of key informants, namely business owners or assigned managers, 1 person for 1 company, and experienced team members or employees, 1 person for 1 company, a total number of 8 companies that are willing to provide information and knowledge related to the process of tracking audits in the engineering cost program, amounting to 16 people. The researcher was able to narrow down the list of potential companies to work with company No.3, Zto Express, was removed from consideration because it operated in the same type of business as company No.2. This left only 8 companies that met the researcher's criteria. Zto Express was noted for its fast pick up and good customer experience. (Ministry of Commerce Department of International Trade Promotion, 2017) As follow:

- 1) Sto Express, Features: many outlets, low price, slow speed.
- 2) Yto Express, Features: Pick up fast, good experience.
- 3) Zto Express, Features: Pick up fast, good experience.
- 4) Yunda Express, Features: Moderate price, moderate speed.
- 5) Rabbit Express, Features: Affordable, good experience.
- 6) Deppon Express, Features: The network covers 98% of counties in the country, the headquarters is directly operated, and has its own logistics fleet, mainly large express.
- 7) Sf Express, Features: Apart from the high price, everything else is very good, especially fast.
- 8) Jd.com Express, Features: Fast speed, good experience.
- 9) Deppon Logistics, Features: Suitable for mailing oversized pieces.

3.3.4 Make an appointment with two groups of key informants, i.e. business owners or assigned managers. and a team of experienced staff to conduct an interview with the owner or manager in assignment from the executive. The researcher makes an appointment by telephone to ask for an interview according to the focus group form an appointment for a team or experienced staff to do a group discussion.

3.3.5 Conduct an interview and conduct group discussions.

3.3.6 Making conclusions with content analysis subsequently, a similar synthesis of information on tracking audit in the engineering cost received from the owner or manager is performed. Including a team or staff with experience from real practice and comparing it with the theory. After that, differentiate the data from actual practice. and compare it with the theory of tracking audit in the engineering cost.

3.3.7 Summarize the model of ways to reduce engineering costs which is new knowledge from the research, see Fig. 2.

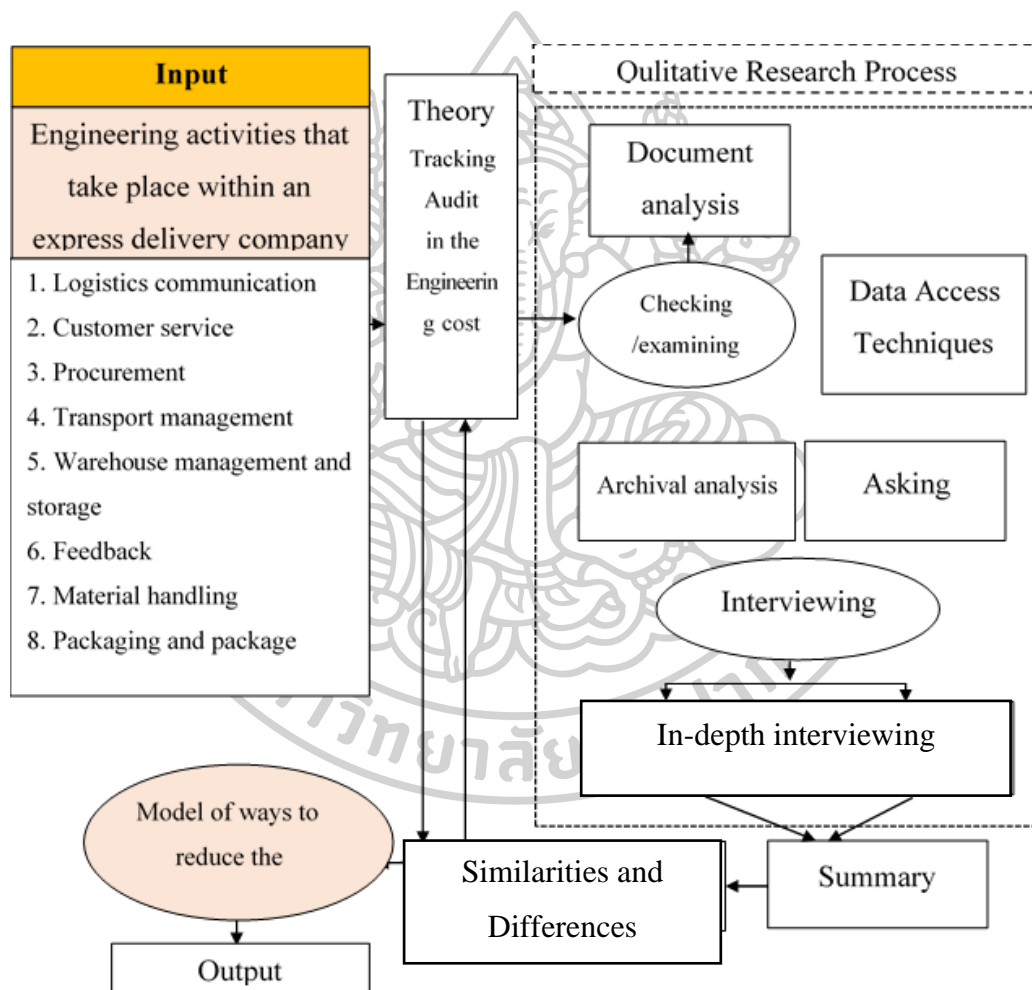


Figure 2 Research procedure

3.4 Conceptual Framework

The result of the concept review theory and the researcher summarizes the components related to the research on the analysis of current operational problems and application of tracking audit in engineering cost of the express delivery company in Kunming, the People's Republic of China, as shown in see Fig. 3.

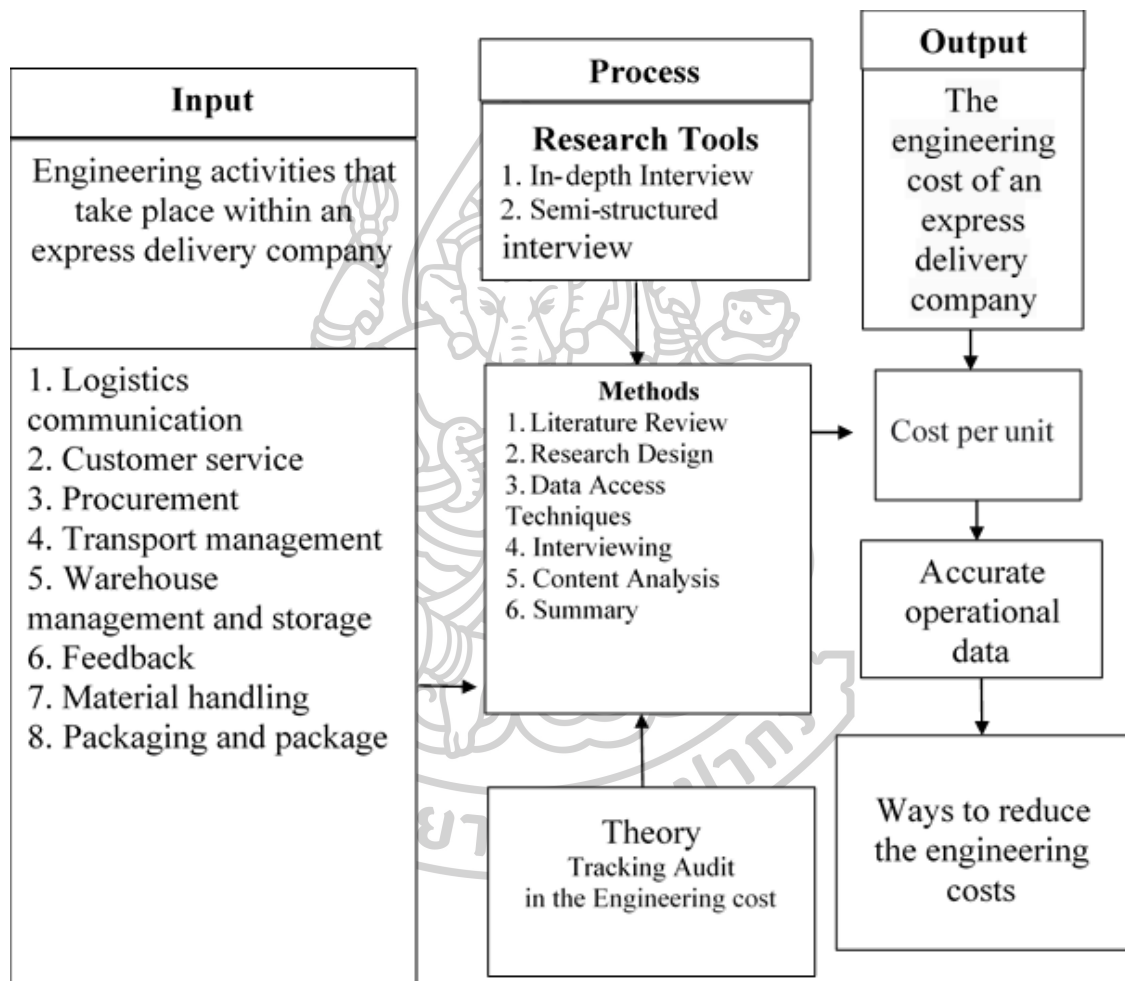


Figure 3 Conceptual Framework

CHAPTER 4

RESULTS AND ANALYSIS

The key point of analysis of current operation problems and application of tracking audit in engineering cost of the express delivery company in Kunming. In addition, the researcher is also finding ways to reduce the engineering costs of the express delivery company in Kunming,

4.1 Part 1 Result

4.1.1 The research results are summarized, as follows:

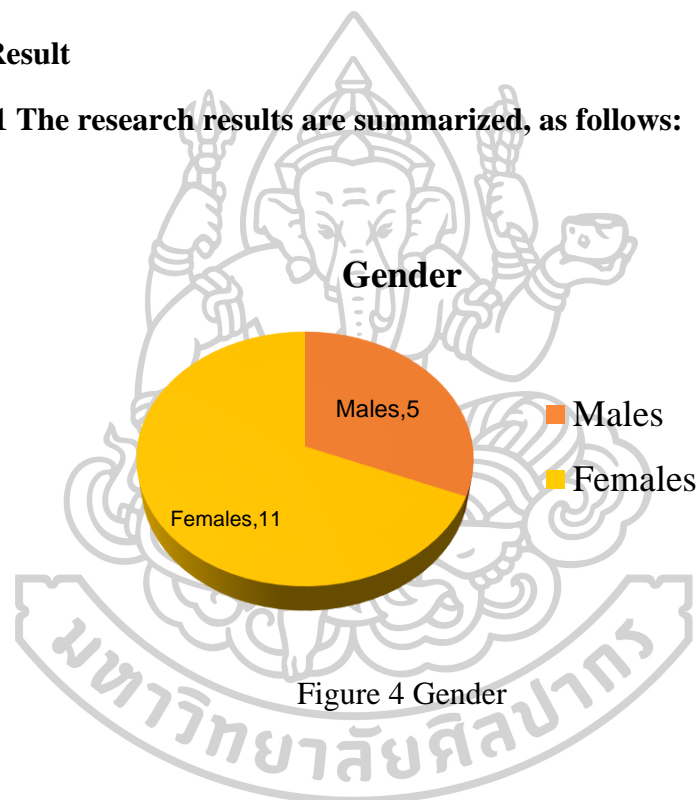


Figure 4 Gender

Figure 4. The gender by classifying it into 2 groups of key informants, namely business owners or assigned managers, experienced team members, and employees. Most of the respondents are females (69%, 11), including males (31% ,5) in the express delivery company . Out of the total respondents, 16 individuals make up the majority.

