

PROJECT THESIS REPORT



FACOS

BUSINESS PLAN FOR FACOS TRANSPORTATION EXCHANGE PLATFORM

A New Era in the Transportation Industry



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Hanoi, December 14, 2023

The authors of this project thesis

EXECUTIVE SUMMARY

The FACOS Transportation Exchange Platform project seeks to provide an effective operating solution to save transportation costs, minimize the number of empty trips, and optimize the domestic freight process.

The project team carried out market and customer behavior research. The project team found high customer demand for the transport exchange platform. Focusing on technology development and progressing platform service are important company goals. The target customers of this project are businesses in the logistics industry, shippers, and carriers.

This project will provide a detailed business plan for the FACOS Transportation Exchange Platform, including market analysis, market opportunity assessment, corporate operations management, financial analysis, and marketing strategy to achieve success. FACOS has forecasted three scenarios: optimistic, most likely, and pessimistic, listed in the financials section, showing the evolution of earnings and cash flows. With all three scenarios, the project is profitable, with IRR indexes from worst to good of 98%, 111%, and 124%.

Based on analysis and judgment, the project team believes the FACOS Transportation Exchange Platform has long-term development potential. The project team is dedicated to providing the best transportation services and hopes to positively influence the domestic transportation industry.

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ABBREVIATION

ABBREVIATION	DEFINITION
BTS	Bureau of Transportation Statistics
GDP	Gross Domestic Product
BOT	Build - Operate - Transfer
IT	Information technology
AI	Artificial intelligence
FTA	Free Trade Agreement
CAGR	Compound annual growth rate
FMC	Federal Maritime Commission
GMV	Gross Merchandise Value
LPI	Logistics Performance Index
ICT	Information and Communication Technology
IoT	Internet of Things
M&A	Mergers and acquisitions
TAM	Technology Acceptance Model
PE	Perceived ease of use
PU	Perceived usefulness
PC	Perceived cost
FC	Transportation exchange platform adoption
CEO	Chief Executive Officer
CMO	Chief Marketing Officer
CFO	Chief Financial Officer
CHRO	Chief Human Resources Officer
CTO	Chief Technology Officer
HR	Human Resources
PR	Public Relations

3PL	Third-party Logistics
VAT	Value-added tax
KPI	Key Performance Indicator
Ads	Advertising
SEO	Search Engine Optimization
ASEAN	Association of Southeast Asian Nations
CPI	Corruption Perceptions Index
QR code	Quick response code
EBITDA	Earnings Before Interest, Tax, Depreciation and Amortization
D&A	Depreciation and Amortization
EBIT	Earnings Before Interest and Tax
NPV	Net present value
IRR	Internal rate of return
MIRR	Modified Internal Rate of Return
NCF	Net cash flow
PB	Payback
SSL	Secure Sockets Layer
CSR	Corporate Social Responsibility

1. INTRODUCTION

1.1. Topic background

1.1.1. Overview of the logistics industry in the world

Logistics plays a crucial role as a service sector within the economy's overall structure. It is a vital component that effectively contributes to managing the supply chain related to the flow of goods, services, and relevant information. Logistics covers the production stage of goods to the recipient's delivery point. Logistics is a standalone industry and directly relates to various other sectors such as transportation, warehouse leasing, import-export services, customs services, taxation, insurance, and retail.

In early 2022, the global logistics market continued its recovery and entered a new phase, bringing significant growth for both 2022 and the subsequent period.

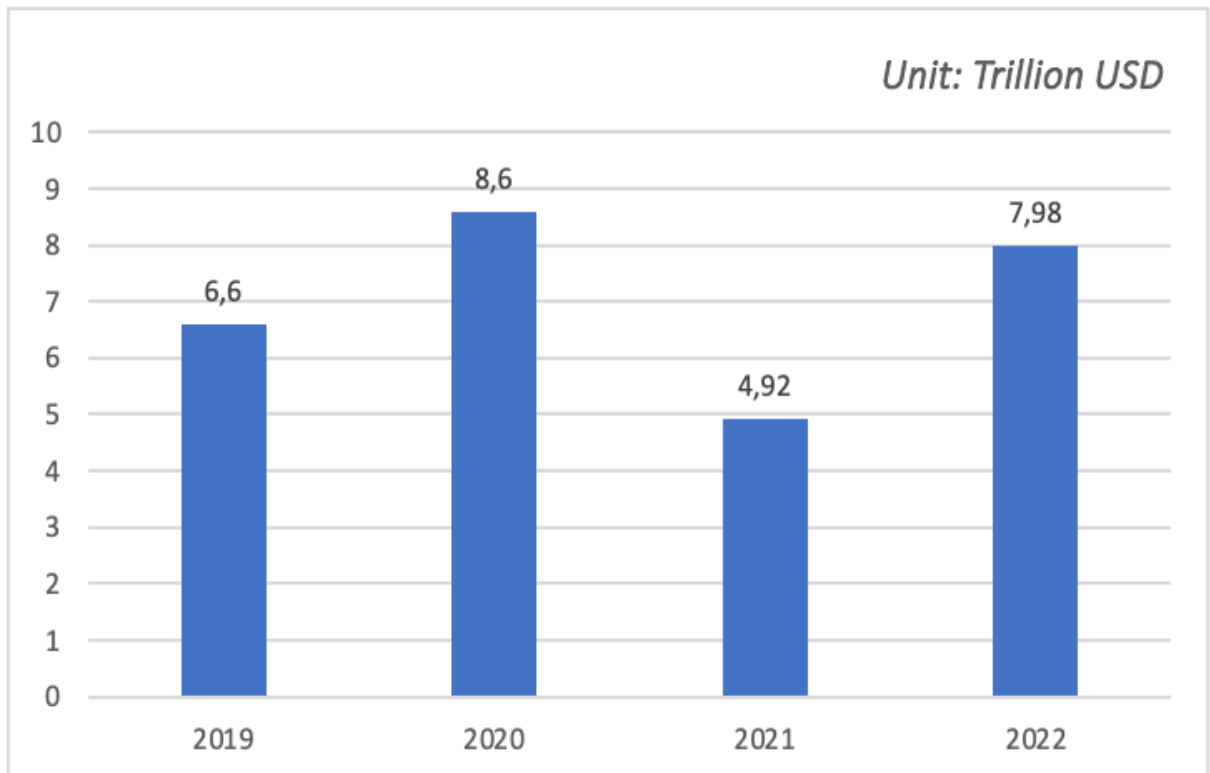


Chart 1.1: The global logistics market size from 2019 - 2022 (unit: Trillion USD)

(Source: Statista.com, 2022)

From 2019 to 2022, the global logistics market witnessed an increase in value from \$6.6 trillion to \$7.98 trillion (a growth of \$1.38 trillion). In 2021, the global logistics market value decreased to \$4.92 trillion (Statista.com, 2022). The COVID-19 pandemic significantly affected this decline due to travel restrictions and lockdown measures that disrupted supply chains and weakened global business activities. The global supply chain disruptions led to shortages of goods and unstable supply sources, consequently diminishing the value of the logistics market.

The pace of trade growth in the first quarter of 2022 remained robust across all geographical regions in developed and developing countries. However, it was slightly lower in the East Asia and Pacific region. Export growth, in general, was more substantial in regions focused on exporting goods, attributed to the increase in commodity prices. The value of goods exported from developing countries in the first quarter of 2022 was around 25% higher than in 2021. Meanwhile, the corresponding figure for developed countries was about 14% (Uyen, 2022).

As of May 2023, the average global logistics cost is 10.7% (Nam, 2023). Within this, logistics costs in the United States and Europe account for an average of 8% of their respective GDPs; China's logistics costs are only around 9%; Singapore is at approximately 8.5%; Malaysia at 13%; and Thailand at 15.5%.

However, fuel costs are becoming a significant negative factor for both the trucking and logistics sectors. For instance, in Europe, inflation and rising diesel prices have led to a notable increase in transportation costs in the first quarter of 2022. In the United Kingdom, the Bureau of Transportation Statistics (BTS) noted that the Freight Transportation Services Index (TSI) rose by 0.7% in March 2022 compared to February 2022. In 2022, the United States witnessed a substantial surge in its business logistics costs (USBLC), surpassing \$2.316 trillion, which accounted for a significant 9.1% of the nation's nominal Gross Domestic Product (GDP) for that year. This figure represents the highest historical level on record, as highlighted in a recent report.



Chart 1.2: Logistic Market Share By Transportation Type in 2022 (%)

(Source: Statista.com, 2022)

The road transportation segment dominated the majority of the market share. The road transportation sector has developed to meet the growing demand for road transport vehicles, especially for long-distance retail product deliveries, particularly in domestic markets. When opting for road transport, retail businesses utilize trucks and large-capacity cargo. Furthermore, improved road connectivity in developing countries, and excellent road connections in all developed countries, are crucial in promoting the expansion of highway transportation methods (Statista.com, 2022).

The Russia-Ukraine conflict has caused political unrest and escalating tensions, which could potentially disrupt trade routes, diplomatic relations, and supply chain networks. These disruptions may impact the logistics industry, affecting the timely movement of goods and subsequently influencing overall market value.

In general, the global logistics industry continues to face numerous changes and opportunities due to the impact of various economic, technological, and social factors. These factors include the growth of e-commerce, technological advancements, and sustainability requirements. Supply chain management and logistics operations require flexibility, adaptability, and strategic planning.

1.1.2. Overview of the logistics industry in Vietnam

In recent years, the logistics industry in Vietnam has experienced significant growth, with an average annual rate of 14 - 16%, and a yearly scale of USD 40 - 42 billion. The number of logistics businesses and the quality of their services have been increasing, making a significant contribution and leading to record-high import and export results with USD 732.5 billion in 2022, marking a 9.5% increase compared to 2021 (Ministry of Industry and Trade, 2022).

Vietnam ranks 10th among the top 50 emerging global logistics markets. It holds the 43rd position in the efficiency index, placing it among the top 5 ASEAN countries in the logistics sector in 2023 (Agility, 2023). Vietnam's total volume of transported goods in the first nine months of 2022 reached 1.4927 billion tons, a 24.4% increase compared to the same period in 2021. The volume of circulated goods reached 318.12 billion tons, a 31% increase compared to the same period in 2021 (General Statistics Office, 2022).



Chart 1.3: Freight volume in the period of 2020 - 2022 (unit: Million tons)

(Source: General Statistics Office, 2022)

The total volume of goods transportation and circulation in the first quarter of 2023 has increased compared to the same period in 2022. Specifically, Vietnam's total volume of cargo transportation has increased by over 16% compared to the same period last year. The

total circulation volume in the first quarter of 2023 also increased by nearly 22% compared to the same period in 2022 (VIRAC, 2023). This indicates a positive economic recovery following the challenging period caused by the COVID-19 pandemic and the ability to meet the demands in the import-export and domestic consumption sectors.

The logistics businesses in Vietnam are considered numerous but need to be more decisive. Vietnam currently has over 30,000 registered logistics businesses. The logistics market involves over 5,000 businesses providing third-party logistics (3PL) services. Among them, 89% are domestic businesses, 10% are joint ventures, and 1% are wholly foreign-owned enterprises providing cross-border logistics services, with prominent names such as DHL, Kuehne+Nagel, DSV, and DB Schenker (Vietnam Logistics Report, 2022).

The trend of applying information technology is strong, and most logistics businesses focus on technology adoption. However, experts assess that the development of the e-logistics sector in Vietnam has yet to match its potential. Despite the emphasis on technology adoption, the e-logistics industry in Vietnam still needs to be considered at a relatively low level of development. The trend of applying information technology is strong, and most logistics businesses focus on technology adoption. Therefore, the application of technology by Vietnamese logistics companies is hindered by various barriers, primarily due to the majority of enterprises in Vietnam being small and medium-sized, which limits their financial capabilities (Quang Vinh, 2022).

Vietnam's total road length is 595,201 km, railway length is 3,143 km, waterway length is 17,026 km, and there are 286 ports with a total port bridge length of 96,275 km. Twenty-two operational airports cover 11,859 hectares, 11 inland ports, and 69 logistics centers (Ministry of Industry and Trade, 2022). However, the transportation network's quality could be better, and technical standards in many places do not ensure safety in transportation. The infrastructure is outdated and lacks connectivity between different stages, from transportation and raw materials to warehousing and supply chain management. The transportation structure could be more rational, and during peak hours, container trucks often experience congestion for hours before entering the port. This leads to increased fuel consumption and slower cargo transportation.

As of May 2023, logistics costs still account for about 16.8% of the value of goods in Vietnam, while the global average is around 10.7%. Within the ASEAN region, logistics costs in Vietnam are higher than other countries, such as Singapore at about 8.5%, Malaysia

at 13%, and Thailand at 15.5% (Vietnam Logistics Association, 2023). The reasons behind this disparity are the lack of synchronized transportation infrastructure and limited connectivity between maritime, rail, and road transport. There need to be national and international logistics centers in key economic areas for centralizing goods distribution is another factor. The limited connectivity between different transportation modes continues to be a constraint, leading to higher transportation costs.

Transportation costs are high, accounting for up to 60% of logistics costs (VIRAC, 2023). This is primarily due to the heavy reliance on road transport, which requires higher transportation fees. In 2022, there was a precise distribution of freight transportation modes in Vietnam. Road transport remained the most common mode, accounting for 74.4% of the total volume of goods transported (General Statistics Office, 2022).

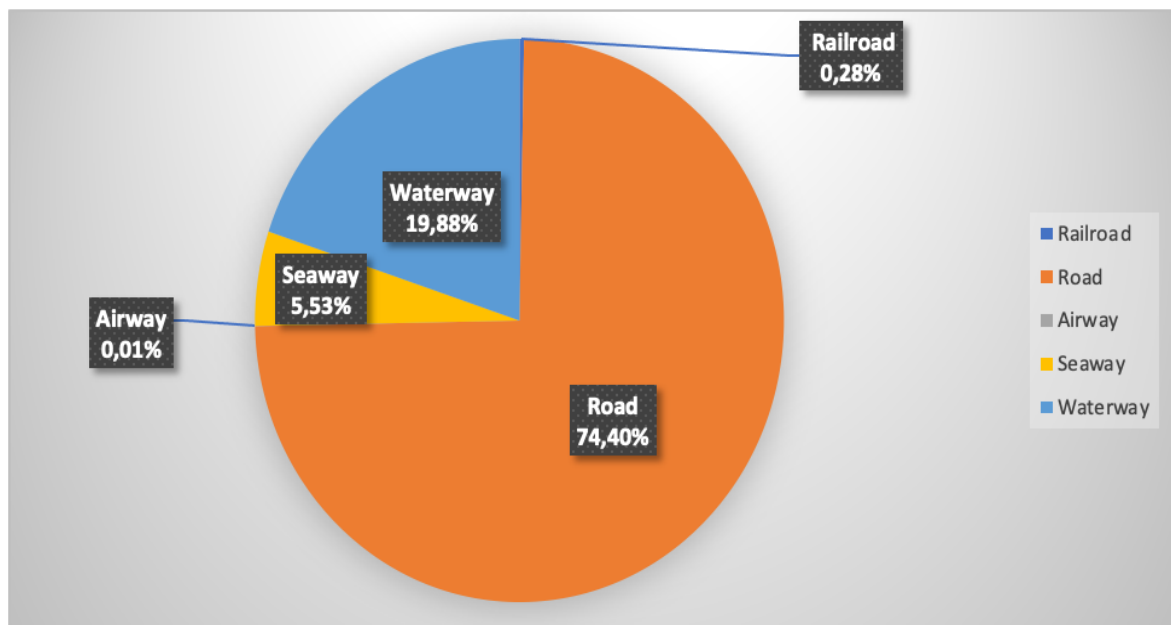


Chart 1.4: Structure of Vietnam's freight modes in 2022 (% by freight volume)

(Source: Vneconomy.vn, 2022)

Road transport costs still account for a high proportion of over 77% compared to other modes of transport (Vietnam Road Administration, 2022). The costs that make long-distance transport prices high are fuel (accounting for 35 - 50%), labor (accounting for 15 - 20%), out-of-way costs approximately 5%, tolls (BOT) about 10 - 15%, spare parts (accounting for 7 - 10%), etc (Minh Anh, 2022).

In addition, emissions from transportation activities also contribute mainly to the increasingly severe air pollution situation. According to statistics from the Journal of Environmental Economics (2021), Vietnam's air contains about 500,000 tons of suspended CO₂ per day, or in other words, about 200 million tons per year, accounting for 0.58% of the world's total (Co emissions database for global atmospheric research EDGAR, 2022). The transportation sector accounts for 45% of the total greenhouse gas emissions and absorption (Institute of Environment and Natural Resources - Ho Chi Minh City National University).

It is estimated that 1 liter of gasoline releases more than 2 kg of CO₂ into the atmosphere from the engine (European Climate Diplomacy Week, 2019). On average, a truck consumes 14 liters of gasoline per 100 km and releases approximately 28 kg of CO₂ into the atmosphere per 100 km. When multiplied by the number of vehicles, the number of kilometers traveled by 1 vehicle will show how large the number is multiplied (above). This problem will become even more severe when there are still many empty vehicles daily, causing both waste of transportation and increasing CO₂ emissions into the environment.

1.2. Market opportunity and problem identification

1.2.1. Market opportunity

The first two months of 2023 marked a significant increase in cargo transportation activities, with 374.7 million tons of goods transported, representing a 15.7% increase compared to the same period in 2022. Furthermore, there was a 20.3% increase in the total distance traveled, reaching 76 billion ton-kilometers (Ministry of Transport, 2023). Transportation activities depend heavily on roads, accounting for 74.40% of the total amount of goods transported. Road transport costs still account for a high proportion of over 77% compared to other modes of transport (Directorate for Roads of Viet Nam, 2022).

In light of the growing demand for cargo transportation and the rising costs, various solutions have emerged to reduce transportation costs. Reducing the cost of road transport will significantly contribute to reducing logistics costs. One such solution is the establishment of the transportation exchange platform. This platform operates based on a sharing economy model to rationalize and optimize transportation costs. The sharing economy model encompasses three main elements: service providers, service recipients, and products, with

a crucial component being the platform providers, which promise to deliver economic benefits to all participants.

The cargo transportation market is continuously evolving in line with global trends, and high customer demands necessitate the implementation of modern and innovative solutions to enhance competitiveness in transportation exchange platforms. Therefore, the Vietnamese market is in great need of transportation exchange platforms that can address the shortcomings of previously established transportation platforms. These platforms aim to optimize costs, minimize empty truck capacity, reduce the time spent searching for transportation partners, simplify complex procedures, and streamline cargo transportation.

Additionally, the integration of Industry 4.0 technologies and the utilization of information technology (IT) and artificial intelligence (AI) are essential for improving transaction processes and transportation management. Additionally, cargo insurance services are crucial for ensuring the safety of goods during transportation, and public transportation service pricing must be transparent. All information related to pricing and transportation services should be transparent. The transportation exchange platform aims to improve the transportation sector and logistics through process optimization, new technologies, and promoting transparency and security throughout the transportation process.

Being a critical factor in saving transportation costs, reducing the rate of empty vehicle runs leaves to be desired. Efficient operation of freight transportation exchange platforms with laden trips will decrease approximately 40% of transportation costs (Ministry of Transport, n.d). To achieve this, transportation exchange platforms need to fulfill their roles properly. The current platforms need to be closer to expectations.

1.2.2. Market problem identification

The transportation market in Vietnam is currently experiencing fierce competition with over 4,000 logistics companies and a range of players, including prominent names like Viettel Post, VNPost, FedEx, UPS, DHL, Logivan, Lalamove, Nasco, Tin Thanh Express, and even super apps like Grab, Go-Viet, and Be (HongBang International University, 2020). In Vietnam, the transportation exchange market is popularly dominated by two primary models: Uber-like application-based services such as Lalamove, Ahamove, and Logivan; and last-mile delivery models like Grab, Now, and Be.

Since 2015, several cargo transportation exchange platforms have been licensed to operate and support cargo transportation services, including VinaTrucking, Smartlog, Ecotruck, bonbon24h.vn, sanvanchuyen.vn, and Logivan. However, these platforms have not met expectations efficiently. They mainly operate as support tools for transportation companies or are almost like transportation exchange platforms, primarily serving road freight.

For example, the STX system by Smartlog is exclusively for serving the Vietnam Post's transportation needs. Logivan only provides trucking services, and Ecotruck offers a combination of services but specializes in containerized cargo transportation for import and export companies. VinaTrucking transportation exchange platform, expected by the Ministry of Transport to hit many targets, had to cease operations by 2017 due to a lack of attention from businesses and a limited number of transactions through the platform. These platforms operate on a small scale and face challenges, with empty truck ratios remaining at 60 - 70%, leading to high transportation costs (Nhat Minh, 2022).

Furthermore, most transportation exchange companies are small enterprises with limited financial resources. Meanwhile, transport costs are low, but the value of goods is high, sometimes up to billions. Consequently, cargo owners often demand solid legal provisions to facilitate problem-solving in case of cargo-related risks or losses. On the other hand, most transportation exchange platforms act merely as intermediaries, connecting cargo owners with transportation companies, and are hesitant to provide guarantees. This shows why there are so many transportation exchange platforms but limited efficiency (Nguyen Yen, 2022).

2. MARKET ANALYSIS

2.1. Market potential

2.1.1. The potential for development of the logistics industry in Vietnam

With its strategic location at the heart of the Asia-Pacific region, situated along international maritime routes and boasting an extensive coastline with numerous deep-water port potential, Vietnam has increasingly integrated itself into the global economy through various free trade agreements (FTAs). Vietnam is considered a highly potential market for the development of logistics services.

After more than two years of severe disruptions caused by the COVID-19 pandemic, as of 2022, the logistics sector has gradually returned to normalcy, ensuring connectivity in transportation and goods circulation. In major economic hubs and various provinces and cities across the country, there has been a heightened focus on renewing logistics activities, developing services infrastructure, and enhancing connectivity among supply chain stakeholders. This is a crucial factor in driving the recovery of manufacturing activities and goods circulation and contributing to Vietnam's record-breaking import and export values as the country transitions into the “new normal” phase and leverages opportunities from signed FTAs.

Vietnam's logistics market ranks 10th among the top 50 global emerging logistics markets (Agility, 2023). The compound annual growth rate (CAGR) for 2022-2027 is forecasted to reach 5.5%. Vietnam's gross domestic product (GDP) gained 8.83% after nine months in 2022 (Ministry of Industry and Trade, 2022). Vietnam currently leads among ASEAN countries in the number of logistics service business entities licensed by the U.S. Federal Maritime Commission (FMC). The logistics sector's contribution to the annual GDP ranges from 4 - 5%.

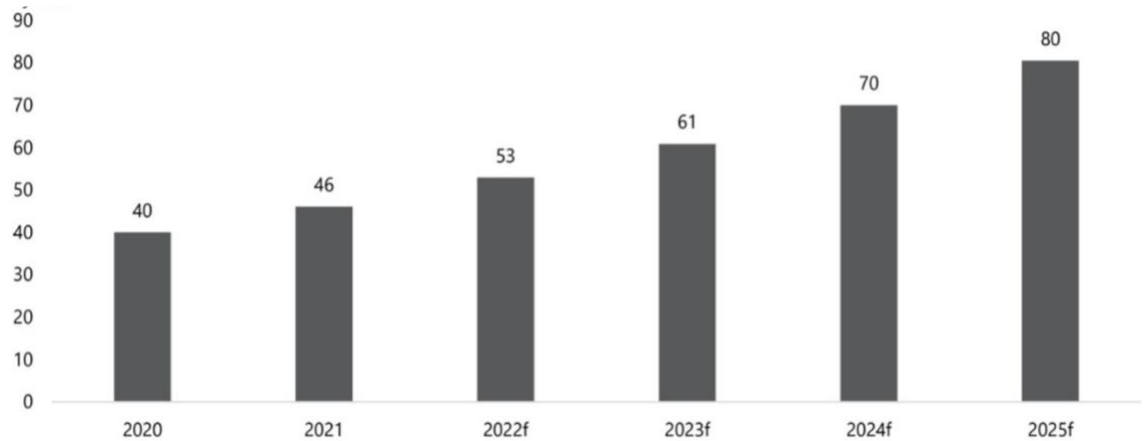


Chart 2.1: Forecast of Vietnam logistics market size in the period of 2020-2025
(unit: Billion USD)

(Source: VIRAC, 2022)

VIRAC predicts that the scale of Vietnam's logistics industry will reach approximately \$61 billion in 2023, representing a 16% increase compared to 2022. The Vietnamese logistics industry 2024 is forecasted to reach \$70 billion (Vietnam Logistics Report, 2022).

Furthermore, e-Logistics (electronic logistics) has played a significant role in enhancing the professionalism and efficiency of Vietnam's logistics sector. According to Agility's "2021 Emerging Markets Logistics Index" report, Vietnam is ranked among the top 8 high-growth logistics markets globally. Additionally, SYNC Southeast Asia (SYNC SEA), a joint venture between Facebook and Bain & Company, forecasts that Vietnam's e-commerce sector will experience the fastest growth in Southeast Asia, with a projected Gross Merchandise Value (GMV) of \$56 billion by 2026 (Hong Vinh, 2022).

From 2017 to 2022, the number of Vietnamese logistics companies increased and their capabilities improved. They actively supported domestic production, goods circulation, and import-export activities. These companies have expanded into various stages of the logistics service chain, progressing towards stages with high-added value. Over time, several large enterprises and conglomerates have emerged in the logistics sector, utilizing modern technology and competing with foreign companies operating in Vietnam. Notable examples include Tan Cang Saigon, which has demonstrated competitiveness with foreign logistics companies.

The Vietnamese government, through Decision No. 221/QĐ-TTg by the Prime Minister, has set ambitious targets for the logistics sector by 2025, including contributing 5 - 6% to the GDP, achieving a 15 - 20% growth rate, outsourcing 50-60% of logistics services, reducing logistics costs by 16 - 20% of GDP, and achieving a world ranking of 50 or higher according to the Logistics Performance Index (LPI).

The Vietnamese government has been leveraging its potential and advantages to build and develop logistics. It aims to transform logistics services into a key economic sector contributing significantly to the country's competitiveness. The government has committed to solid investments and comprehensive planning for developing Vietnam's logistics infrastructure until 2030 with a vision for 2045. This includes the establishment and modernization of national and international transport corridors and planning for seaports, inland ports, airports, railways, and road networks in a synchronized manner. There is also preparation for synchronized logistics centers aligned with regional, local, and national development objectives. Investments are directed towards developing industrial logistics zones, logistics clusters, and logistics centers to alleviate road and air traffic congestion, reduce traffic accidents, and, notably, lower business logistics and transportation costs.