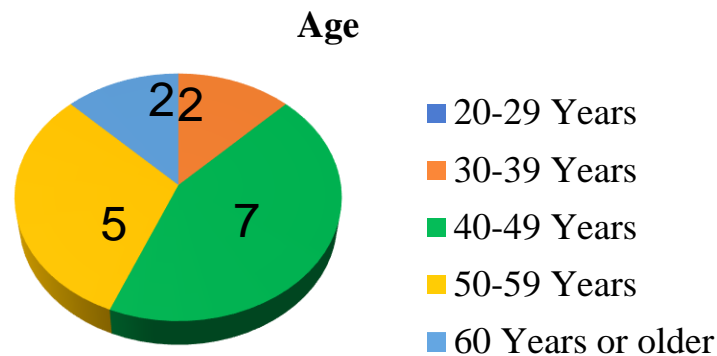


Figure 5 Age

Figure 5. The age by classifying it into four types. There are 2 groups of key informants, namely business owners or assigned managers, experienced team members, and employees. First, 40-47 Years were 44% (7), 50-59 Years were 31% (5), 60 Years or older were 13% (2), and 30-39 Years 12% (2) in the express delivery company in Kunming, the People's Republic of China. Out of the total respondents, 16 individuals make up the majority.

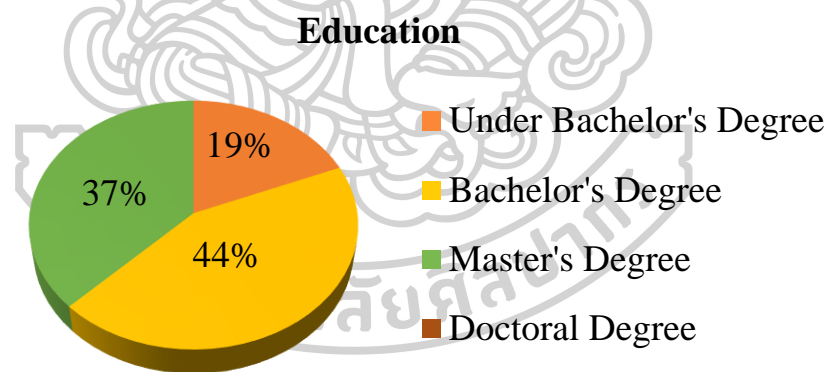


Figure 6 Education

Figure 6. Education by classifying it into three types. There are 2 groups of key informants, namely business owners or assigned managers, experienced team members, and employees. First, Bachelor's degrees were 44% (7), Master's degrees were 37% (6), and Under Bachelor's degrees were 19% (3) in the express delivery company in Kunming, the People's Republic of China. Out of the total respondents, 16 individuals make up the majority.

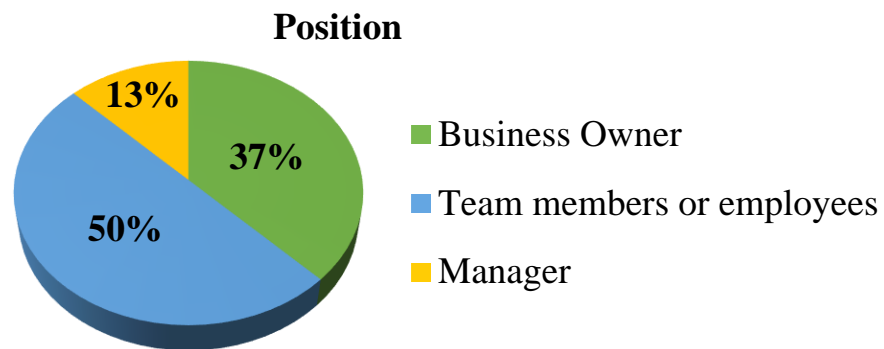


Figure 7 Position

Figure 7. The position by classifying it into three types. There are 2 groups of key informants, namely business owners or assigned managers, experienced team members, and employees. First, experienced team members and employees were 50% (8), business owners were 13% (6), and managers were 13% (2) in the express delivery company in Kunming, the People's Republic of China. Out of the total respondents, 16 individuals make up the majority.

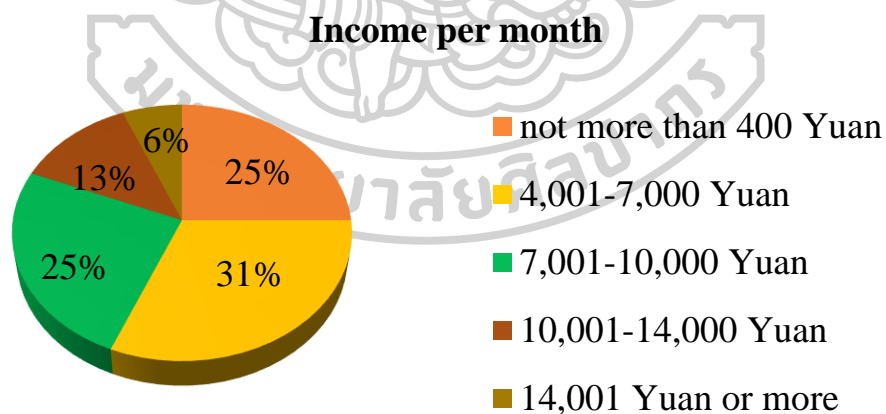


Figure 8 Income per month

Figure 8. The income per month by classifying it into five types. There are 2 groups of key informants, namely business owners or assigned managers, experienced team members, and employees. First, 4,001-7,000 Yuan were 31% (5), 7,001-10,000

Yuan were 25% (4), not more than 400 Yuan were 25% (4), 10,001-14,000 Yuan were 13% (2), and 14,001-Yuan or more were 6% (1) in the express delivery company in Kunming, the People's Republic of China. Out of the total respondents, 16 individuals make up the majority.

6. Previous business experience or year of work

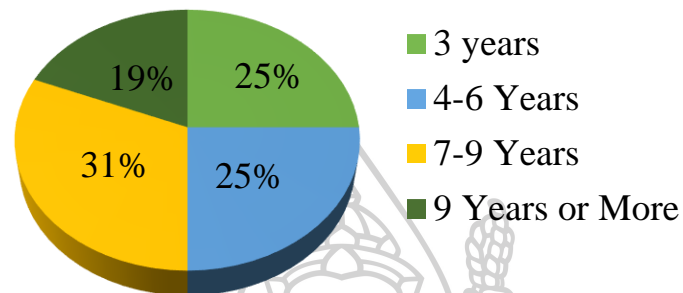


Figure 9 Previous business experience or year of work

Figure 9. Previous business experience or years of work by classifying it into four types. There are 2 groups of key informants, namely business owners or assigned managers, experienced team members, and employees. First, 7-9 Years was 31% (5), 4-6 Years was 25%, 3 Years was 25%, and 9 Years or more was 19%(3) in the express delivery company in Kunming, the People's Republic of China. Out of the total respondents, 16 individuals make up the majority.

4.2 Part 2 Result

The results analysis of problems of the express delivery company in Kunming.

The overall results of asking and talking about problems of the express delivery company in Kunming with 2 groups of key informants, namely business owners or managers, experienced team members, and employees, can be summarized as follows:

4.2.1 Competition situation.

The express delivery industry is highly competitive, with numerous companies vying for market share. Due to China's multiple provinces and subdivisions, duplicate taxes are burdensome. Expensive tolls increase the cost of business as well. This can

lead to price wars, reduced profit margins, and the need for continuous innovation to stay ahead.

4.2.2 Last-mile delivery.

The "last mile" of the delivery process, which involves getting packages from a local distribution center to the customer's doorstep, can be complex and expensive. Issues such as traffic congestion, address accuracy, and failed delivery attempts can increase costs and customer dissatisfaction.

4.2.3 Business owners limited.

Some business owners lack sufficient funds to increase the internal management capabilities of each company, such as investing in Global positioning system (GPS) to control the standards of land transportation of the express delivery company operators, which will have a break-even point that can control expenditures not to be exaggerated.

4.2.4 Regulatory challenges.

Express delivery companies operate in a heavily regulated environment, with rules and regulations related to transportation, safety, data privacy, and customs. Navigating these regulations across different regions and countries can be complex and time-consuming.

4.2.5 Operation.

The new operator of the express delivery company could not figure out the cost of exporting goods from China to neighboring countries. Ultimately, this creates operational risks.

4.2.6 Measures to protect against COVID-19.

The COVID-19 epidemic is being prevented by measures in every country. The Chinese government, too, has taken measures to prevent foreign ships from docking or delaying the docking schedule. Ultimately, the delay transport business operators have expenses and damage to some types of goods during transportation.

4.2.7 Air and water transportation.

It was still unable to travel normally during the recent COVID-19 situation, resulting in containers getting stuck and being unable to deliver goods to neighboring

countries. Consequently, when the number of containers is reduced, there is a shortage of containers. This led to an increase in price and damage to the business.

4.2.8. Environmental concerns.

As consumers become more environmentally conscious, there is increasing pressure on delivery companies to adopt sustainable practices. Balancing the need for timely deliveries with reducing carbon emissions and minimizing environmental impact presents a challenge.

4.2.9. Disruptions and external factors.

Natural disasters, political instability, and unexpected events (as seen with the COVID-19 pandemic) can disrupt supply chains, impact transportation networks, and lead to delays in deliveries. Recent COVID-19 situations have caused all ships scheduled to leave the port to be delayed. Because of the decrease in workers at each port, including workers in the destination country, the container density at each port increases. As a result, exporters incur additional costs for exporting goods, known as demurrage and detention.

4.2.10. Data security and privacy.

Collecting and managing customer data for tracking and communication purposes requires strict adherence to data protection regulations to ensure privacy and security. Some international shipping companies have a problem with space between cargoes. Due to the pre-reservation of space on the ship, there may be a lack of space between the cargo.

4.2.11. Security and fraud.

Ensuring the security of packages and preventing theft or fraud during the delivery process is a constant concern. Companies need to invest in tracking systems, secure packaging, and verification processes to address these issues.

4.2.12. Shipping.

The monopoly of shipping lines resulting from Cartel integration of the shipping industry causes the price level of Express Delivery Companies to become monopolistic. As a result, businesses can set higher prices and collect extra costs such as congested ports, clean fuel, and appearance maintenance.

This problem from two groups (business owners or assigned managers, experienced team members, and employees) can be solved in a limited way. In order to prevent foreign monopolies, a large number of exporting countries must be involved in strategic planning. The government still has the ability to determine the appropriateness of the service charge for imported goods (special expense category) and determine the appropriate price level for goods imported in less than full containers, see Fig. 10

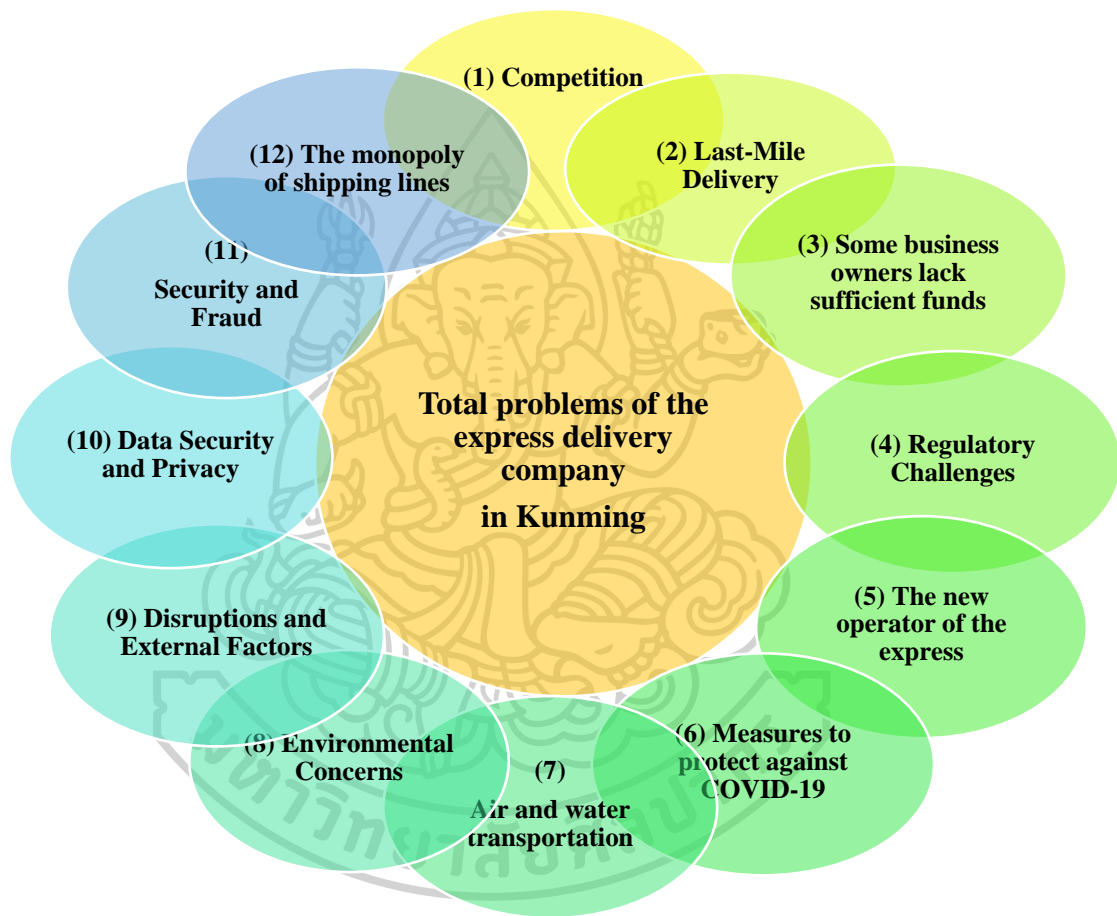


Figure 10 Total problems of the the express delivery company in Kunming

Based on the data shown in Fig. 2., It appears that the express delivery company in Kunming has several issues that need to be addressed. After interviewing 2 groups of key informants, namely business owners or assigned managers, experienced team members, and employees, the researchers have concluded that these problems are impacting the company's operations. Therefore, it is important for the company's

executives to be proactive and address these challenges in order to maintain a competitive edge and continue to provide exceptional service to their customers.

4.3 Part 3 Result

The researcher has asked and talked with 2 groups of key informants, namely business owners or assigned managers, and experienced team members and employees, and knowledge related to the process of tracking audits in the engineering cost program, amounting to 16 people from 8 companies on the following:

- 1) Sto Express, Features: many outlets, low price, slow speed.
- 2) Yto Express, Features: Pick up fast, good experience.
- 3) Yunda Express, Features: Moderate price, moderate speed.
- 4) Rabbit Express, Features: Affordable, good experience.
- 5) Deppon Express, Features: The network covers 98% of counties in the country, the headquarters is directly operated, and has its own logistics fleet, mainly large express.
- 6) Sf Express, Features: Apart from the high price, everything else is very good, especially fast.
- 7) Jd.com Express, Features: Fast speed, good experience.
- 8) Deppon Logistics, Features: Suitable for mailing oversized pieces.

4.3.1 Interview from a business owner or assigned managers

1) Can you please describe the logistics of communication related to the express delivery company that you currently have in place?

After conducting an interview with a business owner and assigned managers, it was discovered that communication in logistics is crucial. Therefore, the researcher provides a summary of the issues as follows:

The manager of company “*Shentong (Sto) Express*” provided information that we use a variety of communication channels such as email, internal messaging platforms, and regular team meetings to ensure that all departments, from logistics and warehouse teams to customer service and delivery personnel, are aligned and updated

on our operations. Additionally, our tracking systems provide real-time updates on package statuses, ensuring everyone involved has accurate and up-to-date information. But external communication: At our company, we prioritize maintaining clear communication with our partner organizations to ensure efficient collaboration within the logistics network. This includes seamless integration with e-commerce platforms or other external systems, which requires effective communication to sync orders, shipping details, and tracking information.

The manager of company “*Yto Express*” There is a popular express delivery service located in China that is renowned for its broad network and logistics services. This service has emphasized the importance of effective communication in the modern era, as work requires coordination with both external and internal stakeholders to achieve goals. It involves not only verbal but also nonverbal cues such as body language that both the sender and receiver must understand. Fortunately, technology is now being utilized to improve communication efficiency. Various tools such as websites, WeChat, and VPNs have made it easier for people to connect and collaborate regardless of their location.

The perspective manager of company “*Yunda Express*” provided information that, it is important to establish different policies in order to ensure smooth operations. Effective communication is key to transmitting data and information to employees at all levels, according to the established chain of command. This is particularly crucial when it comes to communicating with the supply chain network of express delivery companies.

The manager of company “*Rabbit Express*” provided information that communication is the foundation of any successful business. It involves sharing information and ideas between different departments, both within and outside the organization. Poor communication can lead to increased costs and delayed operations, ultimately reducing the competitiveness of the business. Hence, it is essential to ensure efficient communication channels to achieve desired outcomes.

The manager of company “*Deppon Express*” provided information that communication is crucial in fostering teamwork. This involves clear communication between the organization, suppliers of raw materials/products, and customers. Additionally, communication must be maintained between different departments within

the organization. During the delivery process, it's important that all members in the supply chain communicate fluidly and without interruptions. This ensures that the work is effective and produces the desired results.

The manager of company “*Sf Express*” provided information that communication plays a crucial role in creating an efficient transportation process and is one of the factors that contribute to costs. Good communication, on the other hand, gives an organization a competitive advantage. It promotes better connections and information flow, resulting in faster work processes. In conclusion, though communication may seem like a small matter, it can have a significant impact if there are communication problems.

The owner of company “*Jd.com Express*” (Branch) provided information that community is the heart of work if effective communication is crucial in any workplace, particularly in an express delivery company where various parties are involved in the supply chain. Failing to communicate effectively can lead to errors and damage, ultimately increasing the cost of the business. Therefore, it is essential for employees to communicate in a manner that aligns with the intended purpose, to prevent any problems from arising that will require solutions.

The manager of company “*Deppon Logistics*” provided information that business process that leads to the logistics process, especially when communicating with external parties. As an artificial intelligence (AI) assistant, I believe effective communication is essential for any logistics business. This includes maintaining strong relationships with customers, suppliers of materials and equipment, and sellers. Within the organization, departments can also benefit from communication tools such as the express delivery company innovations like the Application, WeChat, QR Code, Chat messages, and WeChat official account. By utilizing these tools, logistics businesses can improve their efficiency and lower their operating costs.

As a business owner, I believe that effective communication plays a vital role in reducing business costs. By receiving accurate information from all related parties and avoiding the forwarding of incorrect information, the production or delivery department can ensure the correct product is delivered in the right quantity. This ultimately results in improved service levels, timely product delivery, and the

satisfaction of our customers. Good communication also enables us to operate smoothly and efficiently, creating a seamless network of information flow. Overall, it gives our the express delivery company a competitive advantage.

2) What is your approach to the customer service model?

During the business owner interview and assigned managers, it was stated that providing excellent customer service is crucial for any business. As follow:

The manager of company “*Shentong (Sto) Express*” provided information that, it is important to keep in mind that customer service is a crucial aspect of any business. Providing superior service to clients is essential for establishing trust and nurturing long-term relationships. Internal audits are a valuable tool for transportation organizations to enhance their customer service. By assessing their processes and practices based on the defined service model, they can better understand and meet the needs of their customers.

The manager of company “*Yto Express*” provided information that customer service is crucial for any business because it sets it apart from the competition. By providing excellent services, customers are more likely to be impressed, satisfied, and recommend the business to others. This helps to create a positive reputation, increase customer loyalty and ultimately, boost market share.

The perspective manager of company “*Yunda Express*” provided information that polite and helpful customer service is critical for any service business. Ensuring that employees offer good advice and consultation is key to achieving maximum customer satisfaction.

The manager of company “*Rabbit Express*” provided information that delivering excellent customer service is the foundation of operating a thriving service-based business. It's not only about providing transportation alternatives to clients, but also about establishing a positive impact that distinguishes the business from its competitors. Exceptional customer service creates a long-lasting impression and fosters strong relationships with customers, encouraging them to repeatedly utilize our services. In summary, it supports the retention of a loyal customer base.

The manager of company “*Deppon Express*” provided information that our company serves a diverse range of customers and to meet their needs effectively, we rely on technology. By creating various channels of communication, we can reach out to more customers and offer them convenient and speedy services. Therefore, it is essential for our customer service team to connect with as many customers as possible.

The manager of company “*Sf Express*” provided information that we are in the transportation business, customer service is considered crucial. The timely delivery of products is of utmost importance as entrepreneurs and product owners may use multiple carriers to transport their goods. This creates competition, and hence, the queue must be organized in such a way that the products are delivered on time. The service format and methods used vary depending on the skills and expertise of each employee. However, the ultimate goal is to prioritize service.

The owner of company “*Jd.com Express*” (Branch) provided information that there are suggestions that our the express delivery company has to prioritize service quality above all else. Our goal is to deliver products correctly, accurately, and quickly, while meeting the expectations and needs of our customers. We strive for customer satisfaction and hope to establish long-term loyalty with our customers.

The manager of company “*Deppon Logistics*” provided information that providing excellent customer service is crucial for long-term profitability. Satisfied customers lead to continued patronage, which ultimately fosters loyalty.

Thus, as a service-based business, the quality of service is key, and it should cover all aspects of the customer experience, including inbound logistics. This means delivering the right products, in the right quantity, to the correct location, at the agreed-upon time, and according to the buyer's needs, all while keeping costs low. However, the efficiency of the service is largely dependent on other logistics activities, such as transportation. Slow transportation can result in lower customer satisfaction levels. After providing the service, it is essential to follow up with customers to ensure that their expectations were met, and the service quality was satisfactory. By doing so, delivery companies can further improve their service quality and provide the best possible experience for their customers.

3) Can you provide information about how the company used to handle procurement in the past?

During the business owner and assigned managers interview, the researcher provides a summary of the issues as follows:

The manager of the company "*Sto Express*" has informed that in the past, they used to handle procurement activities altogether, including sourcing raw materials and managing product stock. However, in the present time, the express delivery business has expanded to include the management of the entire supply chain, including all the parties involved in production and distribution to provide a complete system. This has made the overall process more convenient and efficient.

The perspective a business owner of company "*Yto Express*" provided information that, procuring materials for production and business operations is an ongoing mission that requires attention. In the past, purchasing involved several manual steps and labor-intensive practices. However, with the advent of technology and innovation, the purchasing process has become more efficient. For service-oriented businesses, it is essential to establish a connection between each activity, as it can lead to cost reduction and improved turnaround time. This can ultimately make the business more profitable.