As of August 2023, Vietnam's population is approximately 99.8 million (Danso.org, 2023), with around 78.1% of the population using the Internet (Quyen, 2023). This trend, alongside the rise of online retail and e-commerce platforms, has stimulated demand for purchasing goods and using transportation services. Additionally, Vietnam's youthful population provides an abundant labor force for the transportation and logistics industry.

2.1.2. The potential for transport exchange platform in Vietnam

With the economy and trade growth, the transportation sector is becoming one of the most critical areas in the country's development. Transportation exchange platforms are emerging as a new trend in Vietnam, providing favorable conditions for connecting businesses involved in cargo transportation, coordinating transportation resources, and enhancing efficiency, transparency, and cost savings.

Information and Communication Technology (ICT) is a crucial component of the soft infrastructure in the transportation and logistics sector, offering direct and indirect value-added services to customers. ICT infrastructure in Vietnam has seen significant development in recent years. It plays a vital role in supporting the growth of transportation exchange

platforms and the transportation industry. The revenue of the ICT industry was estimated at \$148 billion, showing an 8.7% growth compared to 2021 (Vietnam Logistics Report, 2022). This indicates that ICT infrastructure in Vietnam is increasingly being upgraded and expanded, including the Internet network and international undersea fiber-optic cable systems. This has created a fast and well-connected network with high-speed Internet access for businesses and users.

Vietnam has made substantial investments in Internet and bandwidth infrastructure. Internet service providers are expanding and upgrading their networks to ensure high-speed and high-capacity access for users and businesses. This makes it easier to connect to transportation exchange platforms and exchange data. With leading mobile network providers like Viettel, VNPT, and Mobifone, the development of mobile networks also provides favorable conditions for developing mobile applications and services related to the transportation industry.

Over the years, Vietnam's economy has grown rapidly and stably. This is an important contribution to the field of e-commerce - a current commercial trend. Recognizing the importance of e-commerce, Vietnam has issued many laws and policies on e-commerce, building a legal framework and creating favorable conditions for the development of e-commerce. According to Decree No. 85/2021/ND-CP, which amends and supplements several articles of Decree 52/2013 of the Government explicitly stipulates the policy that traders must be obligated to protect personal information and consumer interests. In addition, there have been several regulations on sanctions, from administrative sanctions fines to criminal prosecution for serious violations.

To ensure effective management, tax policies for e-commerce in Vietnam are implemented through several current taxes such as value-added tax, corporate income tax and income tax, personal tax, excise tax, and import and export tax. The state has strengthened the management and supervision of transportation exchanges to ensure fairness and compliance with regulations. Regulations and standards apply to transportation operations and related services to ensure safety and quality.

Furthermore, the Government of Vietnam has policies to invest in road transportation with the goal of 2030. Regarding infrastructure, forming a system of highways connecting economic and political centers, key economic regions, seaports and international gateway airports, and gradually upgrading national highways. The volume of cargo transportation

reached about 2,764 million tons (62.80% of the market share); the volume of domestic goods circulation reached about 162.7 billion tons.km (30.48% market share) (Vietnam Logistics Report, 2022). This development facilitates transport and logistics activities and provides a solid foundation for transportation exchange platform, creating a more favorable environment for transport exchange operations and reducing time and cost in freight forwarding.

For the environment, a vital element in modern Corporate Social Responsibility (CSR) models, transportation exchange platform can make positive environmental impacts more feasible. For example, reducing traffic congestion, relieving urban infrastructure burdens, cutting carbon dioxide and greenhouse gas emissions, reducing non-renewable fuel consumption, and committing to achieving "0" emissions by 2050 and striving to reduce greenhouse gas emissions by 43.5% by 2030 and achieve over 70% renewable energy by 2050 (Thanh Ha, 2023).

In addition, Vietnam has a large population and is witnessing significant growth in manufacturing, information technology, and pharmaceutical industries (Hoang Ha, 2023). The growth of these industries requires efficient and reliable transportation services to distribute goods and resources. This is a great opportunity for the transportation exchange platform to expand its operations and meet the growing needs of businesses. Investment in infrastructure and technology, combined with support from the government and opportunities from international trade, can help the transport exchange platform develop and vigorously promote Vietnam's transport and logistics industry.

2.2. Market trend analysis

2.2.1. Development trend of transportation exchange platforms in the world

In recent years, transportation exchange platform solutions have rapidly grown. The traditional working methods through phones, faxes, and emails are replaced by more sophisticated solutions where transactions occur in real time. The wind of change is blowing strongly in transportation and logistics. The first transportation exchange platform was born in the European market, Teleroute, a French freight exchange. Digitization is at the forefront, presenting numerous opportunities to lower costs, create unique product offerings, and reshape business models. The driving force behind this transformation is digital freight platforms. Technological advancements provide a unique opportunity for businesses to

transition from “manual, expensive, and stiff” to “automated, efficient, and agile.” Companies constantly update technology trends.

Integration of Technology: Transportation exchange platforms integrate advanced technologies such as AI, Blockchain, and IoT. This helps optimize transportation processes, predict delivery times, and provide real-time tracking capabilities for goods.

Focus on Security: Data and transaction security has become a top concern in the industry. The development of security technologies, such as Blockchain, ensures data integrity and safety for transportation transactions.

Integration with IoT and Real-Time Monitoring: These platforms provide real-time data on the location and status of goods using sensors and IoT. This helps supply chain management with specific information and effective risk management.

Development In the Field of Environmental Protection: The trend of environmental protection is promoting the development of environmentally friendly transportation platforms, including encouraging the use of clean transportation, and thanks to integration with technology, routes can be optimized to save fuel.

2.2.2. Development trend of transportation exchange platform in Vietnam

In the era of Industry 4.0, the transportation industry is undergoing four major development trends: the application of Industry 4.0 technologies, online shopping, buying and selling activities including mergers and acquisitions (M&A), and investments in warehouses, logistics centers, and cold supply chains. E-logistics, green logistics, e-documents, and others have become trends in developing countries, including Vietnam. Robots, AI, cloud computing, and blockchain are also widely used to connect different transportation methods, optimize operations, and even replace humans in certain cargo handling services. The development trend of the transportation industry in using transportation platforms at businesses in Vietnam is becoming increasingly important. It has a great influence on the way businesses manage and carry out transportation activities, and businesses are keeping up with industry changes and the rise of technology.

Some notable trends in the development of transportation exchange platforms in Vietnam include:

Trends in Online Consumer Behavior in Vietnam: Alongside the rapid global development of e-commerce, in Vietnam, e-commerce has seen remarkable growth in a relatively short period. The COVID-19 pandemic, coinciding with the expansion of e-commerce, has brought about a notable shift in consumer purchasing behavior from traditional in-store shopping to a robust surge in online buying and ordering. Many businesses have gradually transitioned from traditional commerce to e-commerce or have adopted a hybrid approach that proves effective as customers and businesses interact within the virtual realm. As a result, e-commerce plays a pivotal role in enhancing the strength of logistics, which is an integral part of the e-commerce supply chain. Riding the wave of consumers' online shopping trends, e-logistics services have emerged. The transformation in consumer behavior has significantly influenced the development of businesses operating under the E-logistics model.

Application of IT and AI: Transportation exchange platforms are witnessing a growing trend in using information technology and artificial intelligence to optimize transaction processes and transportation management. Online applications and systems help streamline the connection between service providers and transportation users.

- **Online Ordering System:** Transportation exchange platforms often provide online applications or platforms that allow customers to place and manage orders easily. Information technology is used to build these applications, provide information about the status and location of goods, and enable online payments.
- **Transportation Resource Management:** AI can be used to predict transportation needs and efficiently manage transportation resources. AI systems can analyze historical data and factors such as weather, traffic flow, and fuel prices to predict schedules and required resources.
- **Route and Schedule Optimization:** AI can optimize route and transportation schedules to minimize time and costs. AI systems can adjust schedules based on real-time information about traffic conditions and road conditions.

Enhancement of Safety and Security: Transportation exchange platforms are particularly concerned with providing safety and security solutions. This includes securing transaction information and payments, ensuring the safety of goods during transportation, and ensuring transparency in transactions. The use of Blockchain technology helps improve transparency and security in transactions. All transactions are stored in blocks and cannot be altered, ensuring honesty and preventing fraud.

Development of Related Services: In Vietnam, several transportation exchange platforms are expanding their offerings to include various related services, including cargo insurance, packaging, storage, and more, aiming to enhance the overall customer experience. Cargo insurance is a critical service in the transportation sector, and platforms can collaborate with insurance providers to offer coverage, ensuring the safety of goods and reducing risks. Additionally, IoT technology for real-time cargo tracking allows customers to monitor their shipments' location and delivery time. These services should align with market demand and the platform's capabilities to maximize efficiency.

Green transportation trend: The current transportation system has added several hurdles in the final delivery stage, such as increasing greenhouse gas emissions, environmental degradation, and adverse effects on community health. However, consumer awareness of sustainability issues is gradually rising, which explains why the “green” transportation trend is predicted to continue to grow in Vietnam in the coming years. Stringent regulations and resource constraints also place the onus on logistics companies to find solutions to reduce energy consumption and become more environmentally friendly in the eyes of consumers.

The changes in user behavior, the proliferation of technology, and the widespread use of mobile applications highlight the importance of creating an online environment to connect transportation service providers and users. The success of this trend will depend on the ability to foster collaboration among transportation businesses, adapt to new regulations and policies, as well as harness technology to enhance efficiency and convenience for users, influencing the development of the transportation exchange platform model in Vietnam.

2.3. Market share analysis

2.3.1. Analysis of market players

The transportation exchange platform and logistics companies in general are becoming increasingly popular in major cities. The growth rate of these companies is increasing rapidly, especially in recent years. The analysis below will clarify the four market players based on data and information from the research team.

	Smartlog	Logivan	Eco Truck	VTGO
Product/ Service	<ul style="list-style-type: none"> - STM (Smartlog Transport Management System). - SWM (Smartlog Warehouse Management System). - STX Smartlog Transport Exchange platform. 	<ul style="list-style-type: none"> - LOGIVAN – Shippers. - LOGIVAN - Vehicle owner. 	<ul style="list-style-type: none"> - Main services provided (Transport of goods by container truck). - Basic transportation services (domestic FCL/LCL cargo, “Milk Run” mode of transport, multimodal transportation). - Special transport services (Cross-border transport, cold supply chains, dangerous goods). 	<ul style="list-style-type: none"> - VTGO – Shippers. - VTGO - Vehicle owner. - VTGO – Driving.
Mode of transport	Road	Road	Multimodal: Road - Sea - Railway	Road

Information technology	<ul style="list-style-type: none"> - Cloud platform. - AI and big data. - Framework: .Net, Nodejs, React and Angular. 	<ul style="list-style-type: none"> - AI, Internet of Things (IoT). - APPLE (automatic pricing system for each order). - REEL (tool to find the right driver for each order). 	<ul style="list-style-type: none"> - Data science. - API integration technology. - GPS tracking. 	<ul style="list-style-type: none"> - AI. - Automated operation system.
Number of customers using	<ul style="list-style-type: none"> - More than 2,000 transport companies. - Over 15,000 users on the STX exchange platform. 	<ul style="list-style-type: none"> - More than 69,536 vehicle owners. - More than 65,315 shippers. - 10,844 completed orders. 	<ul style="list-style-type: none"> - 10,000 completed orders per month. - More than 2,000 customers use the service . - 11,000 Container trucks and trucks of all types. 	<ul style="list-style-type: none"> - About 5,600 accounts. - 601 shipper accounts. - Nearly 1,800 drivers participated. - 10,000 trucks of all kinds.
Customer Feedback	<ul style="list-style-type: none"> - STX transport platform (5/5 stars on the app store). 	<ul style="list-style-type: none"> - Logivan - vehicle owner (3.6/5 stars on app store). 	<ul style="list-style-type: none"> - Eco Truck ecosystem (5/5 stars on app store). - Eco Truck Driver (4.5/5 stars on the app store). 	<ul style="list-style-type: none"> - VTGO vehicle owner (3.7/5 stars on app store). - VTGO shippers (2.6/5 stars on the app store).
Promotion	Not found	<ul style="list-style-type: none"> - Logivan will offer a gift program for 	<ul style="list-style-type: none"> - E-voucher 50k when referring 1 customer. 	<ul style="list-style-type: none"> - Loyalty program: accumulate

		customers who refer the company's services to their acquaintances.	<ul style="list-style-type: none"> - Bonus 500,000 - 2,000,000 VND when referring partners, drivers. - Get 1 gold thread when reaching the top 1-10 earliest contracts signed in the Wheel of Fortune. 	points through each service use within a period of 6 months to exchange for e-vouchers.
Advantage	<ul style="list-style-type: none"> - Save on logistics costs. - Professional and experienced team of experts. - Modern technology. - Understanding the local market and how to interact with local customers. - The flexibility and creative spirit of the technical team helps to quickly adapt and respond to changes in the market. 	<ul style="list-style-type: none"> - Save on logistics costs. - Large-scale truck network. - Application of modern technology. - Brand identity is highly appreciated. - Clearly display posted information and contact information, avoid virtual orders, help drivers feel secure to receive orders. 	<ul style="list-style-type: none"> - Large and wide vehicle system throughout the country. - Instant growth indicator. - Responsible for incidents occurring during transportation. - Professional staff, highly responsible for goods and customers. 	<ul style="list-style-type: none"> - Low operating costs of the application. - The model only provides a connection platform, so the interests of the application do not conflict with the interests of participating partners.

Disadvantage	<ul style="list-style-type: none"> - Competitive prices are not attractive. - Limited human resource training and development. - Exclusively for only serving the Vietnam Post's transportation needs. 	<ul style="list-style-type: none"> - Non-cash payment method. - Customer care activities have not been focused. - Human resources are limited, and application operations are slow, affecting service quality. - Many limitations, such as cumbersome registration, and no information display. - High-price apps often crash. 	<ul style="list-style-type: none"> - Complex operating system. - It is very difficult to expand the market. - Depends on labor. - High operating costs. - Price is higher than other companies. 	<ul style="list-style-type: none"> - No liability for goods and in freight (creating worries for shippers). - It is necessary to build a large enough ecosystem to be effective. - App services are still limited, complicated, and have not met customers' needs.
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Table 2.1: Analysis of market players

(Source: Smartlog, Logivan, Eco Truck, and VTgo, 2022; and Authors)

Zalo and Facebook ride-hailing groups are online communities where users can search for and share information about ride-hailing services. In these groups, users can post to find a ride or a driver and share details about routes, pricing, departure times, and any specific requirements. Users can interact, exchange information, and make agreements with each other through comments, messages, or other means of communication.

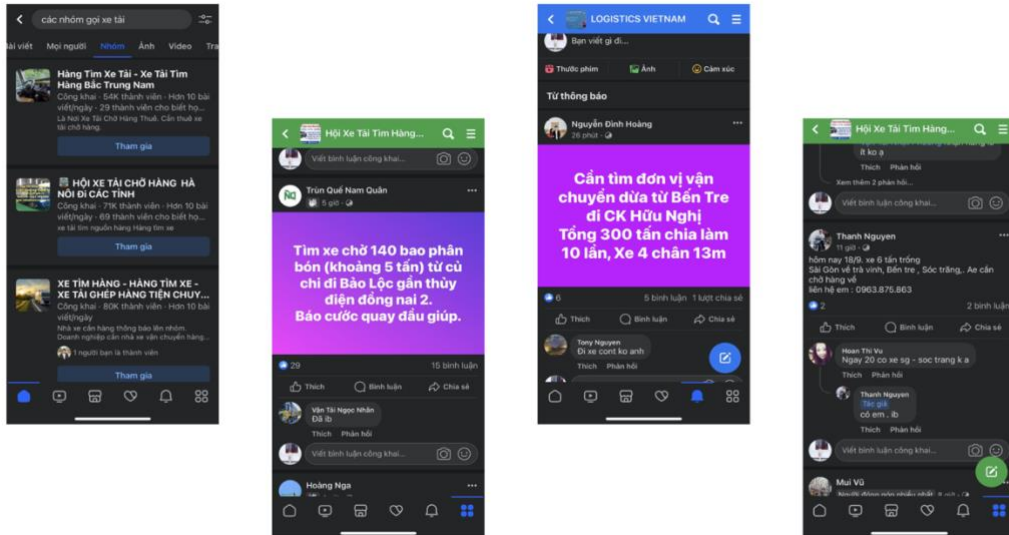


Figure 2.1: Groups looking for trucks on Facebook

(Source: Authors, 2023)

These groups can vary in size, regulations, and operations. Furthermore, the rights and responsibilities of users when using ride-hailing services within these groups are vague. Issues related to personal data security, fraud, and professionalism may be of concern due to their spontaneous and less organized nature.

In general, ride-hailing platforms and indirect market players are changing how people move and deliver goods in the technology-driven transportation industry. Both types of businesses offer new and convenient solutions, creating more efficient transportation models. Competition between ride-hailing platforms and indirect market players in the technology transportation industry makes the market more diverse and exciting for consumers while also posing challenges for businesses to continuously innovate and improve to survive and thrive in this highly competitive environment.

2.3.2. Lesson and practical experience

Building a new transportation exchange platform is not an easy task, and what the project team always needs to do is observe, listen, research, and evaluate the advantages and disadvantages of the companies that have gone before. From there, the project team considers and proposes solutions to improve their operations when establishing a transportation exchange platform in Vietnam:

- Collecting comprehensive, up-to-date, and accurate user information on the transportation exchange platform.
- Publicly disclosing competitive transportation rates from various transport companies on the platform.
- Integrating methods of road transportation on the exchange platform.
- Adding a “cargo insurance” function to the transportation exchange platform to enhance cargo safety. This provides peace of mind to cargo owners and transport companies in case of unforeseen risks.
- Establishing clear and transparent terms and conditions for customers participating in the platform.
- Ensuring close collaboration among all relevant stakeholders in the operation of the transportation exchange platform.
- Investing in regular software technology improvements and upgrades in the operation of the exchange platform.
- Understanding the industry and leveraging government support in terms of legal regulations.

2.4. Customer Segmentation

The transportation exchange platform is built to connect two main components in the cargo transportation, which are shippers and carriers.



Figure 2.2: Shippers and Carriers on the transportation exchange platform

(Source: Authors, 2023)

- Shippers refer to businesses with a demand for transporting goods. Typical examples of shippers include factories, import-export companies, and goods distributors. Business shippers will have specific requirements for transportation, such as shipping rates, estimated delivery times, transparent and accurate information, or a variety of services provided.
- Carriers are companies that provide transportation services. They offer a variety of road transportation methods, including: tanker, dump truck, box truck, semi trailer, flatbed truck, etc. Carriers offer vehicles and experienced drivers to carry out transportation transactions negotiated through the platform.

The project team determines its customer base by considering various factors and conducting surveys with businesses that are Shippers and Carriers. The project team decided to use the “Convenient Sampling Method” to save time and cost. They have used questionnaires sent to relevant groups in the transportation and logistics field on social media platforms like Facebook and have also reached out to friends and acquaintances working in transportation and logistics companies.

The project team identified customers based on various factors by surveying multiple stakeholders, including shippers and transporters. Appropriate sample size is crucial to determine the characteristics of the population. The minimum sample size is 110 based on the formula “ $N \geq n*5$ ” by Hair, Anderson, Tatham, and Black (1998), where N is the sample size, and n is the number of questions (22 questions in this case). After a two-week-long survey, the project team collected 322 responses, which are analyzed and summarized:

2.4.1. Demographic

No.	Research sample		N	Percentage (%)
1	Job position	Senior Manager	49	15.10
		Manager & Supervisor	193	60.10
		Specialist	80	24.80
2	Years of service	Less than 2 years	40	12.40
		2 - 5 years	161	50.10
		5 - 7 years	90	28.00
		Over 7 years	31	9.50
3	Years of experience	Less than 2 years	32	10.20
		2 - 5 years	163	50.50
		6 - 10 years	93	28.80
		Over 10 years	34	10.50
4	Size of business	Under 50 people	27	8.40
		50 - 100 people	164	50.90
		100 - 200 people	95	29.40

		Over 200 people	36	11.30
5	Business category	Agricultural Products and Food: Rice, Pepper, Cashew Nuts, Coffee, and Vegetables	38	11.90
		High-Tech Goods: Electronics, Computers, Mobile Phones, Electronic Devices, and Industrial Machinery	90	28.00
		Fashion and Footwear	39	12.10
		Raw Materials for Production	42	12.90
		Building material	39	12.10
		Transportation company	74	23.00

Table 2.2: Descriptive analysis of research sample

(Source: Authors, 2023)

The project team received responses from individuals with sufficient expertise to assess industry-related matters. The diversity in the size of the businesses reflects that Vietnam's transportation and logistics industry involves many business types, from small to large enterprises. Besides, the diversity in the business sectors of the participating companies indicates that a transportation exchange platform can serve a wide range of customers in various fields, from manufacturing and agriculture to high technology, mainly focusing on small and medium enterprises.

2.4.2. Geographic

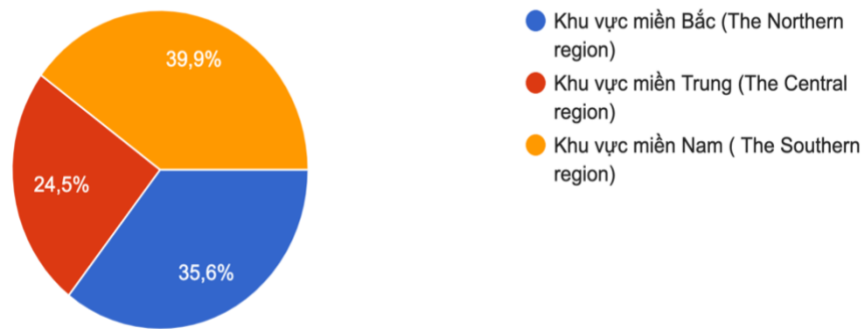


Chart 2.2: Business headquarters of businesses

(Source: Authors, 2023)

The pie chart shows that the participants are diverse and not concentrated in a specific region. Among them, 35.6% come from the Northern region, 39.9% from the Southern region, and 24.5% from the Central region. This indicates that participants in the transportation exchange platform are distributed across all three regions.

The North and South have transportation infrastructure systems development, including modern seaports, railways, and roads. In addition, the North and South are home to many critical industrial and manufacturing zones, creating significant demand for transportation and logistics services. The Southern critical economic region is considered the “locomotive” and is leading in the country's economic development (Truong Van, 2022). The Central critical economic region has many potentials and advantages for developing the logistics system. The Central area stretches along a more than 600 km coastline and possesses a vital seaport system. In addition, the international airport system, transnational railway, and road system of the Central region are associated with many economic corridors in the region. Therefore, the distribution of businesses across all three regions is the expansive business potential of the transport exchange platform.

2.4.3. Behavior

Customers' behavior plays a crucial role in the operations of a transportation exchange platform. The project team attempted the Technology Acceptance Model (TAM) by Davis (1989), which is a theoretical model of technology use behavior. The project team surveyed the needs and behavior of businesses in the transportation and logistics sector, based on three factors such as Perceived ease of use (PE), Perceived usefulness (PU), and Perceived cost (PC) regarding decision-making when adoption of a transportation exchange platform (FC).

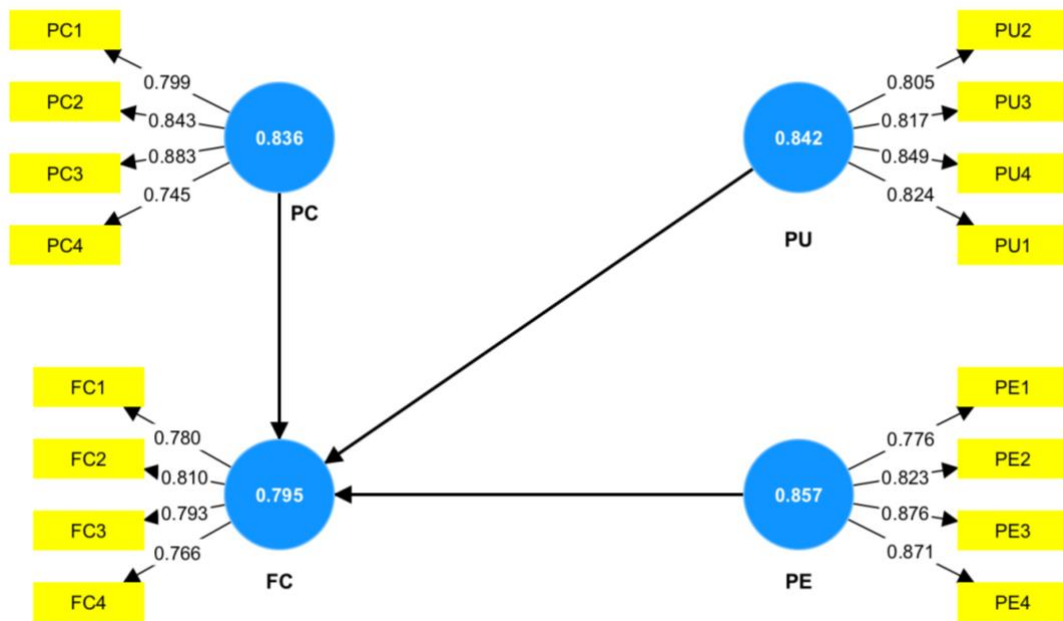


Figure 2.3: Smart-PLS included Outer loadings, and Cronback's alpha

(Source: Authors, 2023)

The outer loading value is the correlation coefficient between an observed variable (indicator) and latent variable (also known as coefficient or construct) in a PLS-SEM model. Hair et al. (2016) recommend an excellent outer loading value for an observed variable of 0.700 or higher. The results of the table above show that all observed variables meet the standards with values above 0.700. That means no observed variables are dropped from the model, and the outer loading doesn't need to be repeated.

The three variables in question have a Cronbach's alpha exceeding 0.700, indicating high internal consistency. The Composite reliability score for the components scale is also higher than 0.700 (Hair et al., 2017). Therefore, since these factors meet both criteria, they can be used in the research.

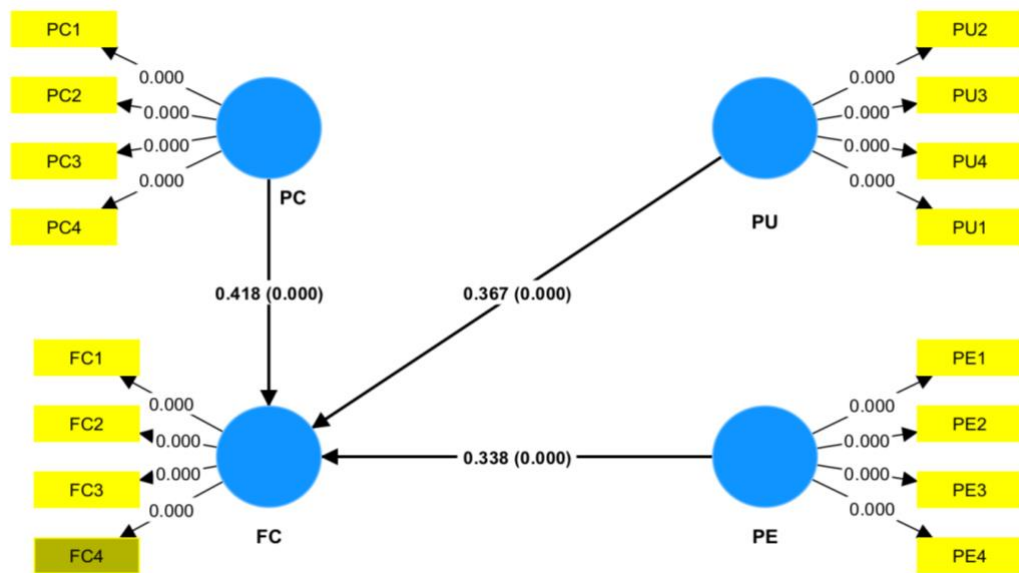


Figure 2.4: Smart-PLS included P-values, and Beta coefficients (β)

(Source: Authors, 2023)

According to the result of Figure 2.4, it can be seen that the p-value of all direct effects is statistically significant (less than 0.050). Of the three interactions, Perceived cost has the most substantial impact on transportation exchange platform adoption ($\beta = 0.418$). Next is the Perceived usefulness factor with $\beta = 0.367$ and the factor that has the least impact on FC is Perceived ease of use ($\beta = 0.338$).

Target customer

Through survey analysis, the project team identified target customers:

Business size: small and medium-sized businesses

Business category: many fields such as high technology, manufacturing, agriculture, and transportation.

Geography: nationwide

Behavior:

- Perceived ease of use
- Perceived usefulness
- Perceived cost

3. BUSINESS STRATEGY

After researching the market, the project team saw grand prospects when entering the industry. Lessons and practical experiences help project teams make important decisions. After a year of preparation and planning, the project team quickly chose this time to establish and build a company named FACOS.

3.1. Company Establishment

3.1.1. Company Information

Company Information	
Vietnamese name	CÔNG TY CỔ PHẦN FACOS
English name	FACOS JOINT STOCK COMPANY
Type of enterprise	Joint stock company
Address	43 Le Van Luong Street, Hoang Mai District, Hanoi
Legal representative	NGUYEN DAC HUY (2001 - Bac Ninh)
Telephone number	0326824388
Date of operation	01/1/2024
Managed by	Tax Department of Hai Ba Trung District
Business sectors	
Code	Sector
6312	Portal: - Set up e-commerce information pages (excluding press activities), social networks; - E-commerce activities: e-commerce website for sales; online promotional website; e-commerce trading platform.

Table 3.1: FACOS Joint Stock Company Information

(Source: Authors, 2023)

Description of company: FACOS Joint Stock Company is established to provide logistics services through a transportation exchange platform namely FACOS, aiming to connect service providers in the transportation sector with users to optimize transportation processes and supply chain management. FACOS is gradually transforming logistics operations in line with the Industry 4.0 revolution, creating an ecosystem where participants can share and maximize resources, thereby enhancing competitiveness.

FACOS Transportation Exchange Platform is an innovative solution facilitating the efficient and cost-effective movement of freight by connecting shippers, carriers, and logistics multi-stakeholders. The platform leverages technology to streamline traffic, optimize routes, reduce empty trips, and offer economic and environmental benefits. The main goal of the FACOS platform is to create mutual benefits for multi-stakeholders by maximizing resource use and minimizing waste in the transportation industry.

Type of Company: Joint Stock Company

- The company's operations are significant and have no limit on the maximum number of shareholders, which is advantageous for business expansion.
- The minimum number of shareholders in a joint-stock company is 03, and the maximum number is unlimited, with their liability limited to the extent of their contributed capital for debts and obligations. This helps minimize risks for investors.
- The liability regime of the joint-stock company is limited.
 - ❖ The company will be responsible for all assets of the company.
 - ❖ Shareholders are responsible for debts corresponding to the amount of capital contributed to the company.
- Compared with other types of companies, joint stock companies can mobilize capital flexibly. Like other types of companies, joint stock companies can raise capital from loans from domestic and foreign organizations and individuals. In addition, joint stock companies can raise capital by issuing stocks and bonds.
- Joint stock companies are not limited in terms of business lines.

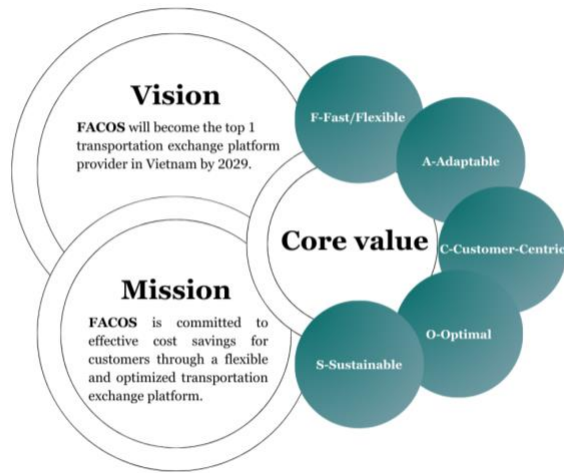


Figure 3.1: Vision, Mission, and Core Value of FACOS Joint Stock Company

(Source: Authors, 2023)

3.1.1.1. Vision

FACOS will become the top 1 transportation exchange platform provider in Vietnam by 2029.

3.1.1.2. Mission

FACOS is committed to effective cost savings for customers through a flexible and optimized transportation exchange platform.

3.1.1.3. Core value

Fast/Flexible - FACOS provides transportation services with fast speed while flexibly responding to customer requirements and changes.

Adaptable - FACOS is always ready to adapt to market changes and customer requirements to ensure efficient operation.

Customer-Centric - FACOS creates the best transportation solutions that fully meet the needs and requirements of customers, putting them first in all decisions and activities.

Optimal - FACOS optimizes transportation operations to minimize waste, reduce costs, and maximize efficiency.

Sustainable - FACOS operates in a sustainable manner, and is conscious of its impact on the environment and society.

3.1.1.4. Legal permits

3.1.1.4.1. Business license application

From a long-term perspective, the FACOS transportation exchange platform has decided to apply for a business license to minimize legal risks and make it easier to attract investments when needed. Per the provisions of the 2020 Enterprise Law (Thuvienphapluat, 2020), the FACOS transportation exchange platform is registering its business as a FACOS joint-stock company. FACOS transportation exchange platform must complete several procedures, including paying the business registration fee at the Department of Planning and Investment, submitting the payment for publishing the company's establishment on the national business registration portal, engraving the company seal, setting up the company's signboard, paying the business license fee, and covering the costs of using electronic invoices. The legal representative performs business registration by registering online through the National Business Registration Portal (Decision No. 855/QD-BKHDT, 2021). The business license is expected to be issued in January 2024.

3.1.1.4.2. Business registration license for e-commerce platform

FACOS registers to set up an e-commerce website. FACOS creates an access account on the website www.online.gov.vn by providing the following information: company name, business registration number, business field/activity, headquarters address, and contact information. FACOS will receive the results from the Ministry of Industry and Trade within three days via the registered email. Once they have an account, FACOS selects “Register an e-commerce service website.” Then, FACOS proceeds to fill in the required information and attach the registration documents as per the template. Within seven working days, FACOS will receive a response from the Ministry of Industry and Trade via the registered email, and the registration will be confirmed with a registration symbol.

After confirming the application, FACOS sends the complete registration documents (hard copy) to the Ministry of Industry and Trade. Once the documents are verified, the Ministry of Industry and Trade will provide FACOS with a code to be added to the e-commerce website. This code serves as the registration symbol, and when selected, users will be directed to the registration information on the E-commerce Activity Management Portal. From there, FACOS, the transportation exchange platform, will be granted an e-commerce business license by the Ministry of Industry and Trade.

3.1.1.4.3. Registered trademark

According to Article 4 of the Intellectual Property Law of Vietnam, a trademark distinguishes the goods or services of different organizations or individuals. Registering a trademark helps businesses mitigate legal risks, protects individuals and organizations when using the trademark, and allows businesses to actively participate in production and business activities (Nhat, 2022). It is crucial to assert ownership rights over a trademark, have legal protection for all rights related to the trademark and brand, and prevent trademark and brand infringement. It also ensures the reputation and prestige of the trademark in the market, building trust with partners and customers.

FACOS Joint Stock Company has registered the trademark “FACOS” for the company. The trademark protection period lasts for ten years from the date of submitting the application. It can be renewed multiple times, each extending for ten years (as regulated in Article 93 regarding the validity of protection certificates).

Registered Logo is a legal process to protect the intellectual property rights of a logo and have the exclusive right to own and use the logo without it being violated by anyone else. In addition, registration also helps increase the commerciality of the brand and turn it into a valuable intellectual property. Registering a logo also helps avoid legal disputes related to intellectual property. The right to register logos is regulated in Article 87 of the Intellectual Property Law 2005 (amended in 2022). FACOS Joint Stock Company decided to register the “FACOS” Logo for the company to help protect the image, color, and structure of the logo, contributing to increasing brand recognition.

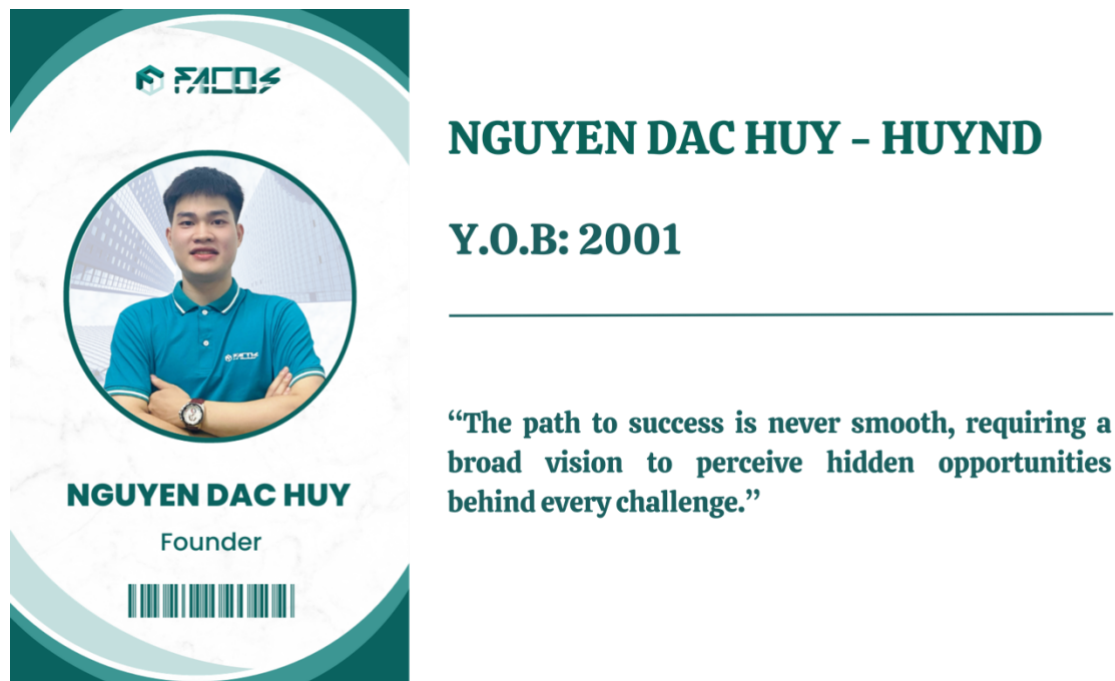
Under Clause 2, Article 13 of Decree 22/2018/ND-CP, the website will register to protect its interface in the form of applied artwork. Under Clause 1, Article 22 of the current Intellectual Property Law, the website will be registered for protection as a computer program. FACOS Joint Stock Company registers website copyright for the FACOS platform to protect the rights of owners as well as to fight against unfair competition practices.

3.1.2. Company structure

3.1.2.1. Founders and shareholders

Founder plays a crucial role in FACOS, as they are responsible for defining the company's objectives, devising plans and strategies to achieve them, and often have a significant role in building the foundation. The founder is typically responsible for conceiving the idea, making critical decisions, establishing relationships with partners and customers, and creating the corporate culture. The founder also secures initial funding, takes responsibility for loans or sponsorships, seeks grants, explores venture capital, or uses personal assets to finance the initial business activities until the company becomes profitable. Therefore, the founder is the critical factor in the success of FACOS and is responsible for the company's related decisions and risks.

The founders of FACOS are Nguyen Dac Huy, Nguyen Mai Giang, Nguyen Thi Ha My, Nguyen Thi Thu Hong, and Nguyen Van Dung. Each member has their responsibilities and roles in FACOS.



NGUYEN DAC HUY - HUYNH

Y.O.B: 2001

“The path to success is never smooth, requiring a broad vision to perceive hidden opportunities behind every challenge.”

Figure 3.2: Profile picture of Nguyen Dac Huy

(Source: Authors, 2023)



NGUYEN MAI GIANG - GIANGNM

Y.O.B: 2001

“Startup is not defined by your age or occupation. What truly matters is the ability to innovate and take action.”

Figure 3.3: Profile picture of Nguyen Mai Giang

(Source: Authors, 2023)



NGUYEN THI HA MY - MYNTH

Y.O.B: 2001

“A fundamental new rule for business is that the Internet changes everything.”

Figure 3.4: Profile picture of Nguyen Thi Ha My

(Source: Authors, 2023)



NGUYEN THI THU HONG - HONGNTT

Y.O.B: 2001

“Persistently pursue perfection in transportation.”

Figure 3.5: Profile picture of Nguyen Thi Thu Hong

(Source: Authors, 2023)



NGUYEN VAN DUNG - DUNGNV

Y.O.B: 2001

“Our success has really been based on partnerships from the very beginning.”

Figure 3.6: Profile picture of Nguyen Van Dung

(Source: Authors, 2023)

FACOS Joint Stock Company established a company with an investment capital contribution of 5 members.

- Mr. Nguyen Dac Huy contributed VND 1,350,000,000; accounting for 45%
- Ms. Nguyen Mai Giang contributed VND 450,000,000; accounting for 15%
- Ms. Nguyen Thi Ha My contributed VND 450,000,000; accounting for 15%
- Ms. Nguyen Thi Thu Hong contributed VND 390,000,000; accounting for 13%
- Mr. Nguyen Van Dung contributed VND 360,000,000; accounting for 12%

Total initial capital: VND 3,000,000,000

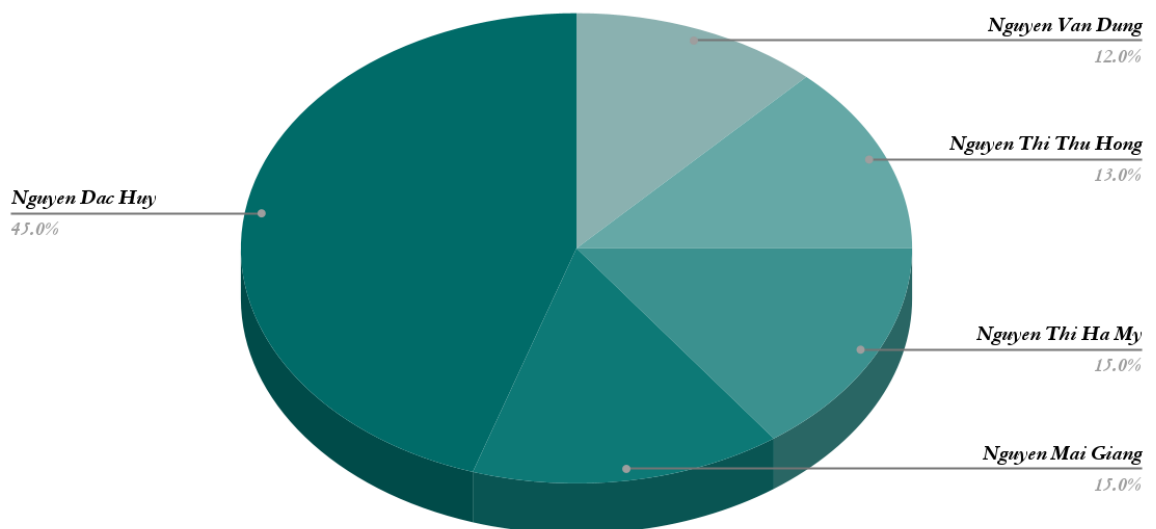


Chart 3.1: The percentage distribution of investment capital

(Source: Authors, 2023)

3.1.2.2. Company structure

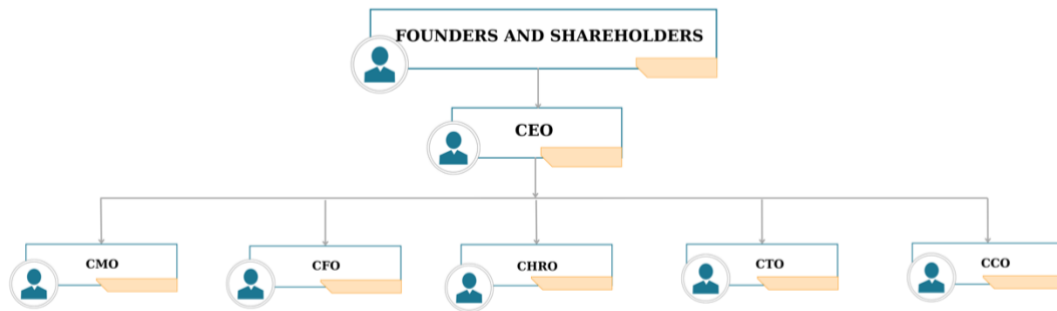


Figure 3.7: FACOS's organizational structure

(Source: Authors, 2023)

- The Chief Executive Officer (CEO) is responsible for the company's overall direction and specific plans. Therefore, the CEO needs an open-minded vision to grasp the potential.
- The Chief Marketing Officer (CMO) oversees market research and analysis to formulate suitable marketing strategies. The Marketing Manager also builds channels like the website, Zalo, Facebook and LinkedIn to reach as many customers as possible.
- The Chief Financial Officer (CFO) seeks potential funding sources for FACOS. Additionally, the Financial Manager manages financial planning to ensure stable revenue sources for the company.
- The Chief Human Resources Officer (CHRO) manages HR activities, including recruitment and training. Besides, a Human Resources Manager also builds a suitable culture that supports employees' personal development.
- The Chief Technology Officer (CTO) is responsible for technical issues related to the platform, such as ensuring smooth operation and promptly resolving any technical problems.
- The Chief Customer Officer (CCO) is responsible for leading and managing business and customer care activities, ensuring satisfaction, and creating a positive experience for customers using the company's products or services.

The division of shares between shareholders is an important problem. FACOS conducts the division of shares early in the company's early stages so that everything is clear and avoids future conflicts. The division of shares is based on two criteria:

Financial contributions

- Charter capital
- Additional capital contribution in the future

Non-financial contributions

- Specialized knowledge
- Specific responsibilities and roles
- Relationships with potential partners or business opportunities

Each founder deducts 3% of the total shares (15% in total) for distribution, with 5% assigned to the Chief Technology Officer (CTO) and 10% to employees who demonstrate deserving capabilities and substantial contributions to the company's development. The founders of FACOS will possess the following percentages of shares: Nguyen Dac Huy 42%, Nguyen Mai Giang 12%, Nguyen Thi Ha My 12%, Nguyen Thi Thu Hong 10%, and Nguyen Van Dung 9%.

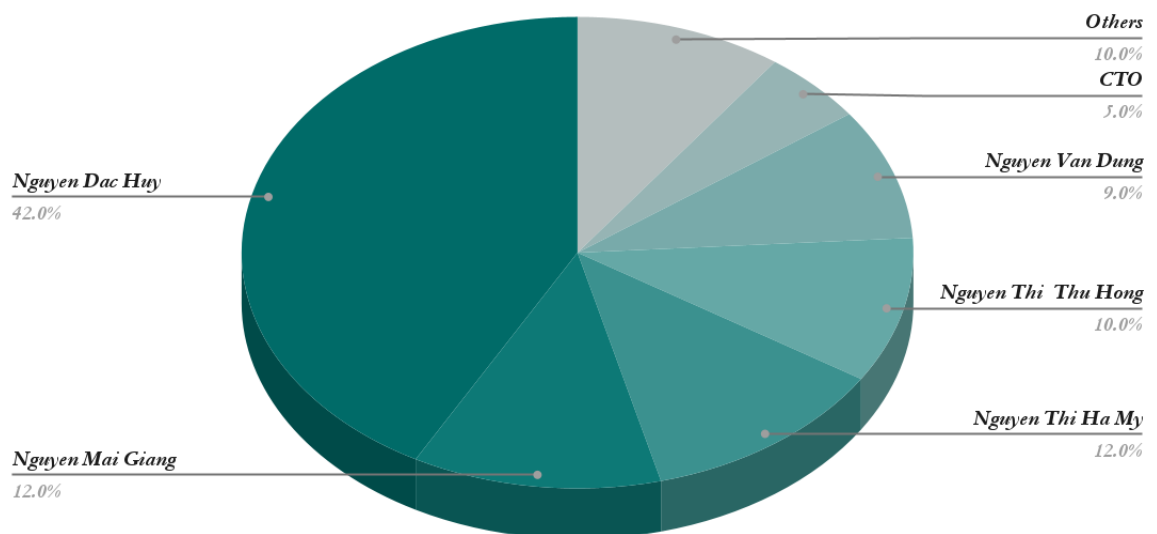


Chart 3.2: Shareholder Structure of FACOS

(Source: Authors, 2023)

3.2. Business Plan

3.2.1. Key activities plan

To achieve long-term success and a robust business development strategy, effective planning is crucial for all of FACOS's business activities. This plan helps execute key activities and reach the platform's goals. This includes identifying specific values, targeting customer groups, maintaining relationships with current customers, and creating long-term revenue sources.

3.2.1.1. Human Resources Management

Human Resources (HR) is the department of a business responsible for finding, recruiting, screening, and training job applicants. It also manages employee benefit programs (John R. Commons, 1893).

The human resources department plays a crucial role in every business, regardless of its size. Its primary responsibility is to ensure maximum employee productivity while safeguarding the company against any workforce-related issues. The department's duties include managing employee compensation and benefits, recruitment, retention, termination, and keeping up-to-date with any laws that may affect the company and its employees.

3.2.1.1.1. Roles and responsibilities

Position	Responsibility	Requirements
CEO	<ul style="list-style-type: none"> - Developing short-term and long-term strategic plans for business activities. - Executing plans approved by the Board of Directors. - Monitoring, evaluating, and suggesting strategies to improve unfeasible projects within the enterprise. - Reviewing and approving matters related to investments, costs, finances, personnel, compensation, and other policies within the business. - Establishing, nurturing, and cultivating the organization's corporate culture, image, and brand in the market. - Negotiating and signing contracts with customers and business partners of the enterprise, ensuring value creation for the organization. 	<ul style="list-style-type: none"> - Educational background: Bachelor's degree or higher. - Expertise: Financial Investment, Human Resources, Technology, and related fields. - Experience: Minimum of 5 years of experience in the CEO position - Skills/Abilities: Strong leadership, strategic thinking, and effective management skills.
CMO	<ul style="list-style-type: none"> - Participated alongside the Board Director in developing the company's brand strategy. - Created marketing plans on a quarterly and monthly basis, including campaign strategies and timelines for implementation. 	<ul style="list-style-type: none"> - Graduated from University with a major in Marketing. - 3 years of experience as a Marketing Manager. - Experience and knowledge

	<ul style="list-style-type: none"> - Guided marketing specialists to create content for various communication channels. - Monitored and measured the effectiveness of campaigns. 	<p>in the field of Marketing within the Logistics industry.</p>
CFO	<ul style="list-style-type: none"> - Manage the day-to-day activities of the accounting department and ensure timely and accurate accounting reports for monthly, quarterly, and annual financial closings. - Review contracts from other departments and approve daily payment documents. - Propose best practices and effective control measures to minimize risks and enhance the efficiency and effectiveness of operations. - Plan and coordinate the annual financial audit process. 	<ul style="list-style-type: none"> - Graduated from University with a major in Accounting/Finance. - At least 3 years of experience in finance and accounting. - Proficient in MS Office and familiar with SAP, ERP, and Misa Systems. - Hold a CPA/ACCA certification.
CHRO	<ul style="list-style-type: none"> - Collaborate with executive directors and staff to analyze and improve existing human resources policies and procedures. - Develop new training and development programs. - Plan recruitment and participate in interviews for potential candidates. - Supervise both lower-level and senior staff and schedule meetings with them. - Ensure compliance with state regulations and public policies and adjust company policies as 	<ul style="list-style-type: none"> - Graduated from University - A minimum of 3 years of experience in the position of Human Resources Manager. - Solid knowledge of labor laws and human resources functions. - Strong leadership and interpersonal communication skills. - Excellent problem-solving

	needed to align with these regulations.	and analytical skills.
CTO	<ul style="list-style-type: none"> - Manage information technology and computer systems to ensure smooth operations. - Plan, organize, control, and evaluate IT. - Manage IT staff through training and development. - Design, develop, deploy, and coordinate IT systems, policies, and procedures. - Ensure data security, network access, and backup systems to protect company information. 	<ul style="list-style-type: none"> - Hold a bachelor's degree in Information Technology. - Have 5-7 years of experience in an equivalent position or related field. - Demonstrate managerial and task delegation abilities. - Possess experience in firewall, DNS, HTTP, FTP, and SSL.
CCO	<ul style="list-style-type: none"> - Manage all work related to business and customer relations. - Plan a business plan and build processes to direct the organization toward development and profitable growth. - Organize and implement business plans, and at the same time be responsible for managing the company's business activities, ensuring compliance with market laws and company policies. - Manage and monitor production activities, sales, distribution channels, etc. to ensure the achievement of set revenue targets. - Coordinate with the Board of Directors and other departments to orient and build long-term 	<ul style="list-style-type: none"> - Graduated from University with a major in Business Administration. - At least 3 years of experience. - Foreign language: Fluent in English - Skills/Abilities: Communication, analysis and evaluation, creative thinking, leadership

	<p>strategies to achieve sustainable growth and expand the scale of business operations in the market.</p> <p>- Expand and strengthen relationships with partners and customers to create a potential market and create business opportunities suitable for revenue growth for the organization.</p>	
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Table 3.2: Roles and requirements of employees

(Source: Authors, 2023)

Besides the C-level, FACOS will recruit additional personnel suitable for the company's situation and development goals. The human resources department will be responsible for recruitment through various social networks, company websites, and other channels. FACOS aims to identify individuals passionate about the transportation and logistics industry, possessing high levels of creativity, not afraid of difficulties, and hard work. Candidates with experience in logistics or IT will receive priority if they express a desire to contribute to the company's development.