The manager of company "*Yunda Express*" provided information that the procurement operations of each business may vary, but in general, a comprehensive procurement management system should have clear and concise procedures that can be audited for every procurement process. This ensures transparency in work. Furthermore, since our company has multiple branches, it is essential to have a well-defined process to control and manage procurement.

The manager of company "*Rabbit Express*" provided information that the company's organizational structure was based on dividing tasks among various personnel. However, procurement is not integrated with all stakeholders, which results in increased business costs.

The manager of company "*Deppon Express*" provided information that in the past, procurement involved selecting raw materials, purchasing, hiring labor, and determining quantities needed.

The manager of company “*Sf Express*” provided information that In the past, procurement was done on a mutually exclusive basis for each department. This causes lost opportunities and high costs. But now information technology has been applied to create speed.

The owner of company “*Jd.com Express*” (Branch) provided information that businesses can reduce costs by using fewer resources and less energy in production, thereby decreasing production costs in the long run, and controlling purchasing effectively.

The manager of company “*Deppon Logistics*” provided information that purchasing is a crucial aspect for businesses of all sizes and industries. It helps to minimize the risk of disruptions in the supply chain. Close management with suppliers is especially important to ensure efficiency in achieving business goals.

Therefore, it was explained that purchasing involves sourcing raw materials and managing the overall supply chain, including vendor selection, price negotiation, and accurate product or service pricing. The quantity and quality of purchased products and materials impact the satisfaction of the organization and customer needs in various departments. To optimize costs, purchasing equipment, tools, or technology at a lower price can lead to increased efficiency and lower engineering costs for express delivery company, ultimately resulting in a more profitable express company. The business owner hopes to shorten the purchasing process and minimize mistakes to improve overall satisfaction.

4) Could you please provide an explanation of the transport management process?

During the interview with the business owner and assigned managers interview, the researcher provides a summary of the issues as follows:

The manager of company “*Sto Express*” provided information that this transportation management system focuses primarily on the movement of goods and resources to provide efficient services to customers, planned and implemented in advance through technological innovation.

The perspective a business owner of company “*Yto Express*” provided information that the management of transportation is crucial as a well-organized system provides transparency to stakeholders and partners, reduces risks in collaborative work, and enables them to support each other.

The manager of company “*Yunda Express*” and the manager of company “*Rabbit Express*” provided similar information that transportation management plays a crucial role in any business, and it must be handled with precision. It requires accurate and traceable processes, with a focus on saving as much as possible. Using a TMS system ensures fast and systematic service, resulting in accurate information storage. The system data can be easily retrieved for analysis of operations, saving on human labor, and, most importantly, reducing the cost of products.

The manager of company “*Deppon Express*” provided information that the TMS system streamlines transportation with various functions suitable for product manufacturing.

The manager of company “*Sf Express*” provided information that most express delivery companies utilize a TMS to confirm delivery of goods. This system can plan and track the delivery process from the time the product becomes available for service until it reaches the consignee. It calculates transportation routes, determines the number of products and vehicles needed, and even manages drivers and fuel usage automatically. In short, the TMS streamlines the entire delivery process, resulting in improved efficiency and faster delivery times.

The owner of company “*Jd.com Express*” (Branch) provided information that the effective management of transportation is crucial for business owners as it allows for strategic planning and analysis, leading to long-term competitive success.

The manager of company “*Deppon Logistics*” provided information that the transportation management system enables companies to efficiently manage transportation and accounting documents, ensuring accuracy and reducing corruption.

Therefore, it was emphasized that effective transport management is crucial for any business. It involves ensuring that products are delivered to customers in good condition and on time. This process encompasses moving raw materials or products from their starting point to their final destination or returning abnormal

products to the warehouse. To accomplish this, express delivery companies must carefully consider which transportation methods to use, taking into account the product type and the regulations of the region. This helps to establish trust with customers and maintain high standards of quality.

In conclusion, express delivery companies must have to prioritize delivering packages to the correct location, at the designated time, and in pristine condition. They should also focus on managing costs to ensure maximum efficiency.

5) Can you explain the process for managing and storing items in a warehouse?

During an interview with a business owner and assigned managers interview, the researcher provides a summary of the issues as follows As follow:

The manager of company “*Sto Express*” provided information that Managing items in a warehouse involves several essential steps to ensure efficient organization, easy accessibility, and proper handling of inventory. This includes a generalized process that consists of receiving, storage planning, organization and handling, inventory management, retrieval and fulfillment, and continuous improvement. Therefore, successful warehouse management requires a combination of efficient processes, utilization of technology, and a well-trained workforce to ensure smooth operations and accurate inventory control.

The perspective a business owner of company “*Yto Express*” provided information that, a warehouse is a place where goods, raw materials, and various materials are stored until they are moved and delivered to the target customers who want to use the product. Thus, warehouse management plays a crucial role in ensuring that products are distributed accurately to customers.

The manager of company “*Yunda Express*” provided information that warehouse management is vital as it facilitates the timely delivery of products and raw materials to customers and production lines within the supply chain.

The manager of company “*Rabbit Express*” provided information that warehouse management should prioritize time efficiency by minimizing the duration for moving products through the warehouse. This includes receiving, storing, picking

up, and discharging products. By doing so, we can reduce operational losses and utilize warehouse space effectively, while keeping operating costs at a minimum. Ultimately, this will enable us to gain maximum benefits within the shortest period of time.

The manager of company “*Deppon Express*” and the manager of company “*Sf Express*” provided similar information that warehouse management involves the process of overseeing storage facilities, including the location for storing products, monitoring the import of goods, and ensuring timely delivery of products.

The owner of company “*Jd.com Express*” (Branch) provided information that warehouse management is essential as it decreases the distance required to move goods and maximizes the use of storage space and volume. This results in increased satisfaction for those involved in moving goods, both incoming and outgoing. By keeping track of the quantity of items purchased and the needs of customers, goods can be delivered on a regular basis. This investment is worthwhile, depending on the size of the business.

The manager of company “*Deppon Logistics*” provided information that inventory management is a crucial aspect of logistics management since it directly impacts the ability to fulfill customer requirements efficiently. It involves utilizing suitable storage systems such as pallet racks, shelves, and bins to store a variety of products. The use of technology like automated guided vehicles (AGVs), drones, or conveyor systems can also significantly improve the efficiency of the inventory management process.

In conclusion, it was emphasized that warehouse management is crucial for supporting transportation businesses. A well-managed warehouse ensures efficient processes from setting up the warehouse structure to product design and placement, managing space, inventory leveling, and maintaining equipment. However, problems can arise, such as when employees resign simultaneously. The business owner must take measures to prevent this since employee resignations can disrupt operations, increase engineering costs, and impede delivery services.

6) Could you provide some information on the feedback received by the express delivery company?

During a recent interview with a business owner and assigned managers interview, the researcher provides a summary of the issues as follows:

The manager of company “*Sto Express*” provided information that businesses can benefit from using data feedback to analyze past operating results, plan operational strategies, and build long-term competitive potential.

The perspective a business owner of company “*Yto Express*” provided information that service businesses analyze customer data and problems to drive customer relationship management strategies. They aim to present solutions that directly meet the needs or solve the problems of the customer, as the customer is an important individual.

The manager of company “*Yunda Express*” and the manager of company “*Rabbit Express*” provided similar information that Feedback can be either positive or negative, but it provides valuable insights for executives and managers to identify areas for improvement. Through careful analysis of customer feedback, executives can identify problems and work towards developing effective solutions. Additionally, by analyzing the actual needs of customers, executives can plan and improve the quality of operations to meet these needs. Ultimately, this helps to improve customer satisfaction and the overall success of the business.

The manager of company “*Deppon Express*” provided information that data feedback can provide valuable insights for identifying areas of improvement. Executives can analyze customer feedback to identify and address issues.

The manager of company “*Sf Express*” provided information that effective analysis of data feedback can be used to plan and make adjustments to a business or organization, leading to long-term growth.

The owner of company “*Jd.com Express*” (Branch) provided information that taking something from its point of consumption or distribution back to its origin while reducing time and costs. Taking into account the efficiency of the operation, the process of tracing something from its point of consumption or distribution back to its origin is carried out to reduce time and costs as much as possible.

The manager of company “*Deppon Logistics*” provided information that traceability is a critical aspect that manufacturers consider seriously. It enables them to check for any abnormalities or defects in the product. However, some manufacturers fail to implement timely countermeasures, which can negatively impact customer confidence in their product. The customers have in you to decrease. It also leads to damage and may have an impact on the organization.

In conclusion, it was revealed that there are instances where returned items cannot be given to customers due to damage or expiration and that businesses should have policies in place to efficiently handle and potentially process or reuse these products to minimize costs. However, it is important to note that dangerous goods require strict guidelines and may have negative impacts on the environment and community health.

Government agencies have established regulations for the destruction of these products, and entrepreneurs must also have appropriate guidelines in place. Thus, business owners or assigned managers should be mindful of these considerations.

7) How do you determine the material handling process?

During an interview with a business owner and assigned managers interview, the researcher provides a summary of the issues as follows:

The manager of company “*Sto Express*” provided information that the material handling process involves the movement, packaging, and storage of materials. It requires the use of appropriate tools and equipment to facilitate the movement of raw materials or products into the production line, until they are converted into finished products. Once the products are ready, they must be delivered to the recipient safely and within the specified time. Therefore, service businesses need to have efficient and smooth processes in place to ensure timely delivery.

The perspective a business owner of company “*Yto Express*” provided information that to establish an efficient and accurate material handling process, it is crucial to manage the movement of goods or materials by implementing a suitable system for loading and unloading. This is a matter that every delivery service provider must carefully consider to determine the best approach.

The manager of company “*Yunda Express*” provided information that The process of moving goods or materials to the warehouse or customer requires a systematic approach to transportation. To reduce the problems that occur during loading and unloading, it's important to prioritize convenience, speed, safety, and efficiency in transporting goods and materials.

The manager of company “*Rabbit Express*” provided information that the material handling process is all about moving raw materials and inventory during production or operations. The aim is to reduce the distance travelled by the materials and inventory by fixing bottleneck processes to enable better flow. This is an effective way to save on labor and costs, which is particularly relevant for our express delivery company.

The manager of company “*Deppon Express*” provided information that the managing movement by Material Handling System is important. Therefore, express delivery companies must have appropriate processes. Therefore, it is a matter for each company to find the best method.

The manager of company “*Sf Express*” provided information that the owner of company “*Jd.com Express*” (Branch) provided information that the material handling process should consider motion, time, quantity, and space as important elements to reduce costs, improve work efficiency, and boost sales.

The manager of company “*Deppon Logistics*” provided information that the material handling system aims to increase the efficiency of the express delivery company's supply chain management because it is a process related to factory management processes, transportation, warehousing, retail trade, wholesale trade, communication. Finally, it becomes an output, which is goods and service, which is worth more than the inputs of the business.

In conclusion, it was revealed that express delivery companies engage in activities related to transporting raw materials, goods in process, and finished goods within factories or warehouses. The main objective is to reduce the distance and frequency of these movements, as well as the volume of objects being moved. This is done in order to minimize management costs, as every movement incurs additional expenses for the business. Since some businesses serve both public and private

customers, it is important to create a plan or establish steps for moving raw materials, products in the process of production, and finished products within factories or warehouses. This ensures that all parties involved receive the maximum benefits and satisfaction.

8) Can you please provide instructions on how to use packaging and package?

During the business owner and assigned manager interview, the researcher provides a summary of the issues as follows:

The manager of company “*Sto Express*” and the perspective a business owner of company “*Yto Express*” provided similar information that packaging is not only a means of protecting and maintaining product quality, but it is also an important aspect of a company's image. It serves as a communication tool between the brand and its customers, partners, and other related individuals. By creating impressive packaging, a company can increase its profits and add value to its products and services.