3.2.1.1.2. Recruitment process

Develop a detailed recruitment process and identify potential recruitment sources such as universities, job websites, headhunting firms, or through social media and professional networks. The recruitment process at the FACOS Transportation Exchange Platform is critical for hiring and retaining personnel with the appropriate skills and experience.

Recruitment Process at FACOS Transportation Exchange Platform:



Figure 3.8: Recruitment Process at FACOS Transportation Exchange Platform

(Source: Authors, 2023)

Step 1: Resume Submission - Interested candidates for vacant positions submit their CVs to the company's job email address at facos@gmail.com.

Step 2: CV Screening

Step 3: Phone Interview - This interview includes questions about professional skills and a discussion of work experience.

Step 4: Entry Test - Candidates are required to demonstrate their professional skills.

Step 5: In-Person Interview - Interview with specialized managers with market knowledge and expertise related to the job position.

Step 6: Evaluation - After two rounds of interviews, the management team evaluates and selects candidates. This helps determine salary levels and final hiring decisions.

Step 7: Training and Probation - Employees receive training in both technical and soft skills to serve their roles for 1-3 months with a probationary salary set at 85% of the base salary.

Step 8: Official Decision - After the 1-3 month probation period, the management assesses each candidate's performance selects, and signs employment contracts.

3.2.1.1.3. Training and development

Training and development at FACOS company is an integral part of the company's commitment to the growth and success of its employees. FACOS understands that to maintain a leading position in the industry, we must invest in all organization members' professional and personal development.

- Ensure that all employees clearly understand the company's operations and the functions of the transportation exchange.
- Provide training courses for managerial roles to develop management skills such as planning, resource optimization, staff management, and performance enhancement.
- Offer communication skills training necessary for effective interaction with customers, suppliers, and colleagues. Develop problem-solving skills to handle unexpected situations such as late deliveries, accidents, or transportation incidents.
- Provide training on how to use and manage information systems and appropriate technology to monitor employee information, customer information, and platform transactions and improve work processes.
- Encourage employees to develop personal skills, such as time management, leadership, and self-management.
- Establish continuous training programs to update employee knowledge and skills in line with industry and company development.
- Set up regular assessment processes to ensure that the training programs are working effectively and provide feedback to employees for improvement.
- Encourage employees to share their knowledge and experiences through discussion meetings or internal platforms to create a learning-sharing environment.

3.2.1.1.4. Salary and Benefit

FACOS company always prioritizes the well-being of its employees and is committed to providing attractive benefits to promote satisfaction and personal development within the team. FACOS understands that happy and fulfilled employees, both materially and mentally, contribute to practical work and the company's success:

- Employees will be paid on the 10th of the monthly and paid via bank transfer
- After 1 year of work, employees will be reviewed and evaluated for a maximum salary increase of 5%.
- 13th-month salary and 12 days of annual paid leave.
- Performance-based bonuses for both business results and individual achievements.
- A friendly work environment with a commitment to long-term stability and development.
- Opportunities for training and career advancement based on capabilities - learn and grow.
- Full compliance with the labor laws of Vietnam.
- Enjoy other benefits as stipulated by the company.

These benefits together create a positive work environment that encourages employee growth and contributions, promoting the company's sustainable success. FACOS takes pride in ensuring the happiness and development of its employee team.

3.2.1.2. Operation

3.2.1.2.1. Building the FACOS platform

FACOS plans to develop an online platform as an interface with two forms: A website and App, based on three main features: Perceived ease of use, Perceived usefulness, and Perceived cost. FACOS platform is built with a combination of the most powerful programming languages, C#, and uses .Net, Nodejs, React & Angular programming frameworks. This combination helps the FACOS platform operate stably and smoothly and meet user needs well. FACOS platform integrates IoT and GPS navigation systems to help transport businesses determine optimal transport routes on online maps. From there, transportation will save fuel costs and minimize the risk of goods loss.

3.2.1.2.2. Financing, accounting, payment

Financial management, accounting, and payment management activities are crucial to ensuring the growth and sustainable operation of the company. Financial management involves planning, organizing, coordinating, and regulating economic activities. The accounting department tracks daily transaction volumes, records income, expenses, and prepares quarterly and year-end financial reports detailing the company's operational results.

In terms of payments, integrating a secure payment gateway facilitates convenient and secure transactions on the platform. The company also needs to manage fees and commissions collected from transactions and ensure the security of payment information to prevent fraudulent activities.

3.2.1.2.3. Information Security Management

FACOS consistently places information security as a top priority. FACOS customers are required to provide business information for account verification. Therefore, the platform carries out information security management activities with specific policies, procedures, and control measures to ensure the safety of customer data and information. These security activities are carried out by the Network Information Security Law No. 86/2015/QH13 provisions. FACOS is always prepared to detect and respond to any potential intrusions. Developing and maintaining an effective information security policy and management system ensures that FACOS can safeguard vital and trustworthy information throughout customer transactions on the platform.

3.2.1.2.4. Maintenance

Maintaining a transportation exchange platform system requires regular checks and assessments of its operational status to ensure it operates smoothly and efficiently. This includes maintaining and upgrading software, servers, and other technical infrastructure components. For an online transportation exchange platform, server resource management is crucial. Maintenance involves monitoring server resources such as CPU, memory, and bandwidth to ensure the system operates smoothly. If any issues are detected, the FACOS team responds promptly, preventing the risk of system downtime or freezing, which could harm customers during transactions. Furthermore, improvements and upgrades are carried out to enhance the equipment or system's performance, reliability, or features. This may involve adopting new technologies, streamlining processes, or upgrading software to keep the platform consistently updated and proactive in guarding against unauthorized information breaches.

3.2.1.3. Marketing plan

3.2.1.3.1. Marketing Mix 7Ps

FACOS utilizes a flexible and detailed Marketing Mix 7Ps strategy to promote its services and reach its target customers. By implementing the 7Ps Marketing Mix strategy, FACOS focuses on providing an efficient technological platform and places the target customers at the core of its strategy. FACOS builds an integrated platform where transparency, reliability, and performance are critical factors in every aspect of the user experience.



Figure 3.9: Marketing Mix 7Ps of FACOS

(Source: Authors, 2023)

3.2.1.3.1.1. Product and Service

FACOS Transport Exchange Platform is developed to connect the two main components in the cargo transportation chain, which are Carriers and Shippers. Instead of having empty trucks returning, transport companies have the opportunity to access continuous orders, with costs being paid immediately upon order completion, and Shippers can always find reputable carriers at the best prices on all routes. To help customers minimize inefficiencies in cargo transportation, FACOS aims to provide the highest quality service:

- All transactions will be conducted on the online platform of FACOS, making it easy for customers to search for information and find transport companies or cargo to transport.
- Customers are provided with complete information about every transaction, including supplier information, publicly available prices, transport routes, estimated delivery times, and detailed transaction steps.
- The FACOS platform offers various road transportation methods: trucks, containers, tank trucks, food trucks, refrigerated trucks and some other types of vehicles. Information about transportation vehicles, such as type, size, and purpose use, is also displayed during the transaction.
- The platform provides cargo insurance solutions so customers can purchase cargo insurance to minimize the risk of external loss or damage during transportation.
- The platform has a credibility scoring system, allowing customers to verify that supplier information is transparent, accurate, and reliable.
- All customer information provided when registering on the platform is kept absolutely secure, ensuring that customers can trust the platform's services.
- With technological advantages, the FACOS platform is regularly updated in real-time, minimizing the risk of slow or faulty transactions.
- With an experienced team of staff in transportation and logistics, customers receive 24/7 support to carry out efficient transactions.
- The simple user-friendly interface design makes it easy for customers to search for information or transact on the FACOS platform.

Unique selling points

a. Diverse methods of transportation

Methods of transportation are types of vehicles that transport freight. FACOS offers diverse road transportation methods, including containers, tankers, dump trucks, box trucks, semi-trailers, flatbed trucks, etc. This means that users have numerous choices when transporting their goods. This is crucial because no single mode of transportation fits every situation. There will be an optimal transportation method for each cargo type and specific situation. FACOS enables users to identify and utilize this feature to minimize costs and optimize transportation time. Users can easily switch between different transportation methods to ensure their goods are always delivered on time and in the best condition.

b. Cargo insurance

The FACOS platform has additional cargo insurance functions. This is a difference from other transportation exchange platforms. FACOS has partnered with one of the leading and reputable cargo insurance companies in Vietnam, Bao Viet Insurance Corporation, which boasts over 20 years of expertise in the insurance industry. Bao Viet's credibility has been affirmed through collaborations with prominent customers and partners.

FACOS customers can choose to purchase insurance for their goods on the platform or not. Opting for insurance on the platform provides customers with competitive pricing, favorable policies, and the assurance of the best protection for their interests.

c. Reputation scoring system

The reputation scoring system is a powerful tool that helps create trust and attract users to the FACOS transportation exchange platform. This system is built to establish a safe, transparent, and highly reliable environment for transportation transactions.

The public profile policy for participants will require customers to provide basic information such as their official company logo and name, contact information (address, email, and hotline), establishment date, and date of participation on the FACOS platform. Businesses must also complete a concise description adhering to community standards. Furthermore, profiles will disclose transaction history over the last 12 months, including the number of transactions and previous partners worked with on the platform.

Additionally, the peer-to-peer evaluation and rating policy allows providers and customers to review and assess each other after each successful transaction. Customers can rate at their discretion or according to criteria suggested by FACOS, including the quality and accuracy of information provided, response time, and commitment to supply/demand. Ratings will be measured on a scale from 1 to 5 stars for each category. To incentivize businesses to participate, this policy will accumulate ratings to earn free usage of shared services. This also encourages shippers and transportation service companies to interact and build a strong logistics community.

3.2.1.3.1.2. Price

FACOS will implement a pricing policy based on the transaction fee revenue model. FACOS will receive a fee in this model when customers conduct transactions through the company's transportation exchange platform.

FACOS will charge a fee based on the value of each successful order transaction: 3% (fee) plus VAT (as stipulated by the law). Moreover, FACOS' fee level is also reasonable compared to the general market. For instance, VTGO Technology Corporation charges a fee of 5% of the transportation contract value (excluding VAT). Similarly, Logivan's transportation exchange platform also charges 5% of the successful transaction value (excluding VAT). Smartlog charges a 3% fee (excluding VAT) (Nguyen Quy, 2023). Therefore, it can be concluded that the average price from transportation exchange platform providers will be about 3%-5%/successful transaction value. FACOS proposes a reasonable fee of 3% of the successful transaction value plus VAT to align with the general market while attracting new users and competing with rivals.

This fee covers all necessary expenses and generates profit from each transaction on the FACOS platform. In the future, should market conditions change, FACOS can adjust prices as necessary to ensure that customers can promptly adapt and not encounter difficulties in transactions.

3.2.1.3.1.3. Place

FACOS is an online transportation exchange platform serving customers all over Vietnam. The official website of FACOS is facos.jsc.com, which is the primary source of information regarding the services offered by the platform.



Figure 3.10: Website of FACOS

(Source: Authors, 2023)

In recent years, the development and implementation of mobile-based e-commerce solutions to support business operations have become a new trend in e-commerce in Vietnam and worldwide. In 2022, Vietnam had over 156 million mobile subscribers, and 97.6% of internet users aged 16-64 own smartphones (Vo Hiep, 2023). Therefore, FACOS will release two applications: one for Shippers and one for Carriers designed for smartphones and tablets with user-friendly interfaces.

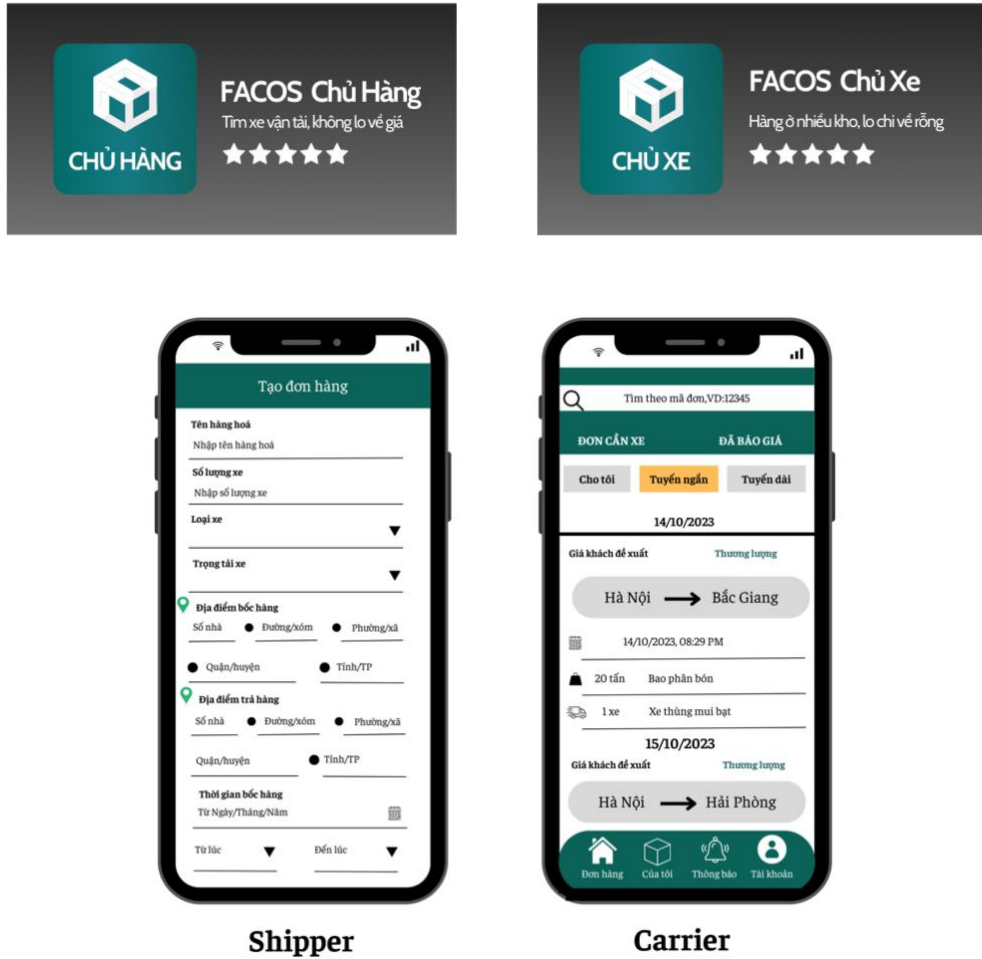


Figure 3.11: FACOS mobile app

(Source: Authors, 2023)

3.2.1.3.1.4. People

The human factor plays a significant role in FACOS' development process. At present, the company has only founders and a small internal team. Therefore, the leadership team's guidance is crucial in steering the company's vision and strategy. As the company grows, it plans to invest in training programs and attract new talent to expand its human resources capacity during development. FACOS is committed to providing training and development opportunities to create a positive working environment and build a flexible and creative workforce. This would allow the company to keep pace with the latest technological advancements, constantly improving the quality of its transportation exchange platform services.

3.2.1.3.1.5. Process

The basic operating process of the platform is divided into 4 stages:

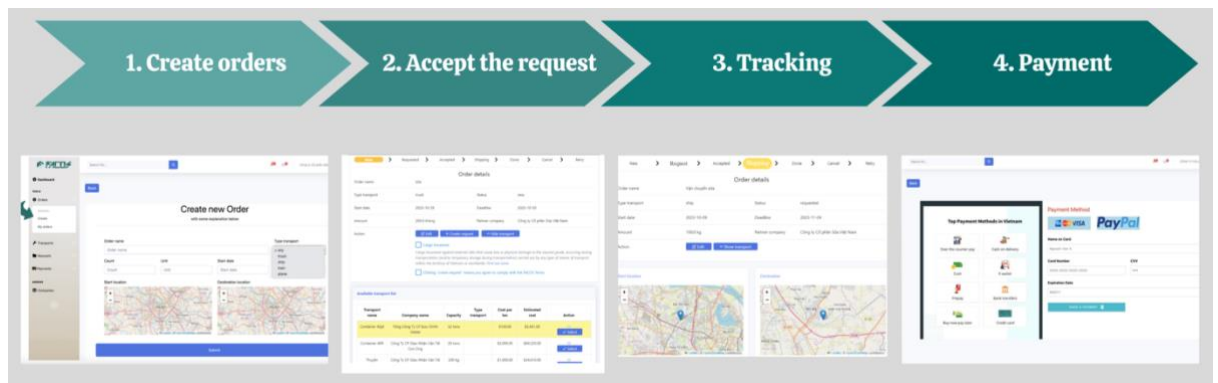


Figure 3.12: FACOS information exchange process

(Source: Authors, 2023)

1. **Create orders:** On the basis of transparency in shipping information, shippers and carriers commit to accurately filling in order information.
2. **Accept the request:** In case the Shipper or Carrier accepts the request, the order is successfully matched.
3. **Tracking:** After the order is processed, the route and status of the goods will be continuously updated for the shipper and vehicle owner to manage.
4. **Payment:** Payment is the final stage after the goods are shipped. The owner checks that the order has been successfully delivered, and will pay the shipping fee.

In this process, the supply chain flows show that:

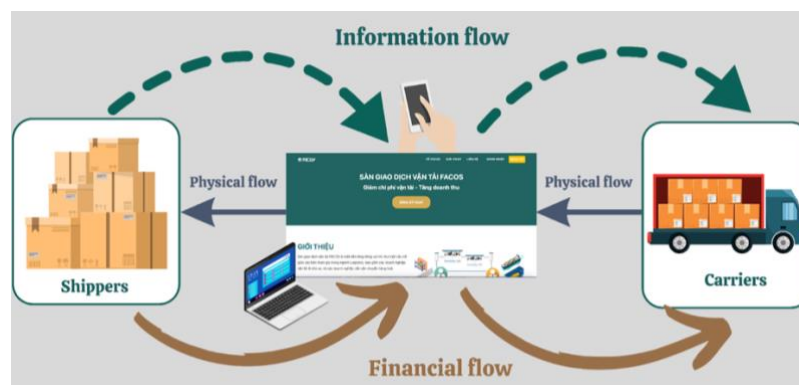


Figure 3.13: FACOS's flow

(Source: Authors, 2023)

Information flow: Information flow appears when a shipper creates an order on the platform. This information will appear in the list of orders to be shipped on the platform's recommendations page. Next, the carrier receives this information and accepts the order. After that, the matching order notification will be displayed.

Physical flow: After the information flow, the carrier executes the order. Through the requests on the shipper's platform, the carrier assigns the vehicle and the driver receives the order to begin transportation to the shipper's designated location.

Financial flow: When the driver successfully delivers, the Shipper is required to pay for that order on the platform. The shipping fee after deducting the platform fee will be paid back to the carrier.

3.2.1.3.1.6. Physical evidence

a. Logo



Figure 3.14: The logo of FACOS

(Source: Authors, 2023)

The FACOS logo carries profound symbolism, representing the company's mission and core values, with the primary color being emerald green. In the forefront, an icon combines the letters “F” and “C” to form a cube, symbolizing transportation and delivery. This signifies that FACOS is a platform connecting various stakeholders in the cargo transportation process. The package box in the icon also reflects FACOS's commitment to ensuring the safety and protection of goods during transportation. The combination of the letters “F” and “C” in the logo forms the abbreviation “FACOS,” representing the company's name. This makes the brand recognizable and closely associated with the company's name.

The FACOS logo underscores the company's focus on the logistics field to ensure that customers receive the best and safest services through their platform. The package box icon, along with the combination of the letters “F” and “C,” illustrates the professionalism and

efficiency of FACOS in connecting and managing transportation for businesses and individuals.

b. Uniform

FACOS uniforms have the main color of the company's emerald green, which is important in expressing the company's brand and values.



Figure 3.15: The Uniform of FACOS

(Source: Authors, 2023)

The “FACOS” logo placed on the front of the uniform is the primary highlight, signifying FACOS's professionalism. This logo helps establish brand recognition for FACOS at first glance.

On the back of the uniform, the combination of the “FACOS” logo and the slogan “Yêu cầu vận tải, ghé FACOS thôi” is a significant focal point, especially when those wearing the uniform are in motion. This slogan reflects FACOS's commitment to efficiently and easily meet all customer transactions. Placing the slogan on the back is an interactive and engaging way to convey the message about FACOS to those around.

c. Name Card

FACOS Name Card has a simple and elegant design. Prominent is the company logo icon, creating easy recognition of the FACOS brand.



Figure 3.16: The Name Card of FACOS

(Source: Authors, 2023)

FACOS's Name Card includes clear contact information, such as a phone number, email, website, and the company's address. This information makes it easy for customers to contact FACOS when needed. The design of the business card follows an emerald green color scheme and a professional style, instilling confidence in potential customers and helping them decide to use FACOS's services.

FACOS's Name Card is not just a means of exchanging contact information but also a branding and commitment tool for the company about its customers and partners. It demonstrates professionalism and attention to detail, which is crucial in the transportation and logistics industry.

3.2.1.3.1.7. Promotion

In order to bring the FACOS brand to increase awareness and get closer to the audience, we divided the use of promotional mix tools which include 3 major parts including: Advertising, Public Relations, Sales, and Marketing Promotion.

3.2.1.3.1.7.1. Advertising

FACOS utilizes the Facebook, Zalo, LinkedIn and Website platforms to advertise and reach its target audience of business customers.

a. Facebook

As of 2023, Vietnam has 66.2 million Facebook users and ranks 7th among countries with the highest number of users worldwide (Oberlo, 2023). Therefore, Facebook Ads is an effective online marketing tool for FACOS to define advertising objectives, such as brand building, seeking potential customers, increasing brand awareness, or driving website traffic.

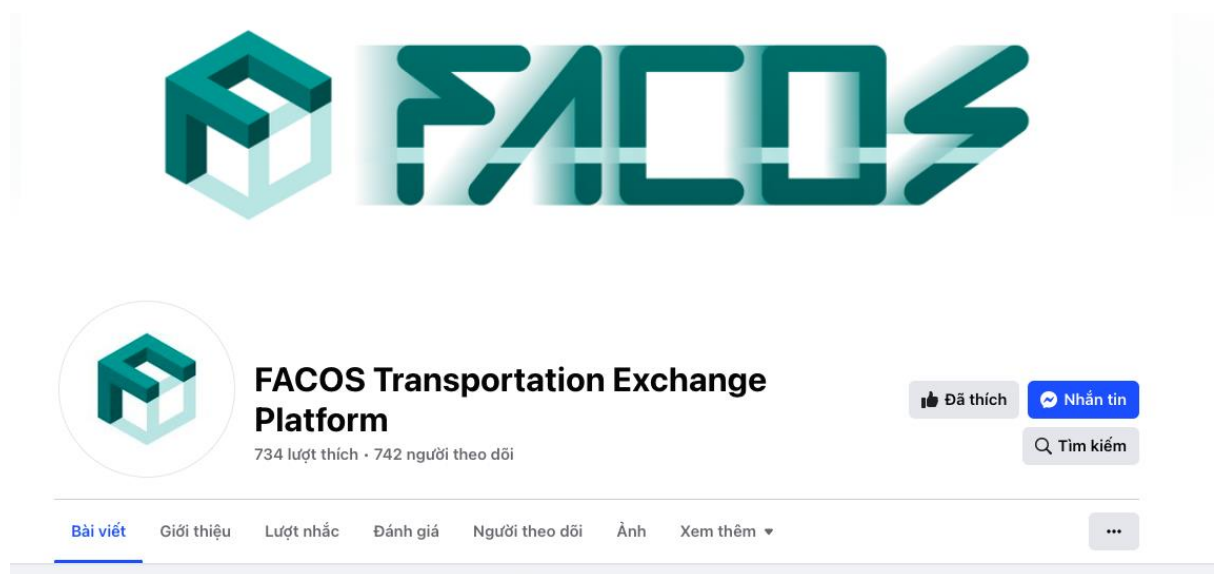


Figure 3.17: The Fanpage of FACOS

(Source: Authors, 2023)

FACOS's Facebook page content includes information about the company, its transportation services, promotional programs, discounts, and new service packages. Posts are scheduled and deployed according to a specific plan. On important holidays, FACOS intensifies its advertising activities through Facebook posts. Running Facebook Ads provides FACOS with the opportunity to boost sales while optimizing costs for the business.

b. Zalo

Despite being relatively new to the market, Zalo Ads has gained popularity among many businesses. Therefore, FACOS invests in Zalo advertising to optimize costs. Similar to Facebook, Zalo allows the sharing of company images, information, and videos. Through Zalo, FACOS can quickly obtain customer phone numbers, which is crucial for launching marketing campaigns for its products and establishing better connections with customers.

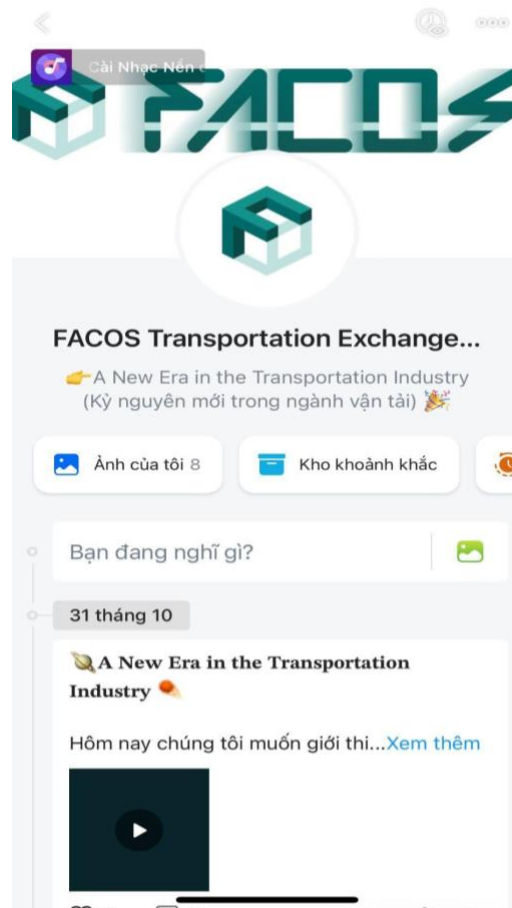


Figure 3.18: The homepage on Zalo of FACOS

(Source: Authors, 2023)

c. Website

Website serves a crucial role in customer retention and providing them with authentic information about FACOS. The website's design is minimalist, professional, and user-friendly while providing comprehensive information about FACOS's products and services.