The manager of company “*Yunda Express*” provided information that the company prioritizes protection of goods and materials for convenient transportation and fast storage. Delivering parcels to buyers promptly.

The manager of company “*Rabbit Express*” provided information that in today's business world, packaging can be a competitive advantage. Therefore, business owners need to enhance sales by creating innovative packaging to outperform their competitors. By investing in modern packaging innovations within their budget, they can improve their brand image and overall organization.

The manager of company “*Deppon Express*” provided information that our company, a subsidiary of a packaging and packaging corporation, prioritizes safety and convenience while also emphasizing aesthetic appeal to create a positive business image.

The manager of company “*Sf Express*” provided information that the express delivery has become highly competitive in China these days. As the economy continues to grow, the importance of packaging and package design cannot be overlooked. It is crucial for companies to highlight the differences between their

products and distinguish themselves with a unique brand identity. Such an approach can not only boost sales but also lead to greater customer satisfaction.

The owner of company “*Jd.com Express*” (Branch) provided information that the packaging and package communicate visually to increase the value of products, as well as their marketing appeal.

The manager of company “*Deppon Logistics*” provided information that the benefits of packaging and package can also create a positive impression of the service.

In conclusion, it was mentioned that packaging plays a vital role in both marketing and logistics. The packaging is designed to showcase product details and create awareness among customers, while also protecting the product from damage during transportation and storage. In modern times, express delivery companies use advanced machinery to ensure that packaging is visually appealing and space-efficient.

Additionally, the packaging must be suitable for transportation and warehouse equipment. To reduce raw material costs, business owners and assigned managers must be aware and continuously analyze and monitor the engineering costs of the express delivery company.

4.3.2 Questions for experienced team members and employees

1) Can you please describe the logistics communication related to the express delivery company that you currently have in place?

After conducting interviews with both experienced team members and employees, the researcher provides a summary of the issues as follows:

The manager of company “*Sto Express*”, “*Yunda Express*” and “*Rabbit Express*” provided similar information that the operator's perspective, logistics communication plays a vital role in the functioning of an express delivery company. Communication can be compared to the blood that nourishes the human body. Hence, it is crucial to ensure a smooth flow of communication at all levels. The company gives utmost importance to communication on all channels to ensure efficient operations. This is particularly true for transportation service agencies. Every available

communication tool must be utilized in the supply chain to create a better understanding among the team and achieve effective results.

The perspective a business owner of company “*Yto Express*” provided information that communication makes the logistics process efficient and is one of the factors that can cause costs. Therefore, it is very important. But good communication gives organizations a competitive advantage, creating connections and information flow. As a result, the work process moves quickly and according to schedule.

The manager of company “*Deppon Express*” provided information that in the express delivery supply chain, it's crucial to communicate information to all parties involved. Businesses need to maintain accurate records so that every department can communicate effectively and have a shared understanding. This makes working within the network smoother and more objective.

The manager of company “*Sf Express*” provided information that data from communications is the starting point of business processes, both inside and outside the organization. It affects the efficiency of express delivery work.

The owner of company “*Jd.com Express*” (Branch) provided information that effective communication provides a competitive edge for organizations by facilitating continuous operations and information flow, resulting in more efficient processes.

The manager of company “*Deppon Logistics*” provided information that all types of businesses require quality and speed in their products and services. Nowadays, the important thing that helps businesses run quickly is communication, especially nowadays communication via online is fast. Especially the transportation of goods requires a quick and convenient source of supply.

Therefore, it became evident that effective communication with business stakeholders is crucial in ensuring, that everyone shares the same understanding. Without clear and thorough communication, problems may arise. It's important for establishments to record accurate data and information using a consistent framework. By utilizing modern technology for storage, all employees can access information correctly and ensure that all departments are on the same page. This helps to streamline work processes and make informed decisions.

Nowadays, logistics systems are closely connected with various information technologies, such as applications, WeChat, chat messaging, WeChat official accounts, Meipai, Zhihu, Dianping, Baidu Website, Baidu SEO, and Baidu Search Engine Optimization. This integration offers significant benefits, such as increased convenience and quick responses to product sales, while also promoting efficient inventory management.

2) What is your approach to the customer service model?

After conducting interviews with both experienced team members and employees. The researcher provided a summary of the issues as stated by 8 people. As follow:

The manager of Company “*Sto Express*” provided information that Customer service is crucial for any express delivery business. A dedicated customer support team should be available through various channels such as phone, WeChat, and email. They should be well-trained to handle queries promptly, resolve issues effectively, and provide personalized assistance. Since customers who use the service are the source of the company's income, it's essential to emphasize the importance of service quality.

The perspective a business owner of company “*Yto Express*” provided information that, Service is the cornerstone of any service-based business. It involves effective communication in various forms, which helps to coordinate and establish a shared understanding of the work. As a result, all employees of the company must be committed to providing high-quality service in their respective roles. This is particularly important in the express delivery supply chain, where customer satisfaction is paramount.

The manager of company “*Yunda Express*”, “*Deppon Express*” and “*Rabbit Express*” provided similar information that Using an automation system, the service in the express delivery supply chain creates customer satisfaction by providing real-time access to data and up-to-date analysis. To ensure quality customer service, it's essential to regularly review performance metrics such as response times, customer satisfaction scores, and resolution rates. This is particularly important for express delivery companies as they often encounter unforeseen problems. Service

employees must be patient and equipped to handle any issues that may arise promptly. strong focus on customer service is necessary to impress and retain customers, leading to lower business costs. By understanding the needs of both service receivers and providers, a positive impression can be made, resulting in repeat and loyal customers.

The manager of company “Sf Express” and “*Deppon Logistics*” provided similar information that an express delivery customer service model should prioritize three key aspects - efficiency, communication, and customer satisfaction. Customers who choose express services expect their deliveries to be swift. Hence, it is important to optimize every step of the delivery process, from order processing to transportation and final delivery. Streamlined logistics and technology for real-time tracking can greatly improve efficiency and meet customer expectations.

The owner of company “*Jd.com Express*” (Branch) provided information that customers service with accurate, real-time tracking information, regular updates about their package's status, and any delays is crucial to building trust and reducing anxiety. To ensure customer satisfaction, it's crucial to focus on proactive communication. This means anticipating any questions or concerns that the customer may have and providing preemptive information. For example, you can inform customers of possible delays during holidays or adverse weather conditions. Service providers should analyze customer needs and prioritize agile communication. Always be ready to provide up-to-date and helpful information whenever customers inquire or need assistance.

Therefore, the key to standing out in the highly competitive express delivery industry is tailoring your customer service approach to meet the specific needs and expectations of your target customers.

3) Can you provide information about how the company used to handle procurement in the past?

After conducting interviews with both experienced team members and employees. The researcher provided a summary of the issues as stated by 8 people. As follow:

The manager of Company “*Sto Express*” provided information that our experience in the transportation business, we have found that many parcel users do not

plan for their parcel usage or fail to follow their plans. This often results in confusion about what type of parcel is needed and how many are required, leading to urgent or delayed procurement. In such cases, the parcel may not meet the necessary requirements, which can cause delays in internal operations. To avoid this, it is important to plan ahead and carefully consider the type and quantity of parcels needed for the job.

The perspective a business owner of company “*Yto Express*” and “*Sf Express*” provided similar information that in the past, In the past, my companies used to rely on manual processes such as phone calls, faxes, and paper-based purchase orders to procure goods and services. However, this method was often time-consuming and inefficient. The transportation and logistics industry used to involve a lot of manual work and unsystematic data collection. The excessive use of paper caused data loss and made the management of various data unsystematic. Fortunately, with the development of technology, logistics systems can now be managed with tools such as AI, advanced analytics, and automation. This makes work faster and enables companies to compete with their rivals on a level playing field.

The manager of company “*Yunda Express*”, “*Rabbit Express*” and “*Deppon Express*” provided similar information that in the past, finding information was a challenging task, especially when looking for information about transportation business operators or the list of necessary products to purchase. Acquiring supplies is a crucial aspect of proper business management. When procuring construction materials or equipment for construction work and public utilities, it's important to have a clear plan that determines the appropriate quantity and quality needed to accomplish the business mission.

Proper asset acquisition and management were essential to follow the cycle of efficient parcel management, which would make budget spending worthwhile. Sometimes, stakeholders with an interest in the business could negatively impact it by causing the acquisition of goods at a higher price than necessary due to a lack of transparency or loose control over supply disbursement. This could lead to missed financial opportunities.

The manager of company “*Sf Express*” provided information that In the past 10 years, computer systems have been used to expedite work. However, with AI, customer service can now be updated and completed faster.

The owner of company “*Jd.com Express*” (Branch) provided information that the company has made continuous developments through its use of employees, technology, innovation, and AI, connecting the entire procurement system. Currently, these tools are integrated to reduce business costs.

The manager of company “*Deppon Logistics*” provided information that the process of procurement must be handled carefully by companies, as it involves coordination with internal and external stakeholders. Implementing a good control system can greatly improve work efficiency.

In conclusion, the express delivery company should prioritize integrating technology, especially by adopting automation and using AI-powered chatbots to handle routine procurement inquiries. Additionally, investing in a reliable customer relationship management system can help us track customer interactions and improve response times. This will enable us to offer more convenient and efficient service.

4) Could you please provide an explanation of the transport management process?

After conducting interviews with both experienced team members and employees. The researcher provided a summary of the issues as stated by 8 people. As follow:

The manager of Company “*Sto Express*” provided information that in the world of logistics, speed is key when it comes to meeting customer needs. To assist with this, many organizations rely on computer systems and electronic business management. Information is crucial for efficiency and quickness in this field, from planning and forecasting customer demands to providing customer service. The success of meeting customer needs depends heavily on the quality and accuracy of the organization's available information, as well as on the insights and experience of team members and employees. The process begins when a customer places an order for express delivery.

The perspective a business owner of company “*Yto Express*” provided information that efficient management processes are crucial for fast, accurate operations that meet the needs of customers and partners.

The manager of company “*Yunda Express*”, “*Deppon Express*” and “*Rabbit Express*” similar provided information that the modern express delivery services provide real-time tracking for customers. Each package is assigned a unique tracking number. Customers can monitor the progress of their shipments online or through a mobile app. Once the package is delivered, the courier obtains a signature, takes a photo, or records another form of confirmation to prove successful delivery. This information is often made available to the sender and recipient.

The manager of company “*Sf Express*” and “*Deppon Logistics*” provided similar information that the express delivery providers continuously analyze data and optimize their processes to enhance speed, accuracy, and customer satisfaction. When deciding on a mode of transportation, customers have numerous options for transport channels. These channels are divided into five types: (1) rail transport, (2) car or truck transport, (3) water transport, (4) air transport, and (5) pipeline transport. The choice of channel largely depends on budget and the desired speed of transportation. Efficient transport management is critical in the express delivery industry to meet tight delivery deadlines and ensure customer satisfaction. Advanced technology and logistics solutions are essential in streamlining these processes and maintaining a high level of service quality.

The owner of company “*Jd.com Express*” (Branch) provided information that focus on feedback and quality control, delivery companies often collect feedback to improve their services. Quality control measures are implemented to ensure safe and efficient handling of packages.

Here are the findings from a group discussion with experienced team members and employees, summarizing their work experience views on transportation management processes for express delivery companies. This process involves managing the transportation of goods and parcels from the sender to the receiver, with a focus on efficiency and value. It's critical for maintaining a company's competitiveness and profitability. Express delivery services are widely recognized for

their speed and reliability, making effective transport management crucial to uphold these qualities.

5) Can you explain the process for managing and storing items in a warehouse?

After conducting interviews with both experienced team members and employees. The researcher provided a summary of the issues as stated by 8 people. As follow:

The manager of company “*Sto Express*” provided information that the storage planning and warehouse items should be stored based on their characteristics and demand. Utilize management software to optimize space and minimize employee travel time. Managing and storing items in a warehouse is a critical aspect of supply chain and inventory management. Efficient warehouse operations can help reduce costs, improve order fulfillment, and enhance customer satisfaction.

The perspective a business owner of company “*Yto Express*” provided information that the most important aspect of inventory management is to have a system that tracks item quantities, locations, and movements, and to update it continuously with real-time data such as receipts, shipments, and adjustments.

The manager of company “*Yunda Express*” provided information that the system uses a first-in, first-out (FIFO) or last-in, first-out (LIFO) approach to prevent items from becoming obsolete. It is important to regularly review inventory and adjust storage for slow-moving or obsolete items.

The manager of company “*Rabbit Express*” and “*Sf Express*” provided similar information that the express delivery companies must keep meticulous records of all warehouse activities, such as receiving, shipping, and modifying inventory. They create reports to examine inventory turnover, order accuracy, and warehouse productivity.

The manager of company “*Deppon Express*” provided information that the express delivery companies should install security measures like surveillance cameras, access control, and alarms. Additionally, warehouse staff should receive training on safety procedures to prevent accidents and injuries.

The owner of company “*Jd.com Express*” (Branch) provided information that our company places a strong emphasis on speed, convenience, and safety, making it easy for every team to provide comprehensive warehouse services that prioritize quality and Just-in-Time delivery. Warehouse management involves the principles and processes necessary to run day-to-day warehouse operations, which include receiving and organizing warehouse space, scheduling labor, managing inventory, and fulfilling orders.

The manager of company “*Deppon Logistics*” provided information that the express delivery companies must conduct quality checks on items before dispatching them to customers to remove damaged or expired items from inventory or return them to suppliers.

Therefore, Nowadays, the express delivery industry requires constant oversight and refinement of warehouse operations to improve productivity while minimizing costs. Given the highly competitive nature of the market, business owners should focus on gathering feedback from warehouse employees and other stakeholders to identify potential areas for improvement. By continuously improving warehouse operations, businesses can efficiently manage and store items, leading to cost savings and improved customer satisfaction.

6) Could you provide some information on the feedback received by the express delivery company?

After conducting interviews with both experienced team members and employees. The researcher provided a summary of the issues as stated by 8 people. As follow:

The manager of company “*Sto Express*” provided information that It is crucial for service businesses that aim to leave a positive impression on their customers. It's important to encourage customers to share their experiences through surveys, feedback forms, follow-up emails, or communication platforms like WeChat or Messages. This way, you can gather valuable insights and identify areas that need improvement.

The perspective a business owner of company “*Yto Express*” provided information that companies can allocate resources effectively by analyzing feedback

data. This helps manage inventory, staffing, and vehicle fleets based on demand patterns, optimizes operations, and reduces unnecessary costs.

The manager of company “*Yunda Express*” and “*Rabbit Express*” provided similar information that effective management of feedback logistics requires proper planning, implementation, and control of the flow of raw materials, in-process inventory, finished goods, and related information from the point of consumption to the point of origin. This process is vital for creating economic or ecological value by reusing materials in different ways and ensuring the efficient disposal of raw materials, in-process inventory, and finished goods. Ensuring effective management of feedback logistics is vital for achieving operational success.

The manager of company “*Sf Express*” provided similar information that tracking data is crucial for express delivery services. Customers expect real-time updates on their package's location and delivery status. Feedback from tracking data helps companies enhance accuracy, provide better visibility, and manage customer expectations.

The manager of company “*Deppon Express*” provided information that by analyzing traffic patterns, delivery volumes, and geographical data, companies can plan more efficient routes, reducing delivery times and costs while maximizing the number of deliveries.

The owner of company “*Jd.com Express*” (Branch) provided information that in the express delivery business, timely delivery is of utmost importance. To ensure timely delivery and track delays, companies use data feedback. By analyzing this data, companies can streamline their operations and enhance efficiency, ultimately reducing delivery times.

The manager of company “*Deppon Logistics*” provided information that the utilizing feedback data effectively can provide a competitive edge to express delivery companies. Continuously improving services based on data insights helps differentiate from competitors, attracting and retaining customers. Feedback data also enables cost optimization. By identifying inefficiencies or areas of excessive spending, companies can make informed decisions to reduce costs without compromising service quality.

In conclusion the highly competitive express delivery company, leveraging data feedback is crucial for staying agile, responsive, and competitive while providing exceptional service to customers.

7) How do you determine the material handling process?

After conducting interviews with both experienced team members and employees. The researcher provided a summary of the issues as stated by 8 people. As follow:

The manager of company “*Sto Express*” provided information that managing materials is a crucial part of the shipping process. It involves selecting appropriate equipment and tools for handling raw materials and finished products. Having the right equipment can minimize losses due to breakage, spoilage, and theft. Efficient equipment can also reduce the time and cost required for transportation.

The perspective a business owner of company “*Yto Express*” provided information that The process of material handling involves a systematic approach to efficiently and safely move, store, protect, and control materials at various stages of production.

The manager of company “*Yunda Express*” and “*Rabbit Express*” provided similar information that To continuously improve the material handling process, establish a system for ongoing evaluation. Regularly review performance metrics, gather feedback, and incorporate advancements in technology or methodologies to optimize operations.

The manager of company “*Sf Express*” provided similar information that to continuously enhance the material handling process, establish a system for ongoing assessment. Regularly review performance metrics, gather feedback, and incorporate advancements in technology or methodologies to optimize operations.

The manager of company “*Deppon Express*” provided information that The process of material handling involves assessing, planning, and implementing efficient strategies to manage the movement, storage, and control of materials within a facility or supply chain.

The owner of company “*Jd.com Express*” (Branch) provided information that the optimization of the material handling process is crucial for smooth operations, cost-effectiveness, safety, customer satisfaction, and competitiveness.

The manager of company “*Deppon Logistics*” provided information that the efficient handling of materials can provide a significant competitive advantage. Businesses that optimize their processes can offer better prices, faster delivery times, and higher quality service compared to their competitors.

In conclusion, the use of material handling equipment such as conveyors, forklifts, elevators, and containers can significantly improve work efficiency. Efficient material handling is crucial for optimizing storage capacity and equipment usage, while minimizing distribution and transportation costs. Poor handling of goods can result in defects and financial losses for businesses, making it an essential aspect of logistics management. However, the type of equipment required depends on the size of the business and the quantity of products. Managers must have an effective plan for managing materials.

8. Can you please provide instructions on how to use packaging and package?

After conducting interviews with both experienced team members and employees. The researcher provided a summary of the issues as stated by 8 people. As follow:

The manager of company “*Sto Express*” provided information that The perspective a business owner of company “*Yto Express*” provided information that packaging plays a crucial role in storing and transporting products. To facilitate this process, unitization is equally important. The ideal shape for ease of movement and storage is a cube, so the aim of packaging and unitization is to pack products of various sizes and shapes as close to a cuboid shape as possible.

The manager of company “*Yunda Express*” and “*Rabbit Express*” provided similar information that packaging plays a crucial role in protecting products during transportation. It acts as the first line of defense against damages caused by impacts, vibrations, moisture, heat, or cold. By ensuring proper packaging, items can

be shipped to their destination without any harm and in the same condition they were sent.

The manager of company “*Sf Express*” provided similar information that the package is often the first physical interaction customers have with your product. An attractive and well-packaged item enhances the overall customer experience, potentially increasing satisfaction and loyalty.

The manager of company “*Deppon Express*” provided information that the packaging typically includes tracking numbers, barcodes, or QR codes that allow for easy tracking and identification of packages. Clear, scannable labels ensure accurate and efficient processing throughout the express delivery network.

The owner of company “*Jd.com Express*” (Branch) provided information that the packaging should be designed for easy and quick access to the product, especially when time sensitivity is a priority, to ensure recipients can access their items swiftly upon delivery. Packaging is an essential part of my brand's visual identity. A well-designed package communicates your brand's values and quality standards to customers.

The manager of company “*Deppon Logistics*” provided information that the using efficient packaging can lead to both cost savings and environmental benefits. Properly sized and shaped packages optimize space utilization during transportation, which can reduce both shipping costs and the environmental impact of transport.

In conclusion, packaging plays an integral role in the logistical process, ensuring that items are delivered safely, quickly, and in a condition that meets or exceeds customer expectations.

After conducting interviews, it is summery to include both experienced team members and employees in the owner or manager assignment to summarize the application of engineering cost monitoring. see Table 2.

Table 2 Explore the similarities and differences from view point 2 groups

The application of engineering cost monitoring	Business Owner /Manager (8 people)	Experience team members and employees (8 people)	Similarities	Differences
1. Logistic communication	Good communication also enables us to operate smoothly and efficiently, creating a seamless network of information flow. Overall, it gives our the express delivery company a competitive advantage	The communication became evident that effective communication with business stakeholders is crucial in ensuring that everyone shares the same understanding.	Similarities. Effective communication is crucial for business owners and managers, including experienced team members and employees who need to coordinate transportation activities to achieve their goals.	However, the role of communication applications is different. Business owners and managers focus on communication to drive policy up the operational hierarchy, while experienced team members and employees use communication to discuss and coordinate work effectively.

Table 2 Explore the similarities and differences from view point 2 groups (continued)

The application of engineering cost monitoring	Business Owner /Manager (8 people)	Experience team members and employees (8 people)	Similarities	Differences
2. Customer service	As a service-based business, the quality of service is key, and it should cover all aspects of the customer experience, including inbound logistics. The company has to prioritize service quality above all else. The goal is to deliver products correctly, accurately, and quickly, while meeting	Continuous operational improvement, proactive communication, feedback collection, knowledgeable staff, and personalized interactions are crucial for exceptional customer service.	Similarities	-

Table 2 Explore the similarities and differences from view point 2 groups (continued)

The application of engineering cost monitoring	Business Owner /Manager (8 people)	Experience team members and employees (8 people)	Similarities	Differences
	<p>the expectations and needs of our customers. Business owners strive for customer satisfaction and hope to establish long-term loyalty with customers oriented.</p>			
3. Handle procurement	The quantity and quality of purchased products and materials impact the satisfaction of the organization and customer	Experience team members and employees must have manual procurement, access to information, and planning	Similarities	As a business owner or manager, it's your responsibility to set policies and guidelines for implementation. However, it's

Table 2 Explore the similarities and differences from view point 2 groups (continued)

The application of engineering cost monitoring	Business Owner /Manager (8 people)	Experience team members and employees (8 people)	Similarities	Differences
	<p>needs in various departments. To optimize costs, purchasing equipment, tools, or technology at a lower price can lead to increased efficiency and lower engineering costs for express delivery companies, ultimately resulting in a more profitable transportation business.</p>	<p>aspects of procurement.</p>		<p>important for your experienced team members and employees to have accurate procurement handling from operators. This ensures safe operations and prevents any problems from arising in the workplace. Ultimately, the goal is to achieve the objectives that have been set for the business.</p>

Table 2 Explore the similarities and differences from view point 2 groups (continued)