On FACOS' website, customers can effortlessly access information about the company's various service packages and reach out for direct guidance. The articles on the website are written with clarity and detail, covering our products, services, and the ongoing promotional offers provided by FACOS. Customers will readily comprehend the distinctiveness and benefits of each product package. Additionally, reviews and feedback from previous customers are shared on the website, enabling new customers to assess and make informed decisions regarding utilizing FACOS' products and services.



Figure 3.19: FACOS's website

(Source: Authors, 2023)

d. LinkedIn

In 2023 LinkedIn reached a milestone of 930 million users worldwide, with Vietnam contributing 6,292,000 users, accounting for 6.2% of the total population (Minh Duc, 2023). Many businesses and organizations in Vietnam utilize LinkedIn for talent acquisition, showcasing their products and services, and seeking business partnerships. Leveraging LinkedIn, a platform that concentrates on a community of business professionals and industry experts, FACOS can optimize its target audience advertising strategy through content sharing and participation in industry-specific groups and communities. In doing so, FACOS creates an interactive environment, builds credibility, and reaches its target audience of business customers.

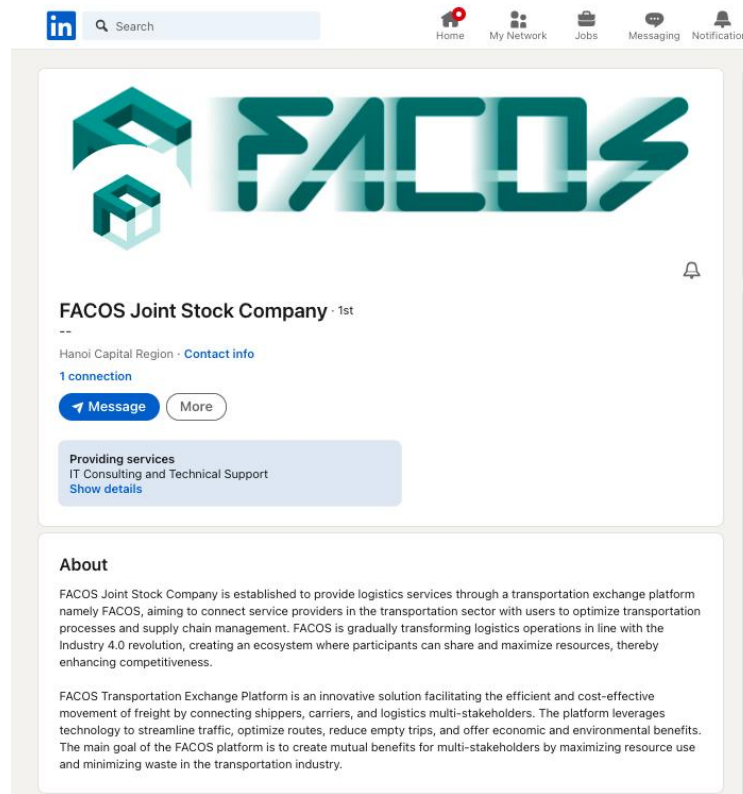


Figure 3.20: FACOS’s LinkedIn

(Source: Authors, 2023)

3.2.1.3.1.7.2. Public Relations (PR)

FACOS's PR objectives include maintaining the brand's reputation, managing a positive image, and building strategic relationships with key stakeholders such as customers, partners, investors, and relevant parties. To achieve these objectives, FACOS will carry out intensive PR activities within its marketing plan.

On FACOS's website, there is a dedicated page for introducing the company, focusing on sharing achievements, notable activities, and important milestones. The goal is to build an authentic image of FACOS and establish a trustworthy relationship with customers and the online community.

FACOS's Facebook page aims to reach potential customers and convey meaningful messages. It serves as a platform to share stories and memorable moments of FACOS from its founding to the present. The Facebook page also highlights the passion and dedication of the staff towards their work, as well as their creativity and talent, showcasing the quality of their services.

3.2.1.3.1.7.3. Sales and Marketing Promotion

FACOS's Promotion campaign aims to stimulate the demand for using the platform. The objectives include attracting new customers through offers and maintaining the loyalty of existing customers with discount programs and reward point systems. On special occasions and holidays, FACOS runs gift-giving programs for potential customers with the highest number of successful transactions to show respect and appreciation for its customers. FACOS always focuses on improving and enhancing the quality of its services to retain customers and enhance competitiveness in the market.

3.2.1.3.2. Seven-month marketing plan

Along with the marketing mix strategy, FACOS focuses on short-term marketing planning with specific activities, objectives, and budget allocation for each communication channel. The marketing plan is implemented in three phases, lasting seven months. Phase 1 is The Pre-marketing Plan, implemented in December 2023; Phase 2 is Launch, scheduled to execute from January to March 2024; and Phase 3 is Promoting PR, parallel with advertising from April to June 2024.

	Phase' name	Duration	Budget
Phase 1	Pre-marketing	01/12/2023 - 31/12/2023	44,900,000
Phase 2	Launch	01/1/2024 - 31/3/2024	275,695,000
Phase 3	Promoting PR in parallel with advertising	1/4/2024 - 30/6/2024	127,995,000
TOTAL BUDGET			448,590,000

Table 3.3: Seven-month marketing plan (unit: VND)

(Source: Authors, 2023)

3.2.1.3.2.1. Phase 1

In the new market entry stage, FACOS focuses on reaching potential customers through online marketing. The goal is to introduce the platform to customers, enhance brand awareness, and ensure a clear understanding of the services offered. FACOS's customer

targeting strategy includes conducting market research to understand the specific needs of the target audience. FACOS builds a segmented database for B2B customers, categorizing them into small and medium-sized enterprises. By creating contact lists for each specific business segment, FACOS employs direct mail, email marketing to reach out.

Duration	Marketing channel	Activities	Target	Budget (VND)
01/12/2023 - 31/12/2023	- Digital Communication	Research and analyze customer insight	- Create 2 content posts per week on each platform - Facebook: 250k+ reaches - Zalo: 200k+ reaches - LinkedIn: Connected 40k businesses	44,900,000
		Create Facebook Fanpage, Website, Zalo & LinkedIn for FACOS - SEO optimization		
	- Content Communication	Writing content on Facebook, Website, Zalo, LinkedIn introduces FACOS		
	- Direct Communication	Design images and graphics		
		Social media ads: Google, Facebook, Zalo, LinkedIn		
		Email Marketing: send emails to customer lists to introduce the FACOS platform		

Table 3.4: One-month pre-marketing for launching platform

(Source: Authors, 2023)

To boost online engagement and expand brand visibility on platforms such as Zalo, Facebook, and LinkedIn, FACOS utilizes short videos, specially designed images, and content to generate curiosity and anticipation before the official platform launch. The content of these communication channels is focused on conveying clear and detailed messages about the benefits that FACOS's transportation exchange platform will provide to participating parties.

On Google, FACOS aims to optimize its visibility through targeted advertising campaigns tailored for the businesses in the transportation sector. Leveraging Google Ads, the platform

will strategically deploy transportation-related keywords to capture the attention of businesses actively seeking freight and logistics solutions.

Facebook and Zalo will play a crucial role in reaching B2B customers through tailored Facebook Ads and Zalo Ads. The content will spotlight the efficiency and advantages of utilizing the FACOS transportation exchange platform. Additionally, FACOS creates a dedicated Facebook and Zalo group that aims to foster discussions and networking among businesses operating in the transportation and logistics landscape.

LinkedIn, as a professional networking platform, will be leveraged for thought leadership within the transportation industry. FACOS will share valuable insights, case studies, and success stories to position itself as a leader in the transportation and logistics domain. Targeted LinkedIn Ads will be deployed to reach decision-makers and professionals within the industry.

3.2.1.3.2.2. Phase 2

In the second phase, the FACOS Transportation Exchange Platform continues to focus on a multi-channel approach, including Google, Zalo, Facebook, and LinkedIn, to capture the attention of B2B customers, specifically Shippers, and Carriers. FACOS utilizes Google Ads to enhance visibility for those searching for transportation exchange services. Advertising on Zalo and Facebook aims to directly reach the user base and generate interest through creative advertisements. On LinkedIn, FACOS shares in-depth content to demonstrate the platform's value for both transportation businesses and shipping enterprises.

Marketing channel	Activities	Duration	Target	Budget (VND)
- Digital Communication - Content Communication - Direct Communication - Traditional Communication	- Promote advertising campaigns on media and social networks to attract customers - Email Marketing: send emails to customer lists to introduce and invite to the FACOS platform launch event	01/1/2024 - 31/3/2024	- Create 1 content posts per week on each platform - Facebook: 2M+ reaches - Zalo: 2M+ reaches - LinkedIn: Connected 100k+ businesses	127,995,000

	Platform launching event	- 300 businesses participated - Sale conversion rate: 60% of businesses register on the platform	97,700,000
	Free 50,000 VND for shipper accounts and Carriers who register for the first time	1000 users	50,000,000
Total budget (VND)			275,695,000

Table 3.5: Platform launch plans

(Source: Authors, 2023)

In this phase, an official launch platform event will be organized to comprehensively introduce the platform, with the participation of partner businesses and potential customers, aiming to enhance brand recognition within the industry and share the values that FACOS brings.

- Name: FACOS platform launch
- Time: 9:00 a.m. - 12:00 a.m., January 11, 2024
- Address: Biz event trading company (No. 43, Street K2, Group 3, Phu Do Ward, Nam Tu Liem District, Hanoi City).
- Purpose: Launch the official FACOS platform and create opportunities to meet and interact between the FACOS leadership team, partner businesses, and customer businesses. The event aims to introduce in detail the features, advantages, and potential of the platform, and the benefits of participating parties, and is also a discussion between FACOS and the business community.

Category	Quantity	Unit Price (VND)	Amount (VND)
Design costs			
Welcome banner	1	800,000	800,000
Bandroll	1	800,000	800,000
Invitation	1	400,000	400,000
Signboard	1	800,000	800,000
Printing costs			

Welcome banner	1	540,000	540,000
Bandroll	1	600,000	600,000
Invitation	300	4,000	1,200,000
Signboard	1	800,000	800,000
Document	300	1,200	360,000
Venue rental costs			
Rent halls, restaurants, hotels	1	20,000,000	20,000,000
Equipment rental costs			
Projector	1	400,000	400,000
Computer	1	300,000	300,000
Photojournalist costs			
Photography, filming, interview	1	8,500,000	8,500,000
Decoration costs			
Flower basket for the table	6	450,000	2,700,000
Large flower basket	2	1,000,000	2,000,000
Flower brooches	50	16,000	800,000
Gift expenses			
Gift pen	300	10,000	3,000,000
Lucky draw gifts	2	500,000	1,000,000
Partner gifts	20	800,000	16,000,000
PR costs			
Press costs	1	5,000,000	5,000,000
Social networks	1	4,000,000	4,000,000
Personnel costs			
Reception	6	200,000	1,200,000
Program MC	2	1,000,000	2,000,000
PG/PB	10	150,000	1,500,000
Dance band	1	3,000,000	3,000,000
Additional costs			20,000,000
TOTAL			97,700,000

Table 3.6: Investment cost plan for the platform launch event (unit: VND)

(Source: Authors, 2023)

Timeline	Job	Request
10 - 13/12/2023	Apply for an organization license from the local government	
13 - 20/12/2023	Come up with theme ideas, concepts, scripts, design and decorate PR campaigns	- Contact the party to design and print banners, flyers, bandrolls, invitations, posters. - Post-conference organization content on Facebook.
20 - 24/12/2023	Make a preliminary list of customers	Send invitations, information about general schedules and forms of transportation to guests.
24 - 27/12/2023	Official customer list	Receive feedback from customers, compile a list of customers with each specific request for transportation.
27 - 31/12/2023	Choose the venue	Book services for the event such as transportation, venue, accommodation, food service, equipment, personnel, and customer appreciation gifts.
01 - 5/1/2024	Official documents of the program	Send a set of documents including information about the program's schedule and official activities along with necessary documents to customers.
05 - 8/1/2024	Preparation and reception work	Complete work items, completely handle arising problems.
08 - 10/1/2024	Try to run the programme	Consider missing elements to supplement, prepare plans and contingencies for all unexpected situations and incidents that occur.
11/1/2024	Official program	Organize and deploy according to plan.
11/1/2024	Clean up	Clean up, inventory the quantity of equipment and items and return the premises to the supplier.
12 - 14/1/2024	- Inquire about guests - Communication after the customer appreciation event	- Call, email and thank all the guests. Survey and collect feedback from all conference participants to hear what people think about the conference and what can be done better in the future. - Upload articles, images, videos of the event to media sites such as websites, fanpages, newspapers, etc.
14 - 18/1/2024	Summative assessment	

Table 3.7: Time to carry out platform launch activities

(Source: Authors, 2023)

As part of this strategy, FACOS introduces a compelling incentive by offering 50,000 VND for free to new shippers and carriers registering for the first time. This promotion aims to attract businesses by providing an immediate tangible benefit, encouraging them to experience the platform's capabilities firsthand. This phase not only highlights the launch of the FACOS platform but also provides favorable conditions for FACOS to build strong relationships with its customers.

3.2.1.3.2.3. Phase 3

In the third phase, FACOS has outlined a series of strategic objectives to enhance its presence and credibility in customer connectivity while maintaining relationships with existing customers. To achieve these goals, FACOS has developed a comprehensive strategy that primarily focuses on multi-channel marketing activities.

Marketing channel	Activities	Duration	Target	Budget (VND)
- Digital Communication	Promote advertising campaigns on media and social networks to attract customers	1/4/2024 - 30/6/2024	- Create 1 content posts per week on each platform.	127,995,000
- Content Communication			- Facebook: 20M+ reaches.	
- Direct Communication	Cooperation with Specialized Media		- Zalo: 20M+ reaches.	
- Traditional Communication			- LinkedIn: Connected 200k+ businesses.	

Table 3.8: Promoting PR in parallel with advertising

(Source: Authors, 2023)

As part of the Customer-Centric Advertising Strategy, targeting businesses, FACOS has allocated a significant portion of the advertising budget to specialized channels dedicated to B2B customers through Facebook, Zalo, and LinkedIn. The utilization of industry-specific keywords and advertising placements aims to effectively convey messages to both transportation service providers and cargo senders.

FACOS has crafted a meticulous strategy to build relationships with industry-specific media, aiming to broaden its reach to a larger audience of businesses. Collaborating with newspapers, online news platforms, newsletters, interviews, and articles allows FACOS to

share success stories and unique value propositions. Through this approach, FACOS enhances its credibility and visibility within the industry, highlighting its value to customers.

In terms of monitoring and analytics, FACOS will employ social media monitoring tools to track mentions, engagement, and discussions related to the FACOS transportation exchange platform. Regular analysis of performance metrics, including conversion rates and engagement levels, will provide valuable insights, enabling strategic adjustments for optimal results.

FACOS aims to position itself as a leading platform transportation exchange in the transportation industry. The comprehensive marketing plan seeks not only to enhance visibility but also to build credibility and foster meaningful connections within the target industry, ultimately solidifying FACOS's standing in the transportation and logistics space.

3.2.2. Value Proposition

3.2.2.1. Values for shippers

The FACOS transportation exchange platform offers several benefits to shippers, helping them efficiently manage and optimize their transportation processes. Firstly, the FACOS platform provides diversity in choosing carriers and transportation services, which brings significant benefits to shippers. By having a wide range of carriers and transportation options available, shippers can select the most suitable carrier for their specific needs. This diversity in choices helps optimize the transportation process and meet various customer requirements.

Secondly, one of the core values that the FACOS platform provides to shippers is cost savings. Through the company's platform, shippers can place their orders and allow carriers to bid on them. This bidding process creates a competitive environment, compelling carriers to offer the most competitive prices. Moreover, shippers can compare prices from different carriers to ensure they receive the most competitive rates. As a result, shippers can ensure they do not overspend on transportation services, helping them optimize their budgets.

Thirdly, using the FACOS platform saves shippers significant time and resources. Instead of spending time and effort searching for suitable carriers and dealing with transportation-related procedures, they can complete all these tasks on a single platform. This includes placing orders, tracking the transportation process, and managing any issues that may arise.

This streamlined and simplified process allows shippers to focus more efficiently on their core management tasks.

Fourthly, transparency is a crucial factor for shippers in the transportation process. FACOS provides transparency by offering detailed information about the transportation process. Shippers can track the real-time location of their goods, understand the processing steps, and monitor the status of their orders. This empowers shippers with greater control and understanding of their transportation processes, ensuring that their goods are transported safely and on time.

Another important value that the FACOS platform brings to shippers is risk minimization. Shippers have access to detailed information about carriers, contracts, and terms to ensure the safety of their goods. This information allows them to assess the reliability of carriers, insurance coverage, and transportation commitments. As a result, shippers can optimize risk management and ensure the safety of their goods throughout the transportation process.

3.2.2.2. Values for transport service companies

The transportation exchange platform has become indispensable to the modern transportation industry. It serves as a tool to connect transportation companies and customers, and the FACOS transportation exchange platform offers several crucial benefits to transportation service providers.

One of the benefits FACOS brings to transportation companies is the ability to quickly and efficiently access new customers and expand their customer networks. By creating online profiles, transportation companies can easily share information about their services, fleet, and transportation capabilities on this platform. This builds trust with existing customers and attracts the attention of potential customers nationwide or even globally. Additionally, companies reduce their dependence on a small number of existing customers by reaching and attracting new customers. This enhances business sustainability and reduces the risks associated with changes or loss of current customers. Therefore, companies can expand their market and create new business opportunities, increasing revenue and profitability.

Furthermore, FACOS provides crucial market data such as freight rates and transportation demand. Companies can use this data to predict and adapt to customer needs and market changes. They can optimize transportation processes through data analysis, ensuring they efficiently meet customer requirements and provide superior services.

Secondly, increasing productivity and using resources efficiently is a goal many transportation companies aim for, and the FACOS plays a significant role in achieving this. One way FACOS supports productivity optimization is by optimizing transportation routes. The platform provides information about available orders and shipments, making it easy for transportation companies to combine trips in the same direction or with similar cargo. This helps minimize unnecessary travel distances and reduces transportation costs and delivery times, allowing for more orders to be served within a certain timeframe.

FACOS platform also helps transportation companies avoid empty or deadhead trips, a common issue in transportation and logistics. By optimizing their fleets' use, companies can maximize profits by ensuring that every trip generates revenue. This increases profitability and reduces negative environmental impacts by reducing empty vehicles on the road.

Thirdly, the payment process is an essential part of business operations in the transportation and logistics industry, and FACOS brings significant improvements to make this process more efficient and convenient for transportation companies. In the past, cash transactions were often complicated and time-consuming, but with FACOS, transportation companies, and customers can make online payments through easily integrated and fast payment methods. This eliminates the hassle of cash transactions while ensuring that transportation providers receive payment quickly, providing financial management flexibility.

The online payment system also brings transparency and reliability to the payment process. By using this system, service providers can ensure they receive timely and reliable customer payments. This helps reduce uncertainty about financial transactions and creates a more trustworthy business environment.

Finally, FACOS also helps enhance the reputation of transportation companies through the ability to review and rate services and customer feedback. The ability to review and rate services on FACOS is a valuable opportunity for customers to share their experiences with transportation companies. This allows customers to express their satisfaction or provide a fair assessment of the service they receive and helps build a positive reputation for these companies. Positive reviews build trust and motivation for the company, making customers confident in using their services.

Additionally, customer feedback is important to building a company's reputation. Positive feedback about services and working experiences with the company helps establish a

trustworthy and professional image in the transportation industry. This positive reputation can attract more new customers, as people tend to trust companies with a history of good work and high ratings from the customer community.

3.2.2.3. Values for other stakeholders

The positive impacts of the FACOS transportation exchange platform on various stakeholders, including consumers, insurance companies, technology suppliers, warehouses, the logistics industry in Vietnam, the national economy, and the environment, will be discussed here.

Firstly, the ultimate goal of the logistics industry is to deliver goods to consumers at the lowest cost and in the shortest time possible. When FACOS helps logistics companies reduce transportation costs and improve operational efficiency, this has the potential to lead to more reasonable prices for goods and services. Logistics companies can pass these cost savings to consumers, enabling them to shop at lower costs. Additionally, FACOS optimizes the transportation process, making deliveries faster. This is particularly important for consumers with urgent needs, such as delivering medical supplies or fresh food. FACOS ensures that goods are delivered on time and in the best condition, enhancing consumer trust and reducing the risks associated with late deliveries or damaged goods during transportation. This increases the attractiveness of products and services and improves consumer access.

Secondly, the FACOS transportation exchange platform positively impacts warehouses and storage facilities by optimizing inventory management and reducing operating costs. Detailed transportation information provided by FACOS helps warehouses plan and manage inventory efficiently. Warehouses can accurately predict when goods will arrive and in what condition, allowing them to arrange storage space effectively and minimize waste. This translates to reduced operating and labor costs. Thanks to information from FACOS, warehouses can optimize labor usage and reduce fuel and energy consumption during operations.

Thirdly, using the FACOS platform in transportation helps businesses reduce the risk of accidents and damage and brings significant benefits to insurance companies. This system provides detailed transportation information, allowing insurers to monitor and assess dangerous situations or unsafe behaviors by drivers or vehicle systems. With reduced risk,

insurance companies can pay less compensation, resulting in significant long-term cost savings. This also enables them to offer transportation insurance policies with lower premiums, making these policies more attractive to businesses and consumers. This promotes using the FACOS service and creates a competitive insurance market that benefits all parties.

Lastly, technology suppliers are among the most important stakeholders in the FACOS transportation exchange platform. They can collaborate with FACOS to develop new products and services, such as mobile applications for tracking transportation and smart inventory management systems. This helps optimize transportation and inventory management processes more efficiently, benefiting logistics businesses and consumers. Additionally, FACOS offers opportunities for technology suppliers to expand their market by providing efficient solutions to the logistics industry. FACOS's strong presence in the logistics industry allows technology suppliers to reach logistics companies globally and become a crucial part of the industry.

3.2.3. Key partner

FACOS aims to provide its customers with the most satisfying transportation exchange experiences through the FACOS transportation exchange platform. For this reason, researching and establishing partnerships are of utmost importance, making FACOS quite stringent in seeking reputable partners to ensure that the trading activities on the platform run efficiently and benefit all partners involved. Partners must meet the following requirements: ensuring quality, being reputable, and specialized in their respective industries. After careful analysis, FACOS has identified partners: transportation companies, logistics service providers, IT technology firms, insurance companies, and payment service providers.

a. **Transportation company - Transimex Corporation**



Figure 3.21: Logo of Transimex Corporation

(Source: Transimex Corporation, 2023)

- **Company name:** Transimex Logistics Joint Stock Company
- **Brand name:** Transimex Corporation
- **Headquarters address:** 172 Hai Ba Trung, Da Kao Ward, District 1, Ho Chi Minh City
- **Product/Service:** International Freight Forwarding, Warehousing, Domestic Transportation, and Distribution
- **Advantages:**
 - Transimex is one of the leading logistics service providers in Vietnam, boasting a long history of nearly 40 years in the transportation and logistics industry. They have built a reputable name for themselves.
 - Transimex has established an extensive network within the transportation and logistics industry, encompassing important partners, carriers, and customers.
 - Transimex provides a variety of transportation and logistics services, including international freight forwarding, warehousing, and domestic transportation.
 - With their international freight forwarding service, Transimex can support FACOS transportation exchange platforms in expanding their operations and entering global markets.

- Projects or transportation transactions often require reliable customer support. Transimex can provide professional customer services to address issues or inquiries promptly.

b. Logistics service provider - Bee Logistics



Figure 3.22: Logo of Bee Logistics

(Source: Bee Logistics, 2023)

- **Company name:** Bee Logistics Joint Stock Company
- **Brand name:** Bee Logistics
- **Headquarters address:** 2nd Floor, Hai U Building, 39B Truong Son Street, Ward 4, Tan Binh District, Ho Chi Minh City
- **Product/Service:** Freight transport services, both single-modal and multi-modal; and value-added services such as warehousing, packaging, and labeling.
- **Advantages:**
 - Bee Logistics has a long history of operating in the transportation and logistics industry, with nearly 20 years of experience in Vietnam. Their credibility has been verified through collaborations with numerous large partners and international projects.
 - Bee Logistics maintains a transportation and warehouse network that caters to customers' needs nationwide. This enables them to provide efficient and flexible services.
 - Bee Logistics offers various services, including road transport, sea freight, air freight, and other logistics services such as warehousing, customs clearance, and supply

chain management. They are committed to delivering top-notch service quality, with a team of professional staff well-versed in the transportation and logistics industry.

- With a network of 28 branches and offices nationwide, they have easy access to major seaports, airports, and transportation routes.
- Bee Logistics invests in technology and automation to enhance efficiency and accuracy in the transportation and logistics processes.
- Bee Logistics is one of the few companies in Vietnam with full licenses, including customs brokerage, single-modal, and multi-modal transportation, accepted by the Federal Maritime Commission (FMC).
- The company's services are globally insured by reputable insurance companies such as AON, QBE, Bao Viet, Bao Minh, and BIC.

c. Information technology enterprise - FPT Software



Figure 3.23: Logo of FPT Software

(Source: FPT Software, 2023)

- **Company name:** FPT Software Company Limited
- **Brand name:** FPT Software
- **Headquarters address:** FPT Cau Giay Building, Duy Tan Street, Dich Vong Hau Ward, Cau Giay District, Hanoi
- **Product/Service:** Software services and maintenance, FPT.AI artificial intelligence platform, digital processing services, and digital transformation services.
- **Advantages:**

- FPT Software boasts over 24 years of experience developing and deploying software applications and information technology solutions. They have a highly skilled team of engineers with deep technological expertise capable of optimizing and automating transportation and supply chain processes.
- Their data analysis and artificial intelligence proficiency allow them to provide crucial insights into transportation, forecast demand, and optimize routes.
- FPT Software can assist in implementing Internet of Things (IoT) solutions to monitor and manage vehicles and equipment during transportation, enhancing operational efficiency and safety.
- Their ability to offer multilingual services and support enables them to expand their operations and serve international customers.

d. Insurance company - Bao Viet Insurance



Figure 3.24: Logo of BAOVIET Insurance

(Source: BAOVIET Insurance, 2023)

- **Company name:** Bao Viet Insurance Corporation
- **Brand name:** Bao Viet Insurance
- **Headquarters address:** 7 Ly Thuong Kiet Street, Phan Chu Trinh Ward, Hoan Kiem District, Hanoi
- **Product/Service:** Cargo insurance, vehicle insurance
- **Advantages:**
 - Bao Viet is one of the leading insurance companies in Vietnam, with over 20 years of experience in the insurance industry. Their reputation and reliability have been

verified through partnerships with numerous major customers and partners.

- Bao Viet provides a range of insurance products, including coverage for cargo, motor vehicles, and technology.
- They can customize insurance solutions to meet the specific needs of the transportation exchange, including setting insurance conditions and benefits according to customer requirements.
- They provide excellent customer support and professional insurance portfolio management services. This ensures the transportation exchange and customers have peace of mind and trust in their services.
- They can offer advanced solutions for monitoring and managing insurance policies by continuously investing in technology to improve processes and services.

e. Payment service provider

FACOS utilizes payment methods using 4.0 technology alongside traditional cash payments to provide value and convenience to our customers. FACOS will establish and maintain relationships with payment service providers to ensure that the payment process for transactions on the FACOS transportation exchange platform is efficient and secure.

We partner with banks such as TPBank, BIDV, VietcomBank, VietinBank, and Techcombank to diversify payment methods, save time, and enhance customer convenience.



Figure 3.25: Paying through bank

(Source: TPBank, Vietcombank, BIDV, Vietinbank, and Techcombank, 2023)

Furthermore, FACOS also collaborates with e-wallets such as MoMo, ZaloPay and Napas, enabling customers to make quick and secure online payments. Additionally, services like Viettel Money and VNPAY offer the capability to transfer funds quickly via mobile phones and make payments using QR Codes, maximizing convenience for our customers.



Figure 3.26: Payment via e-wallet and QR Code

(Source: MoMo, ZaloPay, Viettel Money, VNPay and Napas, 2023)

3.2.4. Cost structure

The estimated initial budget for FACOS is VND 3,000,000,000 and includes the following components:

- **Initial Investments:** This covers the costs of office space, infrastructure, and the development of the website and app platform.
- **Cost of service:** This covers the costs domain, web hosting, and cloud computing server of the website and app platform.
- **Operating Expenses:** This includes marketing expenses, office expenses, employee salaries, software development, and maintenance to ensure the daily operations of FACOS.

3.2.5. Porter's Five Forces Model

The Five Forces model is a strategic business analysis tool introduced by Michael Porter in 1979. This model aids businesses in assessing competitive forces within the market, identifying innovative opportunities, managing risks, and making informed decisions to enhance their market position effectively.

3.2.5.1. Threat of new entrants

In recent years, the demand for goods transportation has increased, with the Vietnamese Government focusing on building and developing Logistics industry infrastructure. Many

transport exchange platforms have been established to connect transport needs between shippers and vehicle owners to reduce the number of one-way empty vehicles, helping to reduce transport costs. However, the barrier to entry into the transport exchange is relatively high; new businesses need to have high costs to invest in technology, creative research, brand building, and establishing customer files, so It will be challenging to participate in this business. Therefore, the threat from new entrants to FACOS is low.

3.2.5.2. Bargaining power of suppliers

Building long-term and strong relationships with supply partners is crucial for ensuring a stable supply and reducing the risk of price increases or supply disruptions. Weak relationships with suppliers can leave FACOS vulnerable to threats. FACOS relies on various suppliers, including transportation companies, logistics service providers, information technology firms, and reputable insurance companies.

First and foremost, the number and availability of transportation providers can create competition when selecting supply partners for FACOS. When multiple options exist, FACOS selects supply partners based on price and service quality. Regarding price negotiations and terms, suppliers may have negotiation strength when they are essential and not easily replaceable. For instance, if they are significant suppliers, they may demand better terms and higher prices from FACOS. Secondly, regarding supply sources, the companies providing services to FACOS are all established and reliable suppliers. This stability can reduce the risk of interruptions in service delivery.

Currently, there are numerous providers of logistics, insurance, payment, and information technology services for FACOS. As a result, these suppliers need more authority over pricing, which weakens their bargaining power. The products these providers offer are standardized, with little differentiation and low switching costs. This makes it easier for FACOS to switch providers. The low negotiation power of suppliers will help FACOS establish a strong position in the industry.

3.2.5.3. Bargaining power of buyers

Customers play a crucial role and directly impact Vietnam's FACOS transportation exchange platform operations. They can choose different transportation exchange services based on various factors, including pricing, service quality, and reliability. Customers often exert pricing pressure to reduce transportation costs, and they can compare prices across different

transportation exchange platforms. They also have the right to negotiate prices and terms in contracts, which poses a challenge for FACOS in maintaining stable customer relationships.

Service quality is another significant factor in retaining customers on the FACOS platform. When the platform provides excellent service, customers tend to become loyal and continue using FACOS services rather than switching to other platforms despite the low switching cost. Online reviews and customer feedback can influence FACOS' reputation, and adapting to new technologies is essential to gain customer trust. Therefore, customers are not only service users but also the determining factor in the success and existence of the FACOS transportation platform. The bargaining power of FACOS transportation exchange platform buyers is enormous.

3.2.5.4. Threat of substitutes

FACOS transport exchange faces many potentially competitive alternative products and services. Several products/services are replacing FACOS transportation exchanges, such as traditional transportation companies and 3PL companies. Competition between FACOS and these companies depends on many factors, including convenience, performance, price, and service quality.

The most significant threat to FACOS comes from 3PL companies with extensive experience providing transportation and supply chain management services. Prominent 3PL companies in Vietnam, like DHL, FedEx, TRANSIMEX, and Gemadept, can optimize performance, reduce costs, and manage the entire process from the source to the destination, encompassing storage, packaging, transportation, and cargo tracking. They can also tailor services to meet the specific needs of individual customers. Besides, traditional transport companies also provide transportation services and possess notable advantages in terms of experience, reputation, and an established customer base.

Additionally, the switching costs to these alternative options are relatively low. However, FACOS can mitigate this threat by helping businesses optimize transportation by connecting with numerous service providers, minimizing empty vehicle space, and maximizing capacity utilization, which results in cost and energy savings. Furthermore, once a brand establishes customer loyalty and trust, the pressure from substitute products diminishes. The threat from substitute products of FACOS transportation exchange platform is moderate.

3.2.5.5. Rivalry among existing competitors

The existence of competitors in the industry is a factor that directly impacts the business operations of FACOS transport exchange. The larger the number of competitors and the higher the level of competition, the smaller the power of FACOS. On the contrary, when the level of competition is low, and the number of competitors is small, FACOS holds greater power because businesses can decide prices, hold benefits, and achieve expected profits. From 2015 to the present, the number of transportation exchanges in Vietnam has increased rapidly. This increases competition, forcing FACOS to take over the market from other competitors.

In this industry, competitors have excellent capabilities, for example, Smartlog, Logivan, Ecotruck, and VTGo. All businesses want to create a particular competitive advantage over their competitors to gain market share by making a significant difference, for example, in marketing strategies and service prices, service quality, promotions, and suppliers. These competitive advantages attract customers to switch to services that meet their needs. This can lead to a war between businesses in the industry. However, FACOS takes advantage of competitive advantages in scale of operations, multimodal services, and insurance services. From here, FACOS's competitiveness increases compared to competitors in the same industry. Therefore, the inherent competition in the industry is always extremely harsh. At the same time, competitors that exist in the industry significantly affect the company's activities.

Overall, FACOS appears to have a favorable position in the industry, with strengths in scale, diversity, and services helping to mitigate certain threats and competitive pressures. However, it should continue to focus on service quality and strategic optimization to sustain and enhance its market position.

3.2.6. Strategy explanation (using Porter: Low cost & Differentiation)

FACOS's transportation exchange platform has identified key characteristics of its target customers, encompassing small and medium-sized enterprises from diverse industries nationwide. To meet the needs of these customers, FACOS has devised a strategy that combines both Low Cost and Differentiation.

Regarding the Low Cost strategy, FACOS aims to address small and medium-sized enterprises' transportation cost reduction requirements. Upon participants joining the

platform, FACOS refrains from charging usage fees. Instead, FACOS opts for a fee structure based on the successful transaction value, set at 3%. This fee is evaluated as lower compared to market competitors such as VTGO, which charges 5% of the transportation contract value, and Logivan, which also charges 5%. This strategy will provide a competitive advantage for FACOS compared to its competitors in the market.

FACOS focuses on Differentiation strategy, developing interfaces for websites and apps that are easier for users, providing multiple options, saving shipping time, and minimizing risks: transparent shipping process, information and prices, and customer information security. Meeting the demand for an easy-to-use interface, FACOS provides a simple and user-friendly experience for customers. Leveraging reasonable transportation methods based on cargo type and distance, FACOS enables customers to optimize transportation time. Integrating cloud computing and GPS tracking ensures real-time monitoring of the location and status of transport vehicles, optimizing routes, reducing congestion, and saving fuel.

Besides, FACOS builds a transparent and trustworthy public transportation exchange platform, disclosing all the needs of shippers and the capabilities of transportation companies. FACOS is built on a blockchain digital platform. The blockchain platform strictly manages information flow, physical flow, financial flow, and transportation exchange monitoring to ensure the reliability and security of customer information. To help FACOS customers feel more secure when using the transportation exchange platform, FACOS provides cargo insurance covering risks such as loss, collision, and fire. This ensures that goods are always protected during transport.

By combining Low Cost and Differentiation strategies, FACOS can address many customer needs, from cost savings to providing specific solutions and transparent services. This approach creates genuine customer value and shapes sustainable development for FACOS in the transportation exchange market.

4. FINANCIAL ANALYSIS

4.1. Initial Investment

4.1.1. Initial Cost

No.	Name of capitals	Units	Quantity	Price	Total
1	Legal procedure	Set	1	6,320,000	6,320,000
2	Deposit rent	Month	6	8,400,000	50,400,000
3	Printing	Set	1	1,335,000	1,335,000
4	Platform cost	Set	1	2,000,000,000	2,000,000,000
5	Pre-Marketing	Set	1	84,900,000	84,900,000
6	Net working capital	Set	1	897,045,000	897,045,000
TOTAL					3,000,000,000

Category	Total	Percentage (%)
Capital Expenditure	2,102,955,000	70.10
Net working capital	897,045,000	29.90
TOTAL INITIAL INVESTMENT	3,000,000,000	100

Table 4.1: Summarized initial investment (unit: VND)

(Source: Authors, 2023)

The initial investment that FACOS spent to establish FACOS Transportation Exchange Platform is VND 2,102,955,000, paid for five categories. The first is legal procedures such as registering a business license, business registration license for an e-commerce platform, and registering trademark, copyright logo, and copyright website. Secondly, the rental deposit fee is VND 50,400,000, equivalent to 6 months' rent. Next is the cost of printing business cards and uniforms, and marketing costs in the preparation phase of launching the platform. The cost of developing/coding the FACOS platform is VND 2,000,000,000. Finally, net working capital (VND 897,045,000) is available for any expected or unexpected situation. In reality, when actual revenue and expenses arise, FACOS will record and recalculate the exact amount of net working capital each year.

4.1.2. Depreciation and Amortization

Depreciation and Amortization			
No.	Name of capital	Year	Month
1	Platform cost	400,000,000	33,333,333
TOTAL		400,000,000	33,333,333

Table 4.2: Depreciation and Amortization cost (unit: VND)

(Source: Authors, 2023)

FACOS calculates depreciation and amortization on the Straight Line Depreciation Method. The above depreciation and amortization table includes platform amortization of 5 years.

4.2. Costs of service

Computer hardware requires a considerable investment. FACOS is just a new startup with limited financial resources, using services provided by third parties, compared to using the entire infrastructure yourself. It will be a more considerate and better choice for the company to help optimize resource and financial use.

No	Items	Package	Supplier	Fee	Unit price
1	Domain	.com	FPT	Monthly cost	253,000
2	Web hosting	Advanced	FPT	Monthly cost	418,000
3	Cloud computing server		FPT	Monthly cost	66,000,000

Table 4.3: Items belong to FACOS's costs of service (unit: VND)

(Source: FPT and Authors, 2023)

Items	2024	2025	2026	2027	2028
Domain	3,036,000	3,036,000	3,036,000	3,036,000	3,036,000
Web hosting	5,016,000	5,016,000	5,016,000	5,016,000	5,016,000
Cloud computing server	792,000,000	792,000,000	792,000,000	792,000,000	792,000,000
Costs of service (before adjustment)	800,052,000	800,052,000	800,052,000	800,052,000	800,052,000
Coefficient to adjust for inflation	$(1 + 3.4\%)^1$	$(1 + 3.4\%)^2$	$(1 + 3.4\%)^3$	$(1 + 3.4\%)^4$	$(1 + 3.4\%)^5$
Costs of service (after adjustment)	827,253,768	855,380,396	884,463,330	914,535,083	945,629,276

Table 4.4: Costs of service (unit: VND)

(Source: Authors, 2023)

4.3. Operating expenses

Items	2024	2025	2026	2027	2028
Marketing expenses	659,680,000	511,980,000	511,980,000	511,980,000	511,980,000
Payroll expenses	978,142,800	978,142,800	978,142,800	978,142,800	978,142,800
Office expenses	105,972,500	107,972,500	107,972,500	107,972,500	108,021,667
Other costs (5% revenue)	264,600,000	325,590,300	400,638,864	492,986,122	606,619,424
Operating expenses (before adjustment)	2,008,395,300	1,923,685,600	1,998,734,164	2,091,081,422	2,204,763,890
Coefficient to adjust for inflation	$(1 + 3.4\%)^1$	$(1 + 3.4\%)^2$	$(1 + 3.4\%)^3$	$(1 + 3.4\%)^4$	$(1 + 3.4\%)^5$
Operating expenses (after adjustment)	2,076,680,740	2,056,720,001	2,209,615,217	2,390,303,782	2,605,942,214

Table 4.5: Aggregation of operating expenses and adjustments for inflation

(unit: VND)

(Source: Authors, 2023)

4.3.1. Marketing expenses

To enhance effectiveness in marketing activities, FACOS has made a strategic decision by entering into a comprehensive contract with the international company DMV, which boasts over 15 years of specialized experience in the marketing field. The decision to outsource full-service is an intelligent move, optimizing FACOS's advertising processes and marketing plans. This marketing service encompasses various activities, including market analysis, competitor research, advertising strategy development, and campaign deployment across multiple media platforms.

FACOS's marketing service costs VND 14,900,000 per month, with an additional VND 30,000,000 per month allocated for advertising on Google & SEO, Facebook, Zalo, and LinkedIn platforms. FACOS signing a 1-year Marketing package contract with DMV company will receive a 15% discount each year.

Items	Activities	Fee	Unit price
Marketing services	<ul style="list-style-type: none">- Research and analyze customer insight- Plan detailed implementation of online marketing and remarketing- Measure daily reports- Build & upgrade online systems: Facebook, Zalo, Website, and LinkedIn- Taking care of the system: Writing SEO content, content Marketing- Public Relations	Monthly cost	14,900,000
Social media ads	Google, Facebook, Zalo, and LinkedIn	Monthly cost	30,000,000

Table 4.6: FACOS's monthly marketing expenses (unit: VND)

(Source: DMV, and Authors, 2023)

Items	2024	2025	2026	2027	2028
Marketing services	151,980,000	151,980,000	151,980,000	151,980,000	151,980,000
Social media ads	360,000,000	360,000,000	360,000,000	360,000,000	360,000,000
Gift for customers opening an account for the first time	50,000,000	-	-	-	-
Platform launching event	97,700,000	-	-	-	-
TOTAL (VND)	659,680,000	511,980,000	511,980,000	511,980,000	511,980,000

Table 4.7: FACOS's marketing budget (unit: VND)

(Source: Authors, 2023)

In this way, FACOS can concentrate on its core strengths in the business sector while ensuring its marketing strategy is executed professionally and efficiently. The entire collaboration with DMV is not only about optimizing resources but also a crucial step in building a solid brand image and increasing FACOS's presence in the market.

4.3.2. Payroll expenses

In FACOS Joint Stock Company's salary structure, the allocation of salaries for C-level positions responsible for strategic management and company development is a crucial component. The company's human resources framework is built with key leadership from the founding group, comprising Founders and Shareholders who assume essential C-level roles within the company. The CEO receives a monthly salary of VND 12,000,000. The CMO, CFO, CHRO, and CCO each receive a monthly salary of VND 10,000,000, while the highest is the CTO with a monthly salary of VND 15,000,000. The CTO has key responsibility for technology development and innovation, making a major contribution to the company's development and competitiveness. Careful consideration of salary levels ensures not only fairness but also encourages commitment and positive contributions from key members of the leadership team, supporting the stable and sustainable development of FACOS.

Besides, pursuant to Article 85 and Article 86 of the 2014 Law on Social Insurance and instructions in Decree 58/2020/ND-CP, Decision 595/QD-BHXH in 2017, the compulsory social insurance payment rate is 32%. In which employees pay 10.5% of their salary, employers pay 21.5% of their monthly salary fund for social insurance.

No.	Position	Quantity	Working hour	Monthly	Total
1	CEO	1	flexible	12,000,000	12,000,000
2	CMO	1	8	10,000,000	10,000,000
3	CFO	1	8	10,000,000	10,000,000
4	CHRO	1	8	10,000,000	10,000,000
5	CTO	1	8	15,000,000	15,000,000
6	CCO	1	8	10,000,000	10,000,000
TOTAL 1 month		6			57,000,000
TOTAL 1 year		6			684,000,000

Table 4.8: Base salary for each position (unit: VND)

(Source: Authors, 2023)

Items	Rate	Total 1 year	Note
13th month salary	8.33%	57,000,000	Equal 1/12 of the total base salary
Insurance			Use base salary to compute
Social insurance	17.50%	119,700,000	
Medical insurance	3%	20,520,000	
Unemployment insurance	1%	6,840,000	
Other costs	13.17%	90,082,800	Parking fee, union dues, holidays bonus, team building, etc
TOTAL		294,142,800	

Table 4.9: Benefits costs (unit: VND)

(Source: Thuvienphapluat, and Authors, 2023)

Items	2024	2025	2026	2027	2028
Base salary	684,000,000	684,000,000	684,000,000	684,000,000	684,000,000
Welfare benefits	294,142,800	294,142,800	294,142,800	294,142,800	294,142,800
TOTAL	978,142,800	978,142,800	978,142,800	978,142,800	978,142,800

Table 4.10: Total payroll expenses (unit: VND)

(Source: Authors, 2023)

4.3.3. Office expenses

Items	2024	2025	2026	2027	2028
Office rental	100,800,000	100,800,000	100,800,000	100,800,000	100,800,000
Business license tax	-	2,000,000	2,000,000	2,000,000	2,000,000
Bank account	720,000	720,000	720,000	720,000	720,000
Digital signature	3,905,000	3,905,000	3,905,000	3,905,000	3,905,000
Digital invoice	547,500	547,500	547,500	547,500	596,667
TOTAL	105,972,500	107,972,500	107,972,500	107,972,500	108,021,667

Table 4.11: Estimation for office expenses (unit: USD)

(Source: Authors, 2023)

4.3.1.1. Office rental

FACOS chooses office rental under the Coworking Space model. Coworking Space is an efficient office solution where individuals and organizations share office space and rental expenses, making it the most cost-effective option for newly established businesses, market expansions, or those with small to medium-sized operations. FACOS has entered into a contract with Mspace for a fully serviced office, including fully furnished office space and a diverse range of amenities.

- The office is in Hoang Mai District, Hanoi
- The area is $20m^2$
- The rental fee is VND 8,400,000/month

No.	Services	Quantity	Note
1	Tables, chairs, cabinets, drawers	Default	
2	Electricity, water, internet, Wifi		Electricity is used during standard hours: 8:00 a.m. – 6:00 p.m. from Monday to Friday; Saturday morning from 8:00 a.m. – 12:00 p.m.
3	Speakers, radio, projector		Set an appointment
4	Meeting room	06 hours/week	30% discount for Mspace members for additional hours
5	Dining room/Coffee		
6	Set company nameplate		Place it on the room rental company's name plate at Mspace
7	Tea, coffee, drinking water		
8	Paintings and photos on the wall	Default	
9	Photocopy machine, printing 200 pages/month/room		Print copy supplement: VND 400/copy
10	Sanitation service		Clean private office 2 times/week

Table 4.12: Accompanied service rental of an office at Mspace

(Source: Mspace, 2023)

4.3.1.2. Business license tax

Decree 139/2016/ND-CP stipulates that enterprises with charter capital less than VND 10,000,000,000 must pay an annual license tax of VND 2,000,000. Meanwhile, Decree 22/2020/ND-CP exempts license fees in the first year of company establishment.

4.3.1.3. Bank account, Digital invoice, and Digital signature

To meet different needs, such as collecting customer service fees and paying corporate income tax, FACOS opened 3 accounts at Vietcombank. Luckily, this bank allows opening an account for free and only charges a maintenance fee of VND 20,000 monthly.

Monthly fee quoted by Vietcombank (1)	Number of bank account (2)	Total per year (3) = (1) * (2) * 12 months
20,000	3	720,000

Table 4.13: Estimation of fee for bank accounts (unit: VND)

(Source: Authors, 2023)

FACOS has registered Viettel's HD7000 digital invoice for about 9,100 invoices at VND 3,905,000 per year, including VAT. This helps FACOS manage and issue invoices effectively and cost-effectively.

Items	Package name	Supplier	Fee components	Unit price
Digital invoice	HD7000	Viettel	Fee for 9.100 invoices	3,905,000

Table 4.14: Estimation of fee for digital invoice (unit: VND)

(Source: Viettel, and Authors, 2023)

With digital signature services, to save as much as possible and ensure continuity in service use, FACOS registers for the CA4 package provided by Viettel with a term of up to 4 years, including 10% VAT. After that, FACOS will renew for the next 4 years with the CA4_GH package.

	2024	2025	2026	2027	2028
Cashflow quoted by Viettel	2,190,000	-	-	-	1,790,000
Expense	547,500	547,500	547,500	547,500	596,667

Table 4.15: Estimation of fee for digital signature (unit: VND)

(Source: Authors, 2023)

4.3.4. Other costs

Other costs are estimated not to exceed 5% of FACOS’s revenue and mainly include variable costs based on sales, such as:

- Payment fee to payment partner (bank, e-wallet)
- Reward employees, including C-level executives, when completing KPIs
- Point of Sales Material (POSM) (posters, flyers, business cards, etc.)
- Fees for upgrading and maintaining the platform system

4.4. Inflation rate

The inflation rate in Vietnam is forecast to average 3.4% per year from 2023-2028 (Statista.com, 2023). FACOS's three categories are adjusted for inflation: service costs, operating costs, and revenue. Specifically, in service costs, due to economic effects, inflation can increase the prices of factors related to service supply. Adjusting service costs helps FACOS adapt to price fluctuations. Adjusted operating expenses include marketing activities, salaries, and office expenses to maintain performance and risk management. As for revenue, FACOS is affected by changes in freight rates.

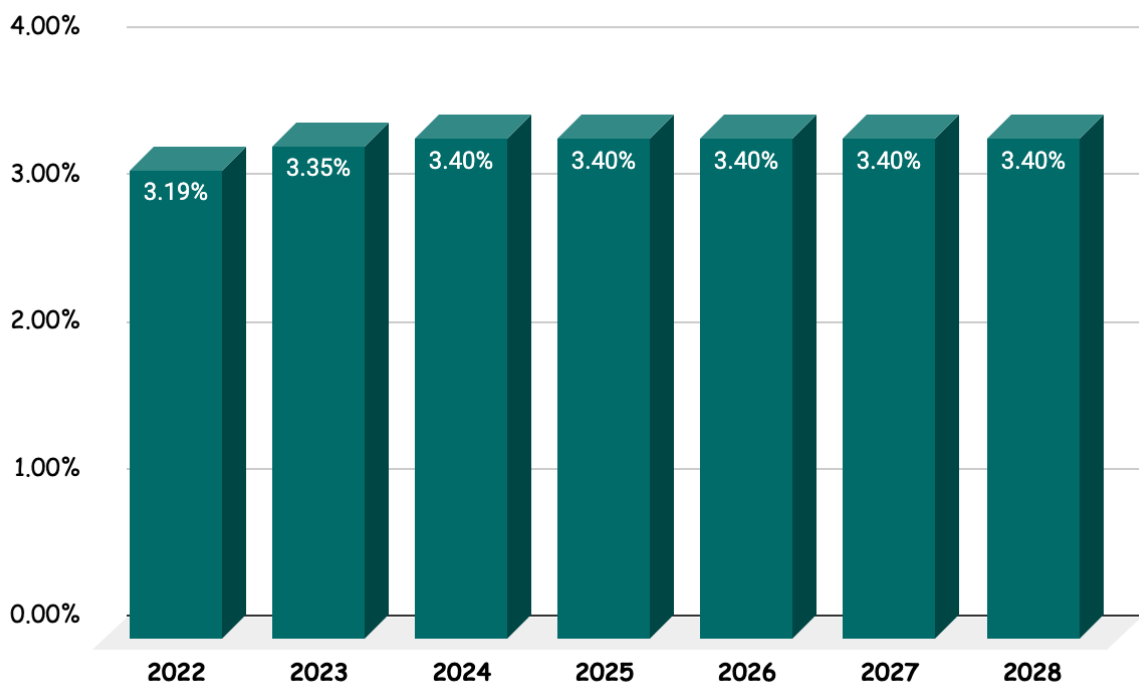


Chart 4.1: Inflation rate in Vietnam in 2022 and forecast from 2023-2028

(Source: Statista.com, 2023)

4.5. Corporate income tax (CIT)

Pursuant to Point b, Clause 1, Article 11, Clause 1, Article 12 of Circular 96/2015/TT-BTC, enterprises with new investment projects in the field of software product manufacturing will enjoy preferential policies to reduce The corporate income tax rate of only 10%, applicable from the year of taxable revenue, including:

- The first 04 years are tax-exempt; the company does not have to pay corporate income tax.
- For the next 9 years, the corporate income tax rate payable decreases 50%, meaning businesses must pay 5% corporate income tax.
- For the next 3 years, pay tax at a tax rate of 10%.
- From the 16th year onwards, pay corporate income tax at a rate of 20%.