The application of engineering cost monitoring	Business Owner /Manager (8 people)	Experience team members and employees (8 people)	Similarities	Differences
4. Transport management process	The process encompasses moving raw materials or products from their starting point to their final destination or returning abnormal products to the warehouse.	Our main focus is on managing information, tracking and monitoring operations, confirming deliveries, and processing payments. We ensure continuous monitoring of the entire process.	Similarities	-
5. Process for managing and storing items in a warehouse.	A well-managed warehouse ensures efficient processes from setting up the warehouse	Managing and storing items in a warehouse is a critical aspect of supply chain and inventory management. Efficient	Similarities	-

Table 2 Explore the similarities and differences from view point 2 groups (continued)

The application of engineering cost monitoring	Business Owner /Manager (8 people)	Experience team members and employees (8 people)	Similarities	Differences
	structure to product design and placement, managing space, inventory leveling, and maintaining equipment.	warehouse operations can help reduce costs, improve order fulfillment, and enhance customer satisfaction.		
6. Feedback	It was revealed that there are instances where returned items cannot be given to customers due to damage or expiration and that businesses should have	There are quality control measures in place to ensure safe and efficient handling of packages. All those involved in operations must trace every process of the transport business.	Similarities	-

Table 2 Explore the similarities and differences from view point 2 groups (continued)

The application of engineering cost monitoring	Business Owner /Manager (8 people)	Experience team members and employees (8 people)	Similarities	Differences
	policies in place to efficiently handle and potentially process or reuse these products to minimize costs.			
7. Material handling process	Engaging in the transportation of raw materials, goods in process, and finished goods is crucial within factories and warehouses.	Efficient material handling is crucial for optimizing storage capacity, and equipment usage, and minimizing distribution and transportation costs.	Similarities	-

Table 2 Explore the similarities and differences from view point 2 groups (continued)

The application of engineering cost monitoring	Business Owner /Manager (8 people)	Experience team members and employees (8 people)	Similarities	Differences
8. Packaging and Package	It's important. Because, the packaging is designed to showcase product details and create awareness among customers, while also protecting the product from damage during transportation and storage.	For transportation businesses, packaging plays a crucial role in saving space during transit while ensuring the safety and aesthetic appeal of the parcel. To achieve ease of movement and storage, the optimal shape for packaging is a cube. The objective of packaging and unitization is	Similarities	-

Table 2 Explore the similarities and differences from view point 2 groups (continued)

The application of engineering cost monitoring	Business Owner /Manager (8 people)	Experience team members and employees (8 people)	Similarities	Differences
		to pack products of diverse sizes and shapes as tightly as possible to resemble a cuboid shape.		

Therefore, According to Table 2, the researcher categorized the data into two groups based on view point 2 and 8 questions. The data showed both similarities and differences between the two groups on various issues. From the analysis, it can be concluded that:

1. Logistic communication. There were both similarities and differences in views on this issue.
2. Customer service. The information provided to both groups of customers about services had similar views.
3. Handling procurement. The different perspectives were observed as procurement policy and budget management is the responsibility of business owners or managers. However, team members and employees need access to information and planning aspects of procurement for efficient work performance in line with the goals.
4. Transport management process. Both groups of informants share similar views on the importance of fast and punctual transportation to ensure customer satisfaction and retention.

5. Process for managing and storing items in a warehouse. It is important to note that both groups of key informants hold varying opinions on the matter. However, they all agree that effective management and storage of items in a warehouse is a crucial aspect of supply chain and inventory management. Streamlined warehouse operations can lead to reduced costs, improved order fulfillment, and increased customer satisfaction.

6. Feedback. Both groups of key informants share similar views and opinions regarding the importance of feedback checks in achieving business goals. Whether it's a business owner, manager, team member or employee, it's crucial to evaluate if the objectives have been met or not. If the goal is not achieved, those involved must work together to solve the problems or devise new strategies to find ways to accomplish the set mission.

7. Material handling process. Both groups of key informants share the same views on reducing costs in every aspect of the business, from upstream to downstream. This includes minimizing production losses and maximizing business opportunities.

8. Packaging and Package. The majority of key informants from two groups share similar views on packaging and package. Packaging is intended to safeguard products from potential damage during transportation and storage, while also enhancing the product's image. Appealing packaging designs can create a positive impression and increase customer satisfaction, ultimately leading to increased sales.

Therefore, the text below has been written to analyze the current operational problems and the application of tracking audit in the engineering cost of an express delivery company. The perspective of owners, business managers and team members or employees within the company will be taken into account. The analysis will focus on eight related elements which are as follows: (1) Logistics communication, (2) Customer service, (3) Procurement, (4) Transport management, (5) Warehouse management and storage, (6) Feedback, (7) Material handling, and (8) Packaging and package.

CHAPTER 5

CONCLUSION

This chapter summarizes the study and proposes recommendations for future research.

5.1 Conclusions

5.1.1 Conclusions of research objective 1

After interviewing 2 groups of key informants, namely business owners or assigned managers, experienced team members, and employees, the researchers have concluded that these problems are impacting the company's operations. The result found that there are 8 main problems in the overall picture of express delivery companies in Kunming as follows:

1) Competition situation. The express delivery companies is highly competitive, with numerous companies vying for market share. Due to China's multiple provinces and subdivisions, duplicate taxes are burdensome. Expensive tolls increase the cost of business as well. This can lead to price wars, reduced profit margins, and the need for continuous innovation to stay ahead.

2) Last-mile delivery. The "last mile" of the delivery process, which involves getting packages from a local distribution center to the customer's doorstep, can be complex and expensive. Issues such as traffic congestion, address accuracy, and failed delivery attempts can increase costs and customer dissatisfaction.

3) Some business owners lack sufficient funds to increase the internal management capabilities of each company, such as investing in GPS systems to control the standards of land transportation of the express delivery company operators, which will have a break-even point that can control expenditures not to be exaggerated.

4) Regulatory challenges. Express delivery companies operate in a heavily regulated environment, with rules and regulations related to transportation, safety, data privacy, and customs. Navigating these regulations across different regions and countries can be complex and time-consuming.

5) The new operator of the express delivery company could not figure out the cost of exporting goods from China to neighboring countries. Ultimately, this creates operational risks.

6) Measures to protect against COVID-19. The COVID-19 epidemic is being prevented by measures in every country. The Chinese government, too, has taken measures to prevent foreign ships from docking or delaying the docking schedule. Ultimately, the delay transport business operators have expenses and damage to some types of goods during transportation.

7) Air and water transportation was still unable to travel normally during the recent COVID-19 situation, resulting in containers getting stuck and being unable to deliver goods to neighboring countries. Consequently, when the number of containers is reduced, there is a shortage of containers. This led to an increase in price and damage to the business.

8) Environmental concerns: As consumers become more environmentally conscious, there is increasing pressure on delivery companies to adopt sustainable practices. Balancing the need for timely deliveries with reducing carbon emissions and minimizing environmental impact presents a challenge.

9) Disruptions and external factors. Natural disasters, political instability, and unexpected events (as seen with the COVID-19 pandemic) can disrupt supply chains, impact transportation networks, and lead to delays in deliveries. Recent COVID-19 situations have caused all ships scheduled to leave the port to be delayed. Because of the decrease in workers at each port, including workers in the destination country, the container density at each port increases. As a result, exporters incur additional costs for exporting goods, known as demurrage and detention.

10) Data security and privacy. Collecting and managing customer data for tracking and communication purposes requires strict adherence to data protection regulations to ensure privacy and security.

Some international shipping companies have a problem with space between cargoes. Due to the pre-reservation of space on the ship, there may be a lack of space between the cargo.

11) Security and fraud. Ensuring the security of packages and preventing theft or fraud during the delivery process is a constant concern. Companies need to invest in tracking systems, secure packaging, and verification processes to address these issues.

12) The monopoly of shipping lines resulting from cartel integration of the shipping industry causes the price level of express delivery companies to become monopolistic. As a result, businesses can set higher prices and collect extra costs such as congested ports, clean fuel, and appearance maintenance.

5.1.2 Conclusions of research objective 2

The researcher conducted interviews with two groups of key informants- business owners or assign manager and experienced team members and employees. A total of 16 people were involved in discussions related to the process of tracking audits in the engineering cost program. Based on the in-depth interviews and small group discussions. The summary of interviews with business owners and managers conducted in person and over the phone, and experienced team members and employees conducted by interview and focus group consisting of 8 questions. The summarized results are 8 elements as follows:

1) Logistic communication

1.1) Business owners and managers provided information on relevant issues, and the researcher concluded that logistic communication is important to also enable us to operate smoothly and efficiently, creating a seamless network of information flow. Overall, it gives our the express delivery company a competitive advantage.

1.2) Experienced team members and employees provided information on relevant issues, and the researcher concluded that the communication became evident that effective communication with business stakeholders is crucial in ensuring that everyone shares the same understanding.

Thus, both groups of key informants agreed on the significance of communication in the logistics industry. Communication is a crucial aspect of the transportation business, regardless of one's position in an The express delivery

company. Therefore, similar communication practices are used by all employees. Especially, effective communication is crucial for business owners and managers, including experienced team members and employees who need to coordinate transportation activities to achieve their goals.

As for the differences, it can be concluded that the role of communication applications is different. Business owners and managers focus on communication to drive policy up the operational hierarchy, while experienced team members and employees use communication to discuss and coordinate work effectively.

2) Customer service

2.1) Business owners and managers provided information on relevant issues, and the researcher concluded that the service-based business, the quality of service is key, and it should cover all aspects of the customer experience, including inbound logistics. The company has to prioritize service quality above all else. The goal is to deliver products correctly, accurately, and quickly, while meeting the expectations and needs of our customers. Business owners strive for customer satisfaction and hope to establish long-term loyalty with customers oriented.

2.2) Experienced team members and employees provided information on relevant issues, and the researcher concluded that continuous operational improvement, proactive communication, feedback collection, knowledgeable staff, and personalized interactions are crucial for exceptional customer service.

Therefore, both groups have identical information.

3) Handle procurement

3.1) Business owners and managers provided information on relevant issues, and the researcher concluded that the quantity and quality of purchased products and materials impact the satisfaction of the organization and customer needs in various departments. To optimize costs, purchasing equipment, tools, or technology at a lower price can lead to increased efficiency and lower engineering costs for express delivery companies, ultimately resulting in a more profitable transportation business.

3.2) Experienced team members and employees provided information on relevant issues, and the researcher concluded that a must-have manual procurement, access to information, and planning aspects of procurement.

Therefore, both groups have identical information.

4) Transport management process

4.1) Business owners and managers provided information on relevant issues, and the researcher concluded that the process encompasses moving raw materials or products from their starting point to their final destination or returning abnormal products to the warehouse.

4.2) Experienced team members and employees provided information on relevant issues, and the researcher concluded that our main focus is on managing information, tracking and monitoring operations, confirming deliveries, and processing payments. We ensure continuous monitoring of the entire process.

Therefore, both groups have identical information.

5) Process for managing and storing items in a warehouse

5.1) Business owners and managers provided information on relevant issues, and the researcher concluded that a well-managed warehouse ensures efficient processes from setting up the warehouse structure to product design and placement, managing space, inventory leveling, and maintaining equipment.

5.2) Experienced team members and employees provided information on relevant issues, and the researcher concluded that managing and storing items in a warehouse is a critical aspect of supply chain and inventory management. Efficient warehouse operations can help reduce costs, improve order fulfillment, and enhance customer satisfaction.

Therefore, both groups have identical information.