4.6. Revenue stream

$$R = N * e\% * H\% * T * C * r\%$$

In which:

R: FACOS's revenue (VND)

N: Vehicle number in the platform

e%: Percentage of empty vehicles out of vehicle number in the platform (70%)

H%: Performance of filling empty vehicles in FACOS platform (target 60%)

T: Number of completed trips per year (average 1 trip/3 days/1 vehicle)

C: Average cost per trip (VND)

r%: FACOS fee rate per successful transaction value (specifically = 3%)

To estimate the number of vehicles participating in the platform (N), FACOS conducted research and surveyed the existing number of transport vehicles in the market, 1,500,000 vehicles. Based on this, FACOS expects to have 1000 vehicles in the first year of operation, with a growth rate of 15% in subsequent years (Vtgo's growth rate is 12%). This is reasonable considering the typical growth rate for new businesses.

FACOS estimates the average freight rate per completed trip in 2024 is VND 3,500,000. FACOS calculates freight rates based on the average rates of some transport companies, such as Truong Nam Logistics, Etruck, A Chau Corporation, and Trong Tan Transportation. Compared to other platforms like VTgo, freight rates range from VND 2,500,000-7,000,000, and Logivan, with freight rates of VND 2,500,000-4,000,000. Besides, freight rates increase by 7-10% each year due to fuel costs increase (Nhu Quynh, 2022). FACOS estimates that freight rates will increase by 7% each year. The average transportation time for goods by road is estimated to be 1-5 days (depending on geographical location) (unilogistics. Vn, 2023). FACOS considers three days for the transportation time of a single trip to be reasonable.

The empty trip rate in Vietnam is 70%, which has increased the cost of road freight transportation (Quang Toan, 2022). Therefore, FACOS has set a goal to fill 60% of empty trips on the platform to reduce costs by 20-30% per trip. As part of this strategy, the platform will charge a 3% fee on the value of each successful transaction. This initiative aims to optimize the use of transportation capacity, minimize empty runs, and ultimately contribute to more efficient and cost-effective freight operations.

	N	e%	H%	T	C	r%	R
2024	1000	70%	60%	120	3,500,000	3%	5,292,000,000
2025	1150	70%	60%	120	3,745,000	3%	6,511,806,000
2026	1323	70%	60%	120	4,007,150	3%	8,012,777,283
2027	1521	70%	60%	120	4,287,651	3%	9,859,722,447
2028	1749	70%	60%	120	4,587,786	3%	12,132,388,471

Table 4.16: Estimate revenue each year (unit: VND)

(Source: Authors, 2023)

4.7. Summary of scenarios

FACOS has forecasted three scenarios (Optimistic, Most likely, and Pessimistic) based on market dynamics, operational performance, pricing policies, operating costs, and the economic situation in Vietnam. To be more specific, FACOS adjusts $\pm 5\%$ for each scenario in the following manner: In conducting assessments with a degree of flexibility in the best-case scenario, cost components will decrease by 5% compared to the normal one. Conversely, cost components will increase by 5% in the worst-case scenario. Correspondingly, revenue will increase by 5% in the best case and decrease by 5% in the worst case. Adjusting the figures by 5% helps FACOS anticipate unforeseen fluctuations and reflects the efficiency level in business plan management.

	Optimistic	Most likely	Pessimistic
Revenue forecast ($\pm 5\%$)	+5%		-5%
2024	5,556,600,000	5,292,000,000	5,027,400,000
2025	6,837,396,300	6,511,806,000	6,186,215,700
2026	8,413,416,147	8,012,777,283	7,612,138,419
2027	10,352,708,569	9,859,722,447	9,366,736,324
2028	12,739,007,894	12,132,388,471	11,525,769,047
Costs of service ($\pm 5\%$)	-5%		+5%
2024	785,891,080	827,253,768	868,616,456
2025	812,611,376	855,380,396	898,149,416
2026	840,240,163	884,463,330	928,686,496
2027	868,808,329	914,535,083	960,261,837
2028	898,347,812	945,629,276	992,910,739
Operating expenses ($\pm 5\%$)	-5%		+5%
2024	1,972,846,703	2,076,680,740	2,180,514,777
2025	1,953,884,001	2,056,720,001	2,159,556,001
2026	2,099,134,456	2,209,615,217	2,320,095,978
2027	2,270,788,593	2,390,303,782	2,509,818,971
2028	2,475,645,103	2,605,942,214	2,736,239,325

Table 4.17: Summary of scenarios (unit: VND)

(Source: Authors, 2023)

4.8. Income statement

a. Optimistic case

	INCOME STATEMENT OPTIMISTIC CASE				
Year	2024	2025	2026	2027	2028
Revenue	5,556,600,000	6,837,396,300	8,413,416,147	10,352,708,569	12,739,007,894
<i>Total costs of service</i>	(785,891,080)	(812,611,376)	(840,240,163)	(868,808,329)	(898,347,812)
Gross profit = Revenue - total costs of service	4,770,708,920	6,024,784,924	7,573,175,984	9,483,900,240	11,840,660,082
<i>Operating expenses</i>	(1,972,846,703)	(1,953,884,001)	(2,099,134,456)	(2,270,788,593)	(2,475,645,103)
Earnings before Interest, taxes, depreciation, and amortization (EBITDA)	2,797,862,217	4,070,900,922	5,474,041,528	7,213,111,647	9,365,014,979
<i>Amortization</i>	(400,000,000)	(400,000,000)	(400,000,000)	(400,000,000)	(400,000,000)
Earnings before interest, taxes (EBIT) = EBITDA - D&A	2,397,862,217	3,670,900,922	5,074,041,528	6,813,111,647	8,965,014,979
<i>Interest expense</i>	0	0	0	0	0
Earnings before taxes (EBT) = EBIT - Interest expense	2,397,862,217	3,670,900,922	5,074,041,528	6,813,111,647	8,965,014,979
<i>Corporate income tax (CIT) (10%)</i>	0	0	0	0	(448,250,749)
NET INCOME	2,397,862,217	3,670,900,922	5,074,041,528	6,813,111,647	8,516,764,230
Gross profit margin %	85.86%	88.12%	90.01%	91.61%	92.95%
Net profit margin %	43.15%	53.69%	60.31%	65.81%	66.86%

Table 4.18: Income Statement in Optimistic case

(Source: Authors, 2023)

b. Most likely case

	INCOME STATEMENT MOST LIKELY CASE				
Year	2024	2025	2026	2027	2028
Revenue	5,292,000,000	6,511,806,000	8,012,777,283	9,859,722,447	12,132,388,471
<i>Total costs of service</i>	<i>(827,253,768)</i>	<i>(855,380,396)</i>	<i>(884,463,330)</i>	<i>(914,535,083)</i>	<i>(945,629,276)</i>
Gross profit = Revenue - total costs of service	4,464,746,232	5,656,425,604	7,128,313,953	8,945,187,364	11,186,759,195
<i>Operating expenses</i>	<i>(2,076,680,740)</i>	<i>(2,056,720,001)</i>	<i>(2,209,615,217)</i>	<i>(2,390,303,782)</i>	<i>(2,605,942,214)</i>
Earnings before Interest, taxes, depreciation, and amortization (EBITDA)	2,388,065,492	3,599,705,603	4,918,698,736	6,554,883,582	8,580,816,981
<i>Amortization</i>	<i>(400,000,000)</i>	<i>(400,000,000)</i>	<i>(400,000,000)</i>	<i>(400,000,000)</i>	<i>(400,000,000)</i>
Earnings before interest, taxes (EBIT) = EBITDA - D&A	1,988,065,492	3,199,705,603	4,518,698,736	6,154,883,582	8,180,816,981
<i>Interest expense</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>
Earnings before taxes (EBT) = EBIT - Interest expense	1,988,065,492	3,199,705,603	4,518,698,736	6,154,883,582	8,180,816,981
<i>Corporate income tax (CIT) (10%)</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>(409,040,849)</i>
NET INCOME	1,988,065,492	3,199,705,603	4,518,698,736	6,154,883,582	7,771,776,132
Gross profit margin %	84.37%	86.86%	88.96%	90.72%	92.21%
Net profit margin %	37.57%	49.14%	56.39%	62.42%	64.06%

Table 4.19: Income Statement in Most likely case

(Source: Authors, 2023)

c. Pessimistic case

	INCOME STATEMENT PESSIMISTIC CASE				
Year	2024	2025	2026	2027	2028
Revenue	5,027,400,000	6,186,215,700	7,612,138,419	9,366,736,324	11,525,769,047
<i>Total costs of service</i>	<i>(868,616,456)</i>	<i>(898,149,416)</i>	<i>(928,686,496)</i>	<i>(960,261,837)</i>	<i>(992,910,739)</i>
Gross profit = Revenue - total costs of service	4,158,783,544	5,288,066,284	6,683,451,923	8,406,474,487	10,532,858,308
<i>Operating expenses</i>	<i>(2,180,514,777)</i>	<i>(2,159,556,001)</i>	<i>(2,320,095,978)</i>	<i>(2,509,818,971)</i>	<i>(2,736,239,325)</i>
Earnings before Interest, taxes, depreciation, and amortization (EBITDA)	1,978,268,766	3,128,510,283	4,363,355,945	5,896,655,516	7,796,618,983
<i>Amortization</i>	<i>(400,000,000)</i>	<i>(400,000,000)</i>	<i>(400,000,000)</i>	<i>(400,000,000)</i>	<i>(400,000,000)</i>
Earnings before interest, taxes (EBIT) = EBITDA - D&A	1,578,268,766	2,728,510,283	3,963,355,945	5,496,655,516	7,396,618,983
<i>Interest expense</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>
Earnings before taxes (EBT) = EBIT - Interest expense	1,578,268,766	2,728,510,283	3,963,355,945	5,496,655,516	7,396,618,983
<i>Corporate income tax (CIT) (10%)</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>(369,830,949)</i>
NET INCOME	1,578,268,766	2,728,510,283	3,963,355,945	5,496,655,516	7,026,788,034
Gross profit margin %	82.72%	85.48%	87.80%	89.75%	91.39%
Net profit margin %	31.39%	44.11%	52.07%	58.68%	60.97%

Table 4.20: Income Statement in Pessimistic case

(Source: Authors, 2023)

4.9. Cash flow

a. Optimistic case

	CASH FLOW OPTIMISTIC CASE					
Year	2023	2024	2025	2026	2027	2028
Initial Investment						
Capital Expenditure	(2,102,955,000)					
Net working capital	(897,045,000)					
Cash Flow from Operating Activities						
Revenue		5,556,600,000	6,837,396,300	8,413,416,147	10,352,708,569	12,739,007,894
<i>Less: Cost of services</i>		<i>(785,891,080)</i>	<i>(812,611,376)</i>	<i>(840,240,163)</i>	<i>(868,808,329)</i>	<i>(898,347,812)</i>
<i>Less: Operating Expense</i>		<i>(1,972,846,703)</i>	<i>(1,953,884,001)</i>	<i>(2,099,134,456)</i>	<i>(2,270,788,593)</i>	<i>(2,475,645,103)</i>
EBITDA		2,797,862,217	4,070,900,922	5,474,041,528	7,213,111,647	9,365,014,979
<i>Less: D&A expense</i>		<i>(400,000,000)</i>	<i>(400,000,000)</i>	<i>(400,000,000)</i>	<i>(400,000,000)</i>	<i>(400,000,000)</i>
EBIT		2,397,862,217	3,670,900,922	5,074,041,528	6,813,111,647	8,965,014,979
*(1-t)		1.00	1.00	1.00	1.00	0.95
Net Operating Profit After Tax (NOPAT)		2,397,862,217	3,670,900,922	5,074,041,528	6,813,111,647	8,516,764,230
Plus: D&A expense		400,000,000	400,000,000	400,000,000	400,000,000	400,000,000
Net Cash Flow from Operating Activities		2,797,862,217	4,070,900,922	5,474,041,528	7,213,111,647	8,916,764,230
<i>Less: Capital Expenditure (CapEx)</i>		<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>
<i>Less: Change in NWC</i>		<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>

Net Cash Flow (NCF)	(3,000,000,000)	2,797,862,217	4,070,900,922	5,474,041,528	7,213,111,647	8,916,764,230
NPV						14,667,708,506
IRR						124%
MIRR						64%
Discounted payback period						1.18

Table 4.21: Cash flow in Optimistic case

(Source: Authors, 2023)

b. Most likely case

	CASH FLOW MOST LIKELY CASE					
Year	2023	2024	2025	2026	2027	2028
Initial Investment						
Capital Expenditure	(2,102,955,000)					
Net working capital	(897,045,000)					
Cash Flow from Operating Activities						
Revenue		5,292,000,000	6,511,806,000	8,012,777,283	9,859,722,447	12,132,388,471
<i>Less: Cost of services</i>		<i>(827,253,768)</i>	<i>(855,380,396)</i>	<i>(884,463,330)</i>	<i>(914,535,083)</i>	<i>(945,629,276)</i>
<i>Less: Operating Expense</i>		<i>(2,076,680,740)</i>	<i>(2,056,720,001)</i>	<i>(2,209,615,217)</i>	<i>(2,390,303,782)</i>	<i>(2,605,942,214)</i>
EBITDA		2,388,065,492	3,599,705,603	4,918,698,736	6,554,883,582	8,580,816,981
<i>Less: D&A expense</i>		<i>(400,000,000)</i>	<i>(400,000,000)</i>	<i>(400,000,000)</i>	<i>(400,000,000)</i>	<i>(400,000,000)</i>
EBIT		1,988,065,492	3,199,705,603	4,518,698,736	6,154,883,582	8,180,816,981
*(1-t)		1.00	1.00	1.00	1.00	0.95
Net Operating Profit After Tax (NOPAT)		1,988,065,492	3,199,705,603	4,518,698,736	6,154,883,582	7,771,776,132
Plus: D&A expense		400,000,000	400,000,000	400,000,000	400,000,000	400,000,000
Net Cash Flow from Operating Activities		2,388,065,492	3,599,705,603	4,918,698,736	6,554,883,582	8,171,776,132
<i>Less: Capital Expenditure (CapEx)</i>		<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>
<i>Less: Change in NWC</i>		<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>

Net Cash Flow (NCF)	(3,000,000,000)	2,388,065,492	3,599,705,603	4,918,698,736	6,554,883,582	8,171,776,132
NPV						12,843,190,487
IRR						111%
MIRR						60%
Discounted payback period						1.34

Table 4.22: Cash flow in Most likely case

(Source: Authors, 2023)

c. Pessimistic case

	CASH FLOW PESSIMISTIC CASE					
Year	2023	2024	2025	2026	2027	2028
Initial Investment						
Capital Expenditure	(2,102,955,000)					
Net working capital	(897,045,000)					
Cash Flow from Operating Activities						
Revenue		5,027,400,000	6,186,215,700	7,612,138,419	9,366,736,324	11,525,769,047
<i>Less: Cost of services</i>		(868,616,456)	(898,149,416)	(928,686,496)	(960,261,837)	(992,910,739)
<i>Less: Operating Expense</i>		(2,180,514,777)	(2,159,556,001)	(2,320,095,978)	(2,509,818,971)	(2,736,239,325)
EBITDA		1,978,268,766	3,128,510,283	4,363,355,945	5,896,655,516	7,796,618,983
<i>Less: D&A expense</i>		(400,000,000)	(400,000,000)	(400,000,000)	(400,000,000)	(400,000,000)
EBIT		1,578,268,766	2,728,510,283	3,963,355,945	5,496,655,516	7,396,618,983
*(1-t)		1.00	1.00	1.00	1.00	0.95
Net Operating Profit After Tax (NOPAT)		1,578,268,766	2,728,510,283	3,963,355,945	5,496,655,516	7,026,788,034
Plus: D&A expense		400,000,000	400,000,000	400,000,000	400,000,000	400,000,000
Net Cash Flow from Operating Activities		1,978,268,766	3,128,510,283	4,363,355,945	5,896,655,516	7,426,788,034
<i>Less: Capital Expenditure (CapEx)</i>		0	0	0	0	0
<i>Less: Change in NWC</i>		0	0	0	0	0

Net Cash Flow (NCF)	(3,000,000,000)	1,978,268,766	3,128,510,283	4,363,355,945	5,896,655,516	7,426,788,034
NPV						11,018,672,468
IRR						98%
MIRR						57%
Discounted payback period						1.54

Table 4.23: Cash flow in Pessimistic case

(Source: Authors, 2023)

4.10. Financial Highlight

With the FACOS transportation exchange platform project, the total initial investment is VND 3,000,000,000, and this capital is 100% from equity. Since the owner investing in this project requires a higher return than the creditor because it will take more risks. Currently, the maximum bank savings interest rate is 6-6.5% (Ky Phong, 2023). Therefore, FACOS recommends a required rate of return of 15%.

The project team observes that the NPV of the project is greater than 0. This means that the project has a profit higher than the initial investment cost that FACOS has spent, it still generates a profit. IRR and MIRR are higher than the required rate of return (15%), which proves that the profit rate is high and this project is very well implemented, has potential, and is well worth the investment of investors in the project. With such revenue and profitability, FACOS only takes about 14 months to payback in optimistic case, about 16 months to payback in most likely case, and about 19 months to payback in pessimistic case, while the project will operate within 5 years.

Business ratio	Optimistic	Most likely	Pessimistic
Required rate of return	15%	15%	15%
NPV	14,667,708,506	12,843,190,487	11,018,672,468
IRR	124%	111%	98%
MIRR	64%	60%	57%
Payback period (years)	1.18	1.34	1.54
Possibility	30%	60%	10%

Table 4.24: Financial Highlight

(Source: Authors, 2023)

Based on the computed data in the cash flow section, the project team suggests that the probabilities for each scenario are Optimistic (30%), Most Likely (60%), and Pessimistic (10%). Therefore, the project team predicts that the Most Likely case is the scenario with the highest probability of occurrence. FACOS's comprehensive assessment of all business aspects shows that the Most Likely scenario accurately reflects the company's situation and

development goals based on the company's resources in terms of financial indicators, customers, marketing strategy, and differentiation strategy.

Additionally, the Optimistic (30%) and Pessimistic (10%) scenarios as the company's contingency scenario. In the optimistic scenario, it will achieve the highest revenue and profit if FACOS seizes the best market opportunities and optimizes performance and costs. Conversely, the Pessimistic scenario may unfold if business results are unfavorable due to sudden revenue decline, high costs, or changes in government regulations and taxes. In the future, if the pessimistic scenario materializes, FACOS will still maintain a positive NPV. This demonstrates that, even in the worst-case scenario, FACO still generates a profit and is prepared to confront any fluctuation in the business environment.

5. FUTURE PERSPECTIVES AND CONCLUSION

Through the plans and activities of FACOS, there will be certain potential risks when the project comes into practice. These risks come from many directions, and FACOS has found a way to solve these problems. Besides, FACOS prepares and predicts scenarios and provides specific future strategies and directions. FACOS is a start-up preparing all aspects to cope with difficulties.

5.1. Risk analysis

Risk management plays a crucial role in the operations of FACOS, particularly when risks can impact the realization of the company's important missions and visions. To ensure that the project achieves the crucial goals set by the team, FACOS has implemented a comprehensive risk management strategy. Several precautionary measures have been implemented to minimize potential risks' impact. This includes identifying risk factors from within the organization, such as personnel or technological issues, and external risk factors stemming from customers, market fluctuations, or political changes.

5.1.1. Risks from human resource

The risks associated with human resources management at FACOS encompass issues related to the oversight of personnel, potentially resulting in asset loss or harm to the company and its clients. Additionally, challenges may arise in situations such as employee disabilities, deaths, retirements, or resignations for seeking new employment.

FACOS recognizes that human resources play an important role in a company's success and are at the same time, a huge liability if not managed properly. FACOS is committed to providing employees with attractive policies. FACOS will increase skills enhancement and personnel development programs to ensure employees have learning and career development opportunities. This allows employees to develop themselves and improve their commitment and loyalty to the company. Provide attractive benefits and welfare policies to maintain employee motivation and satisfaction. This policy may include health benefits, vacation benefits, and incentive programs.

5.1.2. Risks from cyber attacks

Risks from cyberattacks pose a significant threat to the safety and security of FACOS's transportation exchange platform, given its predominantly online operations. The platform is susceptible to Denial of Service (DoS) and Distributed Denial of Service (DDoS) attacks, which overload servers and may exploit malicious actors to install harmful software. Such malware could compromise vital information from customers and employees, extending its reach to the business's website and presenting a serious cybersecurity concern.

FACOS has implemented a series of cybersecurity measures and security strategies to prevent and mitigate this risk. FACOS uses a powerful firewall system to prevent unauthorized access and two-step authentication to enhance security when logging into the system. All transactions on the FACOS platform are performed according to Secure Sockets Layer (SSL) standards. SSL is a standard technology that allows the establishment of a secure encrypted connection between a web server (host) and a web browser (client) (Thanh Thao, 2023). This connection ensures that data transmitted between the host and client remains private and reliable and helps encrypt data and protect the client's personal information. FACOS performs routine data backups to ensure that critical data can be restored quickly during a crash or attack.

In addition, FACOS regularly tests, updates, and maintains systems to face new and potential threats. Periodic employee training on information security is also carried out to increase awareness and skills in protecting important customer and company information.

5.1.3. Risks from finance

FACOS, like every other business, faces many financial risks during its operations. One of the crucial risks is unpredictable fluctuations in revenue. This can stem from many factors, such as erratic markets, political changes, or environmental factors.

To face this, FACOS has built a system to continuously monitor and evaluate financial health, helping FACOS quickly identify and respond to any fluctuations. If the company's finances are insufficient to meet initial investment needs, FACOS has considered and implemented measures to diversify capital sources. This includes raising capital from various sources, such as investment capital, bank loans, or strategic partnerships with financial partners. In addition, FACOS has established a reserve fund with personal capital contributions from the founders. This fund will address emergencies or unexpected

economic challenges the company may face.

In the worst scenario, where the project cannot generate revenue because the project model is unsuitable for the current market, FACOS will consider restructuring the business model or suspending the company's operations until finding new solutions to improve your business.

5.1.4. Risks from customers

FACOS, aiming to optimize transportation processes and minimize costs, inevitably faces certain inherent risks from its customer base. One of the challenges is the need for users to adapt to the platform's new model and modern technology. This necessitates a proactive and effective communication strategy to clearly explain the benefits and value of the FACOS platform. Additionally, customers often express concerns about the safety and security of their information when engaging with the platform.

FACOS maintains a robust technical infrastructure to address these concerns and provides interactive social media platforms for direct customer engagement. Advanced security measures and continuous risk management are implemented to prevent potential issues. The company prioritizes transparency in communication to build trust and confidence among users, emphasizing the importance of their safety and data security.

5.1.5. Risks from competitors

FACOS is keenly aware of the risks posed by competitors in the transportation exchange industry, where unhealthy competition and business model replication are unavoidable. However, FACOS believes its innovation and competitive advantages will enable the company to overcome challenges.

Fortunately for FACOS, there are only a few competitors, and their market share is insignificant. FACOS focuses on investing in service quality improvement and continuous innovation to address this risk. The company promotes innovation in its market approach, employs advanced technology, and builds strong relationships with partners. This not only helps FACOS maintain a competitive edge but also creates unique value for customers, fostering loyalty and sustainable growth over the long term.

5.2. Future-oriented

5.2.1. Short-term and medium-term (1-5 years)

Product and service	Marketing	Finance
<p>- FACOS plans to optimize the existing functions of the platform, enhance user experience, and expand the scope of services.</p> <p>- FACOS is establishing a professional customer support service, allowing customers to experience the product services or address scheduling, payments, and order tracking issues.</p>	<p>- FACOS will focus on nurturing and retaining its existing customer base while attracting new customers through intensified activities on social media platforms such as Google, Facebook, and LinkedIn. The company will continue to develop and expand its customer appreciation programs.</p> <p>- Investment in research and development is a crucial priority to monitor industry trends and update the FACOS platform to meet new requirements. Surveys and feedback collection from users will be organized to ensure continuous improvements.</p>	<p>- The profit growth target is set at a positive rate 20-25% annually.</p> <p>- Develop a comprehensive financial contingency plan to address market fluctuations or economic uncertainties.</p> <p>- FACOS will seek efficient sources of capital, including investment funds and other sponsorship channels, to ensure sufficient resources for the effective deployment and maintenance of projects.</p>

5.2.2. Long-term (6-10 years)

Product and service	Marketing	Finance
<p>- FACOS plans to expand its service portfolio, including railway, seaway, and air transportation and express delivery services. This expansion aims to provide partners and customers with a broader range of options, catering to transporting large goods to same-day delivery services.</p> <p>- FACOS is strategically approaching new markets and optimizing operational processes. The company will continue investing in research, development, and integrating cutting-edge technologies within the industry.</p>	<p>- FACOS will invest in a strategic brand-building strategy to enhance its image. The company aims to create a solid and consistent brand identity, focusing on values and a commitment to service quality.</p> <p>- Establishing strategic relationships with key partners in the transportation and logistics industry is a priority. Collaborating closely with partners will create new opportunities and benefit both parties.</p>	<p>- Maintain a balanced cash flow to ensure long-term financial stability.</p> <p>- Diversify income sources by expanding the product and service portfolio.</p> <p>- Focus on investing in technology to improve efficiency and reduce costs.</p> <p>- Continue efficient capital management, reviewing profitable investment projects, and maintaining positive investor relationships.</p>

5.3. Conclusion

The FACOS transportation exchange platform represents a significant milestone, underscoring FACOS's strong commitment to innovation and serving the transportation community. With a detailed plan, FACOS is confident that the implementation of the project will bring substantial value to the user community and partners. FACOS will focus on building a robust, flexible, and reliable platform where all stakeholders can enjoy a seamless and efficient transportation transaction experience. FACOS acknowledges that the beginning of 2024 will mark a crucial milestone in the company's development journey. FACOS is committed to ensuring that it is not just a transportation exchange platform but also a reliable partner, supporting the development and prosperity of the transportation community.

APPENDIX

Appendix 1: Survey the needs and behavior of businesses about using the Transportation Exchange Platform.

Dear Sir/Madam,

We are the project group GRP490_G42, majoring in International Business at FPT University Hanoi.

- Currently, our team is conducting a survey to learn about the needs & behaviors of businesses in the Transportation and logistics industry using the Transport Exchange Platform.
- Your participation will help us better understand customer segments and help shape the project's future strategies.

The survey below only takes a few minutes to complete, so we would love your help to complete your research most intuitively. We assure you that your information is confidential and will only be used for research purposes.

Thank you very much for your contribution!

Best regards!

1.1 Business information

We kindly ask for some business information, and we assure you that all the information you provide will be kept strictly confidential and used solely for the research study.

1.1.1 Job position (one-answer question)

- Senior Manager
- Manager & Supervisor
- Specialist

1.2.1 Years of service (one-answer question)

- Less than 2 years
- 2 - 5 years
- 5 - 7 years

- Over 7 years

1.3.1 Years of experience (one-answer question)

- Less than 2 years
- 2 - 5 years
- 6 - 10 years
- Over 10 years

1.4.1 Size of business (one-answer question)

- Under 50 people
- 50 - 100 people
- 100 - 200 people
- Over 200 people

1.5.1 Business category (one-answer question)

- Agricultural Products and Food: Rice, Pepper, Cashew Nuts, Coffee, and Vegetables
- High-Tech Goods: Electronics, Computers, Mobile Phones, Electronic Devices, and Industrial Machinery
- Fashion and Footwear
- Raw Materials for Production
- Building material
- Transportation company

1.6.1 Business headquarters of businesses (one-answer question)

- The Northern region
- The Central region
- The Southern region

1.2 Please assess the behavior related to “Factors related to the decision to use a transportation exchange platform”.

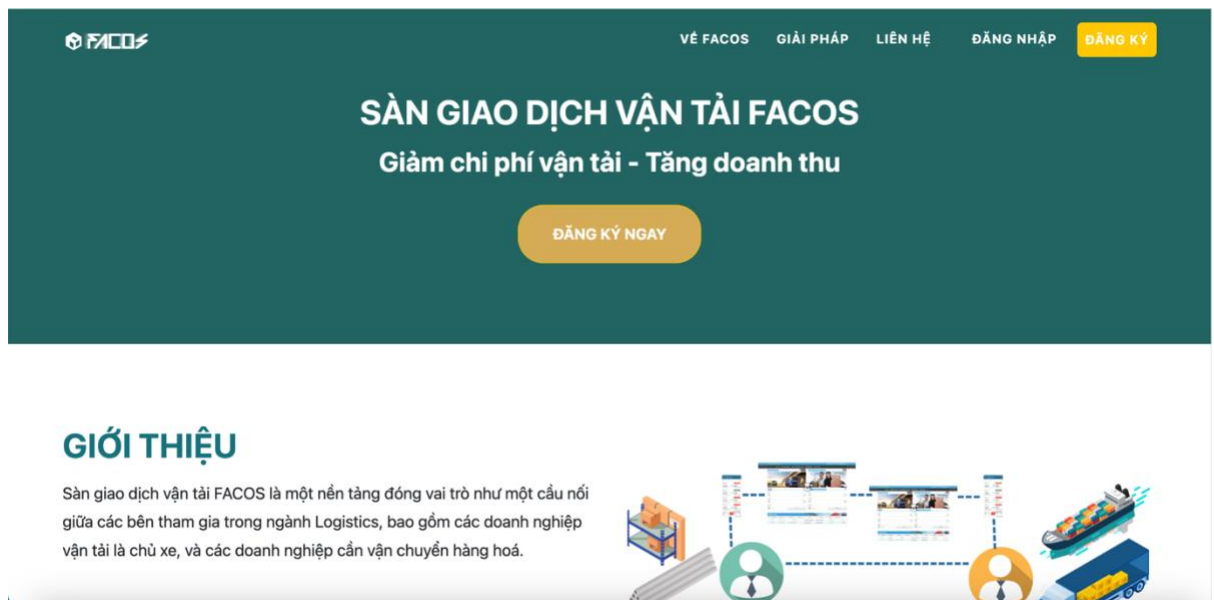
	Code	Question	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
PE - Perceived ease of use							
1	PE1	The transportation exchange platform has an easy-to-use interface.					
2	PE2	Learning to operate the transportation exchange platform is straightforward.					
3	PE3	Interacting with the features of the transportation exchange platform is intuitive.					
4	PE4	The navigation on the transportation exchange platform is user-friendly.					
PU - Perceived usefulness							
1	PU1	The transportation exchange platform provides a diverse range of road transportation methods					
2	PU2	The platform effectively minimizes risks during transport, such as loss or					

		damage.					
3	PU3	The information and pricing on the transportation exchange platform are transparent and easily accessible.					
4	PU4	The transportation exchange platform security of the business information					
PC - Perceived cost							
1	PC1	Using the transportation exchange platform is cost-saving transportation.					
2	PC2	The pricing structure of the transportation exchange platform is clear and understandable.					
3	PC3	The benefits of the transportation exchange platform will be worth its cost.					
4	PC4	The total cost of using the transportation exchange platform is acceptable.					
FC - Transportation exchange platform adoption							

1	FC1	I am currently using the transportation exchange platform for my transportation needs.					
2	FC2	I intend to continue using the transportation exchange platform.					
3	FC3	The transportation exchange platform is valuable to my transportation options.					
4	FC4	I actively recommend the transportation exchange platform to others for their transportation requirements.					

Once again, thank you for taking the time to participate in the survey! Wish you have a productive day of studying and working!

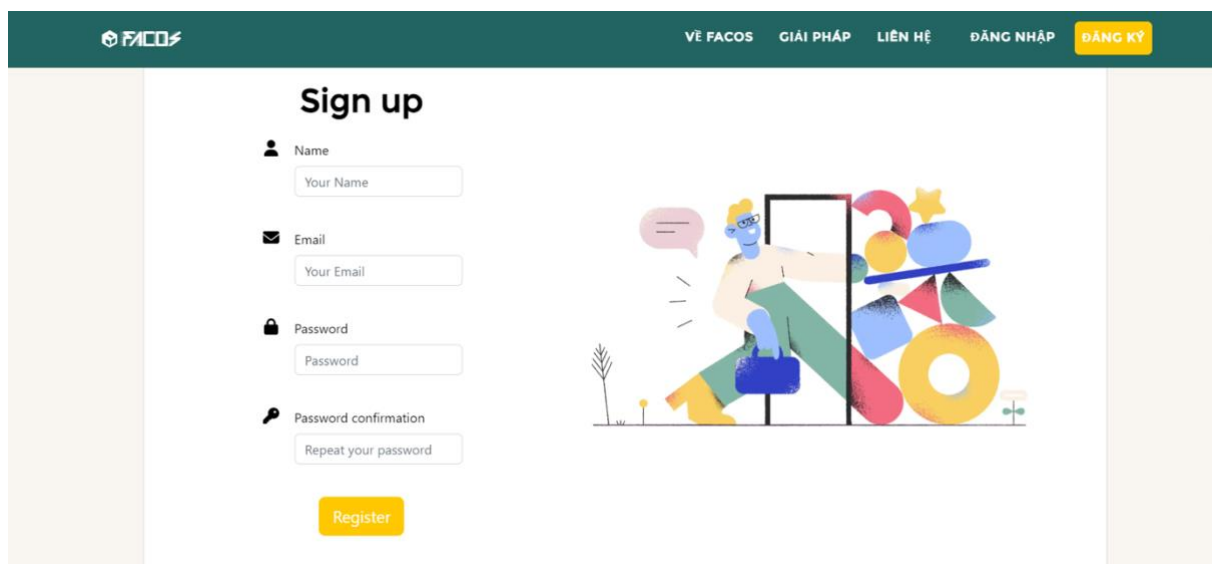
Appendix 2: Instructions for using the FACOS platform



Appendix 2.1: The homepage

(Source: Authors, 2023)

Firstly, users must register information as a shipper or vehicle owner, including company name, business email, and phone number, and set up a password for the account.



Appendix 2.2: The sign-up page

(Source: Authors, 2023)

INFORMATION FORM

Please fill in your company details

Company name: _____ Company code: _____

Type company: **Goods owner** (dropdown menu open with options: Goods owner, Transport, Headcount, Headcount)

Group company: **Global** (dropdown menu open with options: Global, Local, Express, All, Rolling year)

Company email: _____

Website url: _____

Official website: _____

I commit all the information are truth.

Appendix 2.3: Information registration page

(Source: Authors, 2023)

INFORMATION FORM

Please fill in additional information

Company phone: _____ Company fax: _____

Company image url: _____

Logo url: _____

Address: _____

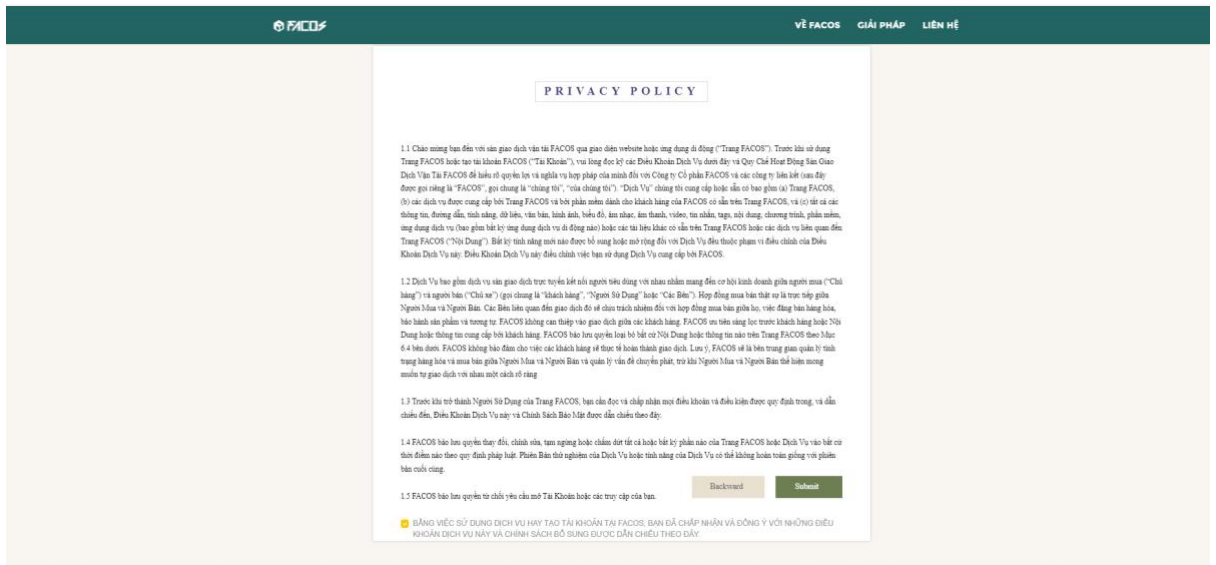
Office address: _____

Description: _____

Description: _____

Appendix 2.4: Information registration page

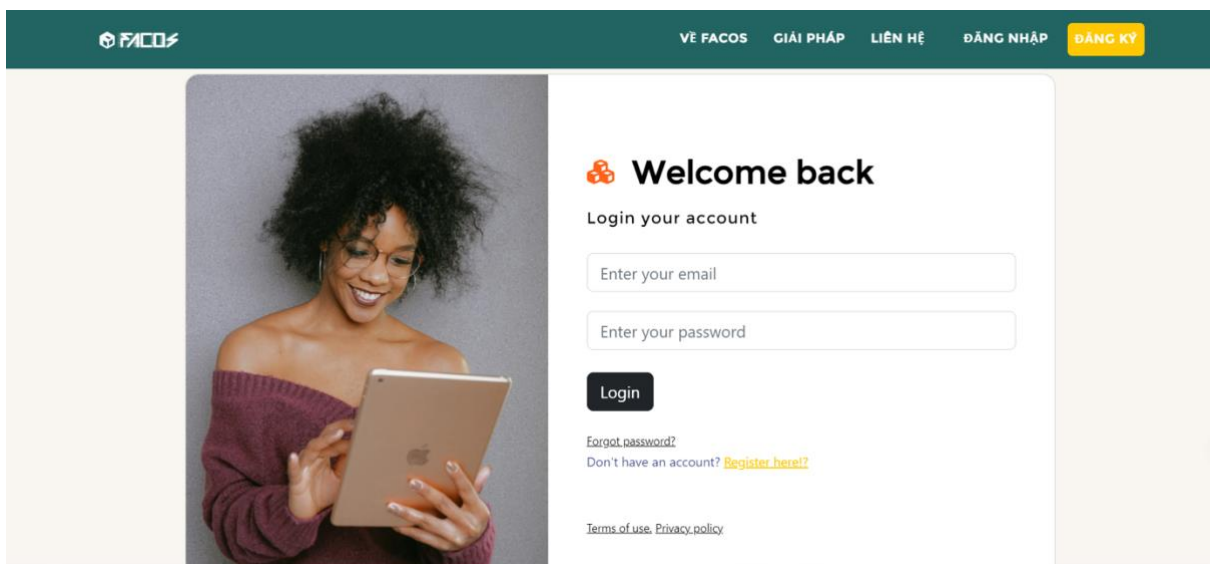
(Source: Authors, 2023)



Appendix 2.5: Privacy policy page of FACOS website

(Source: Authors, 2023)

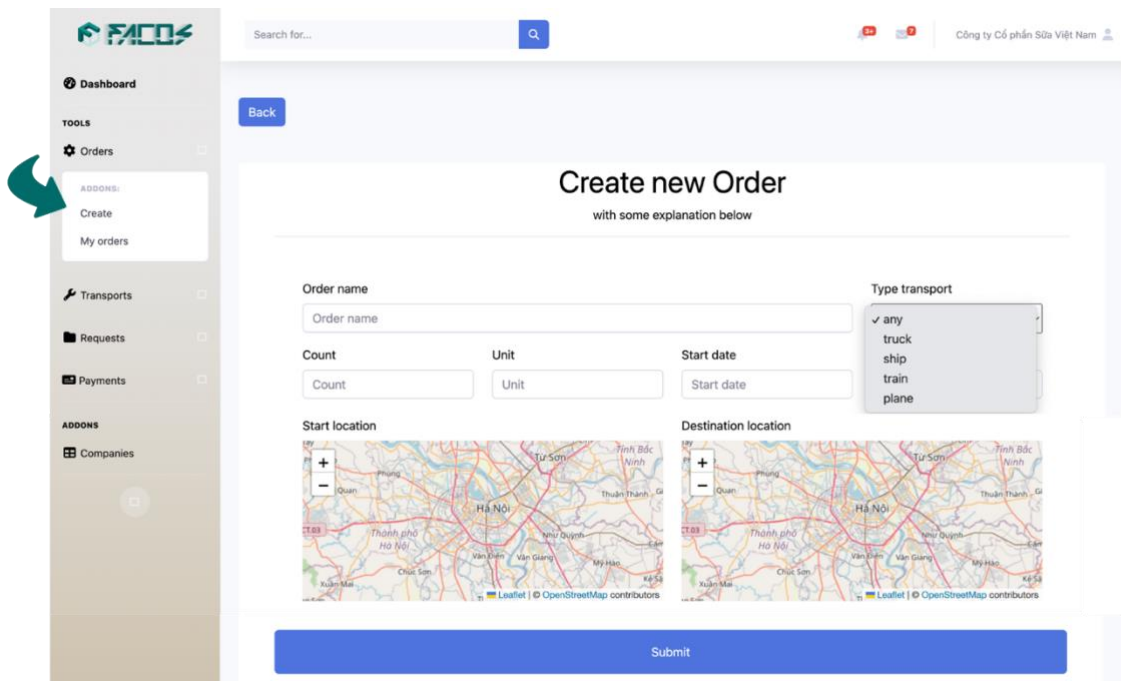
After filling in all the information, businesses need to read the terms of FACOS and submit carefully.



Appendix 2.6: The login page

(Source: Authors, 2023)

On the login screen, businesses fill in the previously registered account information and password. After having an account, the customer creates an order as a “Shipper” by clicking “Order” -> “Create.” Then, fill in the goods information and Click “ Submit”.



Appendix 2.7: Create new order page

(Source: Authors, 2023)

After having good information, the system recommends that shippers choose insurance. The goods owner can choose whether or not to use this cargo insurance. The system also suggests the most optimal travel distance from the loading point to the return point for the shipper.

Clicking “Create request” means that the shipper has accepted the terms of FACOS and successfully created the request. FACOS's GPS positioning system will recommend transport businesses closest to the order to optimize transport distance.

New > Requested > Accepted > Shipping > Done > Cancel > Retry

Order details

Order name: sữa

Type transport: truck Status: new

Start date: 2023-10-29 Deadline: 2023-10-30

Amount: 200.0 thùng Partner company: Công ty Cổ phần Sữa Việt Nam

Action: Edit + Create request ^ Hide transport

Cargo Insurance

Cargo Insurance against external risks that cause loss or physical damage to the insured goods, occurring during transportation (and/or temporary storage during transportation) carried out by any type of means of transport, within the territory of Vietnam or worldwide. [Find out more](#)

Clicking "create request" means you agree to comply with the FACOS Terms

Available transport list

Transport name	Company name	Capacity	Type transport	Cost per km	Estimated cost	Action
Container 40pt	Tổng Công Ty CP Bưu Chính Viettel	32 tons		\$100.00	\$3,461.00	<input type="radio"/> Select
Container 40ft	Công Ty CP Giao Nhận Vận Tải Con Ong	20 tons		\$2,000.00	\$69,220.00	<input type="radio"/> Select
Thuyền	Công Ty CP Giao Nhận Vận Tải	200 kg		\$1,000.00	\$34,610.00	<input type="radio"/> Select

Appendix 2.8: The page of searching results

(Source: Authors, 2023)

BEEOLOGISTICS

www.beelogistics.com

(+84 28) 62647272

(+84 28) 62647373

info@beelogistics.com

Company name	Công Ty CP Giao Nhận Vận Tải Con Ong
Company code	Bee Logistics
Tax code	0303482440
Founding year	2023-10-17
Headcount	800
Address	Tầng 2, Tòa nhà Hải Âu, 39B Trường Sơn, Phường 4, Quận Tân Bình, Thành phố Hồ Chí Minh, Việt Nam

Action: [Edit](#)

Description: Được thành lập từ năm 2004, Công Ty CP Giao Nhận Vận Tải Con Ong là một trong những nhà cung cấp dịch vụ logistics hàng đầu tại Việt Nam.

Comments (avg 5.0 ★): 5.0★ Thân thiện

Appendix 2.9: Transportation business information page

(Source: Authors, 2023)

Current location

Transport information

Transport name	Container 40pt
Capacity	32 tons
Type transport	
Status	✓ Ready to Use
Cost per km	100.0 (VND)
Coordinates x	21.031712347616423
Coordinates y	105.61975302025475

Action: [Show order](#)

Evaluate point: ★★★★★


Comments: Thân thiện

Appendix 2.10: Vehicle information page

(Source: Authors, 2023)

Shippers can view transport prices arranged from high to low according to the Filter bar and check the current vehicle status, whether it is ready or in transit. On the profile page of each transportation provider, you can see basic information such as year of establishment, scale, and experience. From there, shippers can choose to book a suitable vehicle.

Appendix 3: Etruck's price list for road freight

 TRANG CHỦ VÉ ETRUCK DỊCH VỤ BẢNG GIÁ TIN TỨC LIÊN HỆ Q 		
STT	Khoảng cách	Xe tải 1.25 - 1.9 tấn
1	Min	250.000
2	> 20km	14.500
3	> 30km	11.000
4	> 50km	10.000
5	> 100km	9.500
6	> 200km	9.000
7	> 300km	8.500
STT	Khoảng cách	Xe tải 2.5 tấn
1	Min	450.000
2	> 20km	22.500
3	> 30km	20.000
4	> 50km	17.000
5	> 100km	16.000
6	> 200km	15.000
7	> 300km	14.000
STT	Khoảng cách	Xe tải 3.5 tấn
1	Min	500.000
2	> 20km	23.800
3	> 30km	22.000
4	> 50km	18.000
5	> 100km	17.000
6	> 200km	16.000
7	> 300km	15.000
STT	Khoảng cách	Xe tải 5 tấn
1	Min	600.000
2	> 20km	31.700
3	> 30km	28.000
4	> 50km	24.000
5	> 100km	22.000
6	> 200km	20.000
7	> 300km	18.000
STT	Khoảng cách	Xe tải 8 tấn
1	Min	700.000
2	> 20km	37.000
3	> 30km	32.000
4	> 50km	28.000
5	> 100km	26.000
6	> 200km	25.000
7	> 300km	24.000
STT	Khoảng cách	Xe tải 10 tấn
1	Min	1.000.000
2	> 20km	42.300
3	> 30km	36.000
4	> 50km	32.000
5	> 100km	30.000
6	> 200km	28.000
7	> 300km	26.000

Appendix 3: Etruck's price list for road freight (unit: VND)

(Source: Etruck.vn, 2023)

Appendix 4: A Chau Corporation's price list for road freight

Bảng giá cước vận chuyển hàng từ Hà Nội đi các tỉnh

Từ Hà Nội đi các Tỉnh Thành	Tính theo kg (vnd/kg)	Tính theo khối (vnd/khối)	Nguyên xe (triệu vnd/xe)
Quảng Bình, Hà Tĩnh, Nghệ An, Thanh Hóa	800 - 1800	250.000 - 370.000	15 - 27
Huế, Quảng Trị, Đà Nẵng	1.100 - 2.000	330.000 - 460.000	17 - 29
Phú Yên, Bình Định, Quảng Nam, Quảng Ngãi	1.200 - 2.100	400.000 - 490.000	18 - 33
Nha Trang, Ninh Thuận, Bình Thuận	1.250 - 2.200	410.000 - 510.000	19 - 34
Đồng Nai, Bình Dương	1.350 - 2.300	425.000 - 525.000	20 - 35
Tp.HCM	1.300 - 2.300	420.000 - 520.000	20 - 35
Vũng Tàu, Bình Phước, Tây Ninh, Long An, Bến Tre	2.600 - 3.300	830.000 - 920.000	28 - 45
Cần Thơ, Đồng Tháp, Vĩnh Long, An Giang, Trà Vinh	2.600 - 3.600	800.000 - 920.000	29 - 46
Komtum, Gia Lai, Đắk Lắk, Lâm Đồng	3.100 - 3.300	800.000 - 900.000	26 - 42

Bảng giá cước vận chuyển hàng từ Sài Gòn (HCM) đi các tỉnh

Từ TPHCM đi các Tỉnh Thành	Tính theo kg (vnd/kg)	Tính theo khối (vnd/khối)	Nguyên xe (triệu vnd/xe)
Nha Trang, Ninh Thuận, Bình Thuận	1.000 - 1.650	305.000 - 405.000	12 - 25
Phú Yên, Bình Định	1.150 - 1.900	400.000 - 490.000	15 - 28
Quảng Ngãi, Quảng Nam, Đà Nẵng	1.350 - 2.200	420.000 - 495.000	17 - 31
Huế, Quảng Trị, Quảng Bình	1.450 - 2.650	460.000 - 550.000	19 - 37
Nghệ An, Hà Tĩnh, Thanh Hóa	1.750 - 2.900	485.000 - 585.000	20 - 47
Hà Nội	1.800 - 2.950	490.000 - 595.000	20 - 47
Hà Nam, Ninh Bình, Nam Định, Hưng Yên, Bắc Ninh	1.800 - 2.950	495.000 - 595.000	21 - 47
Vĩnh Phúc, Hải Dương, Bắc Giang, Hòa Bình	1.900 - 2.950	520.000 - 595.000	23 - 48
Phú Thọ, Thái Nguyên, Thái Bình, Hải Phòng	2.000 - 2.950	520.000 - 595.000	23 - 49
Hạ Long, Yên Bái, Tuyên Quang, Lạng Sơn, Bắc Cạn	2.300 - 2.950	540.000 - 595.000	25 - 53

Appendix 4: A Chau Corporation's price list for road freight (unit: VND)

(Source: vanchuyenchau.com.vn, 2023)

Appendix 5: Truong Nam Logistics's price list for road freight

Trong đó dịch vụ vận chuyển xe tải của Truong Nam Logistics sẽ được phân thành xe hạng nhẹ và hạng nặng.

TRƯƠNG NAM LOGISTICS **TRANG CHỦ** **DỊCH VỤ VẬN CHUYỂN** **BẢO GIÁ DỊCH VỤ**

Bảng giá vận chuyển xe tải hạng nhẹ

KIẾN HÀNG	DƯỚI 2 TẤN	DƯỚI 2,8 TẤN	DƯỚI 3 TẤN	DƯỚI 4 TẤN	DƯỚI 5 TẤN
Giá mở cửa tối thiểu (VNĐ)	180	250	300	350	420
Mốc Km	Giá đơn vị cho mỗi kg hàng theo mốc km (VNĐ)				
5km – 15km	21.5	22.5	23.5	24	25.5
15km – 50km	16	18.5	18.5	19.5	21
50km – 100km	15	15.5	16	17	18.5
100km – 200km	9	10	15	16	17.5
200km – 300km	8	9	13	14	15.5
300km – 500km	7	8	10	11	12.5
500km – 1000km	7	8	8	9	12.5
1000km – 1500km	7	8	7	8	9.5
> 1500km	7	8	5	6	7.5

Bảng giá vận chuyển hàng hóa bằng xe tải hạng nặng

KIẾN HÀNG	5 TẤN	DƯỚI 10 TẤN	DƯỚI 15 TẤN	DƯỚI 18 TẤN	TRÊN 18 TẤN
Giá mở cửa tối thiểu (VNĐ)	500	550	650	860	1.000.000
Mốc Km	Giá đơn vị cho mỗi kg hàng theo mốc km (VNĐ)				
5km – 15km	27.5	28.5	31.5	39	49
15km – 50km	22.5	24	27	44.5	44.5
50km – 100km	20.5	21.5	24.5	32	42
100km – 200km	19.5	20.5	23.5	31	41
200km – 300km	17.5	18.5	21.5	29	39
300km – 500km	14.5	15.5	18.5	26	36
500km – 1000km	12.5	13.5	16.5	24	34.5
1000km – 1500km	11.5	12.5	15.5	23	33.5
> 1500km	9.5	10.5	13.5	21	31.5

Appendix 5: Truong Nam Logistics's price list for road freight (unit: VND)

(Source: truongnamlogistics.com.vn, 2023)

Appendix 6: Final Financial Excel

<https://docs.google.com/spreadsheets/d/1bJNudSPfkUbSdB1LA8Pnv4O2MYop9bvpIOhJlCyGqrQ/edit?usp=sharing>

Appendix 7: FACOS's Facebook fanpage

<https://www.facebook.com/FACOS.jsc>

Appendix 8: FACOS's Website

<https://facos-demo-627990dc0a97.herokuapp.com/>

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