6) Feedback

6.1) Business owners and managers provided information on relevant issues, and the researcher concluded that was revealed that there are instances where returned items cannot be given to customers due to damage or expiration and that

businesses should have policies in place to efficiently handle and potentially process or reuse these products to minimize costs.

6.2) Experienced team members and employees provided information on relevant issues, and the researcher concluded that there are quality control measures in place to ensure the safe and efficient handling of packages. All those involved in operations must trace every process of the transport business.

Therefore, both groups have identical information.

7) Material handling process

7.1) Business owners and managers provided information on relevant issues, and the researcher concluded that was revealed that engaging in the transportation of raw materials, goods in process, and finished goods is crucial within factories and warehouses.

7.2) Experienced team members and employees provided information on relevant issues, and the researcher concluded that efficient material handling is crucial for optimizing storage capacity, and equipment usage, and minimizing distribution and transportation costs.

Therefore, both groups have identical information.

8) Packaging and Package

8.1) Business owners and managers provided information on relevant issues, and the researcher concluded that it was made that packaging serves a vital role in displaying product information, raising customer awareness, and safeguarding the product during transportation and storage.

8.2) Experienced team members and employees provided information on relevant issues, and the researcher concluded that the express delivery company, packaging plays a crucial role in saving space during transit while ensuring the safety and aesthetic appeal of the parcel. To achieve ease of movement and storage, the optimal shape for packaging is a cube. The objective of packaging and unitization is to pack products of diverse sizes and shapes as tightly as possible to resemble a cuboid shape.

Therefore, both groups have identical information.

5.2 Summary and Discussion

5.2.1 The overall results of problems of the express delivery company in Kunming with 2 groups of key informants, namely business owners or managers, experienced team members, and employees, can be summarized 12 factors as follows: 1) Competition situation, 2) Last-mile delivery, 3) Some business owners lack sufficient funds, 4) Regulatory challenges, and 5) The introduction of a new operator is significant because it can help enhance operational efficiency, boost productivity, and simplify processes. This may entail incorporating new technologies, optimizing workflows, or restructuring teams.

5.2.2 The overall results of the application of tracking audit in engineering cost of the express delivery company in Kunming with 2 groups of key informants, namely business owners or managers, experienced team members, and employees, can be summarized 8 factors as follows: 1) Logistics communication, 2) Customer service, It is proposed that tracking and auditing be conducted throughout the entire project process to emphasize comprehensive customer service and create a lasting impression. 3) Procurement, 4) Managing the transportation of goods is crucial for business owners. This process involves the movement of raw materials or products from their origin to their final destination, as well as returning defective products to the warehouse. 5) Warehouse management and storage, 6) Feedback is essential for an the express delivery company to maintain and enhance its services, address customer concerns, adapt to changing customer preferences, and ultimately provide a better overall experience for its customers while remaining competitive in the market. In today's world, businesses strive to improve their quality through feedback. Because, feedback helps companies understand how their customers experience their services, including delivery speed, accuracy, and condition. This feedback allows companies to identify areas for improvement and make necessary changes to enhance the quality of their services. 7) Material handling is mechanical equipment used for the movement, storage, control, and protection of materials, finished goods, and products throughout the process of manufacturing, distribution, consumption, and disposal. The operational process involves efficiently controlling operating costs while aiming to meet set objectives. And 8) Packaging and packages play an essential role in protecting products

during transportation, handling, and storage from physical damage, moisture, contamination, and other environmental factors. Inadequate packaging can lead to financial losses for manufacturers and dissatisfaction among consumers. In modern commerce, packaging serves various functions beyond containment, such as product safety, marketing, convenience, and sustainability, making them a crucial component of business strategy and consumer experience.

5.3 Suggestions for Future Study

The research into reducing engineering costs involves nine steps and is an ongoing process. However, it is necessary to continuously adjust the model in the future by either adding or removing relevant factors. The changing environment and increased competition have forced businesses to adjust their operating strategies. To ensure sustainable business operations, it is important to find ways to overcome obstacles and challenges in engineering costs for express delivery companies.

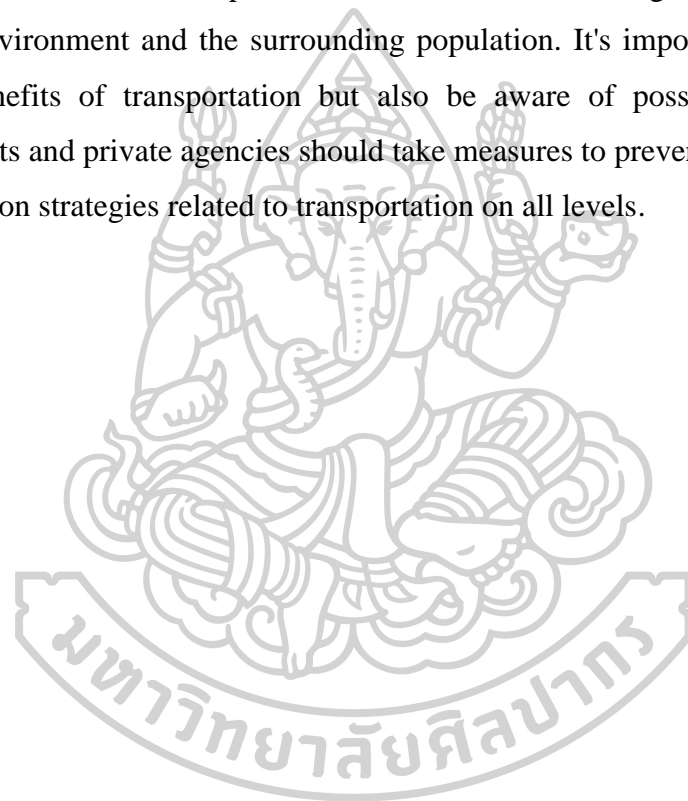
5.4 Implications

5.4.1 Operational impact

Executives have to consider cost reduction policies and work together with their establishments to achieve common ground. It is crucial to keep track of engineering costs for express delivery companies, especially personnel factors. Managers and business owners need to prepare their workforce and ensure that employees are aware of their responsibilities. This not only ensures work is completed according to standards and in a timely manner but also ensures there are enough employees to handle the workload. Departments must coordinate systematically, and unnecessary or redundant steps should be eliminated to increase efficiency. Executives can monitor the current operating activities of the express delivery business chain to avoid potential issues that may cause transportation delays in the future. These factors greatly impact the efficiency of express delivery management.

5.4.2 Social impact

Transportation has to significant role in a country's economic, social, and environmental systems, promoting rapid economic growth. There has been a cultural exchange between cities and rural areas, and sometimes new cultures can enhance the living standards of rural communities. However, there are also negative consequences associated with transportation, such as marine transportation causing oil spills that negatively impact water quality and the environment for those living near the port. Land transportation can also cause pollution in the form of exhaust gas and noise, affecting both the environment and the surrounding population. It's important to consider the various benefits of transportation but also be aware of possible social impacts. Governments and private agencies should take measures to prevent negative effects or collaborate on strategies related to transportation on all levels.



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Questionnaire

Research Title

**The Analysis of Current Operation Problems and Application of Tracking Audit
in Engineering Cost of Express Delivery Company in Kunming, the People's
Republic of China**

Advisor

Assoc. Prof, Dr. Choosak Pornsing.

**Engineering Program in Engineering Management
Department of Industrial Engineering and Management
Graduate School, Silpakorn University**

This questionnaire consists of 3 sections of questions as follows:

Part 1: Demographic data and general information about the respondents.

Part 2: Information about the operation of the express delivery company, provided by the business owner and experienced team members and employees.

Part 3. Suggestion about current operation problems and application of tracking audit in engineering cost of express delivery company in Kunming.

The researcher kindly requests your help in answering a questionnaire regarding your opinions. Please prioritize both your importance and experience on all topics. Thank you for your participation. This research will not affect the organization directly, but it will benefit the organization and the wider academic community.



Yue Huang

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Department of Industrial Engineering and Management

Graduate School, Silpakorn University

Please provide an explanation and mark it clearly ✓ right channel Please read the provided text and answer one question with as much accuracy as possible.

Part 1 Demographic Data

1. Gender 1. Male

2. female

2. Age 1. 20- 29 Years

2. 30- 39 Years

3. 40- 49 Years

4. 50- 59 Years

5. 60 years or older

3. Status

1. Single

2. Married

3. Separated

4. Divorced

4. Education

1. Under Bachelor's Degree

2. Bachelor's Degree

3. Master's Degree

4. Doctoral Degree

5. Other (please specify).....

5. Position

1. business owner

2. team members or employees

7. Income/ Month

1. not more than 4000 Yuan
2. 4,001-7,000 Yuan
3. 7,001-10,000 Yuan
4. 10,001-14,000 Yuan
5. 14,001 Yuan or more

9. Previous business experience or years of work.

1. 3 Years
2. 4-6 Years
3. 7-9 Years
4. 9 Years or more

Part 2**1. Questions for the business owner**

1. Can you please describe the type of communication-related to logistics that you currently have in place?
2. What is your customer service model?
3. What is the company's procurement process?
4. What is the transport management process?
5. What is the warehouse management and storage process?
6. Could you provide some information on the feedback received by the express delivery company?
7. How do you determine the material handling process?
8. Can you please provide instructions on how to use packaging and package?

2. Questions for experienced team members and employees

1. Can you please describe the type of communication-related to logistics that you currently have in place?
2. What is your customer service model?
3. What is the company's procurement process?
4. What is the transport management process?
5. What is the warehouse management and storage process?
6. Could you provide some information on the feedback received by express delivery company?
7. How do you determine the material handling process?
8. Can you please provide instructions on how to use packaging and package?

Part 3

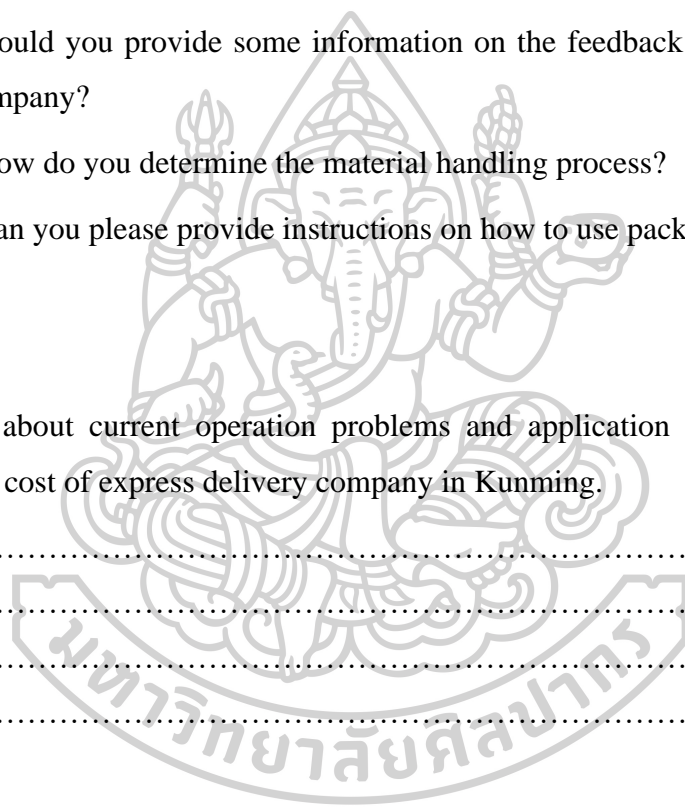
Suggestion about current operation problems and application of tracking audit in engineering cost of express delivery company in Kunming.

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VITA

NAME

Yue Huang

