Policy and Effectiveness of Distribution Channels on Product Sales

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ABSTRACT

In today's increasingly complex and fiercely competitive industrial world, logistics is said to be able to provide greater value to companies. Logistics activities are seen as an extension of production activities, which are a solution for companies to reap more profits. The purpose of this study is to determine the factors that influence the decline in turnover in the mid-mile enterprise fulfillment division based on the business model canvas and to determine how the internal control system works in the mid-mile enterprise fulfillment division. This study uses a qualitative descriptive approach to describe a company's business model based on business model canvas theory and analyze internal control. In this study, data collection techniques include interviews, observations, documentation, and triangulation. The interview results will be processed using data triangulation techniques in accordance with the nine elements of the business model canvas. The results of the study indicate that the determination of shipping prices, which should be calculated based on shipping distance and tonnage, will affect the decline in turnover in the mid-mile enterprise fulfillment division. The nine elements of the business model canvas are examined to identify factors contributing to the decline in turnover.

Keywords*: Business Model Canvas, Digital Logistics, Distribution Channel, Internal Control, Logistics Startup, Operational Efficiency.*

ABSTRAK

Dalam dunia industri yang semakin kompleks dan kompetitif saat ini, logistik dianggap mampu memberikan nilai tambah bagi perusahaan. Aktivitas logistik dipandang sebagai perpanjangan dari aktivitas produksi, yang menjadi solusi bagi perusahaan untuk meraih keuntungan lebih besar. Tujuan penelitian ini adalah untuk mengetahui faktor-faktor yang memengaruhi penurunan omzet di divisi pemenuhan pesanan perusahaan kelas menengah berdasarkan business model canvas dan untuk mengetahui bagaimana sistem pengendalian internal di divisi pemenuhan pesanan perusahaan kelas menengah. Penelitian ini menggunakan pendekatan deskriptif kualitatif untuk mendeskripsikan model bisnis perusahaan berdasarkan teori business model canvas dan menganalisis pengendalian internal. Dalam penelitian ini, teknik pengumpulan data yang digunakan yaitu wawancara, observasi, dokumentasi, dan teknik triangulasi. Hasil wawancara akan diolah menggunakan teknik triangulasi data sesuai dengan sembilan elemen business model canvas. Hasil penelitian menunjukkan bahwa penentuan harga pengiriman yang seharusnya dihitung berdasarkan jarak dan tonase pengiriman akan memengaruhi penurunan omzet di divisi

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pemenuhan pesanan perusahaan kelas menengah. Sembilan elemen business model canvas dianalisis untuk mengidentifikasi faktor-faktor yang berkontribusi terhadap penurunan omzet.

***Kata kunci**: Business Model Canvas, Logistik Digital, Saluran Distribusi, Pengendalian Internal, Startup Logistik, Efisiensi Operasional.*

INTRODUCTION

In a competitive and complex industry, logistics has become a source of added value, extending production activities and enhancing efficiency by managing goods and services from origin to destination (Saragih et al., 2020). Technological advances have transformed logistics into an integrated, adaptive system (Macnico et al., 2022). Indonesian digital logistics pioneer operates a virtual trucking platform connecting cargo owners, fleet owners, and drivers via a mobile application, handling Fast-Moving Consumer Goods (FMCG), raw materials, and mineral shipments nationwide. Despite early growth, the company later faced turnover decline, logistical coordination issues, client management inefficiencies, and cash-flow instability, highlighting the need to analyze which business model components and internal control weaknesses drive these problems in the mid-mile enterprise fulfillment division

Although research on the Business Model Canvas (BMC) and business model innovation in logistics is expanding, studies that integrate BMC analysis with internal control evaluation, particularly to explain financial decline in platform-based logistics firms in Indonesia, remain limited. Previous studies show that digital logistics firms often face revenue volatility due to mismatches between revenue streams, cost structures, and operational activities, while sustainable operational performance depends on effective internal controls (Heinbach et al., 2021; Parodos et al., 2022). This demonstrates a research gap: existing literature tends to analyze business models and internal controls separately, and lacks integrated examinations of how misaligned BMC components interact with weak control systems to affect financial outcomes.

This represents a relevant case to address this gap by exploring how business model design and internal control quality jointly influence turnover performance in an Indonesian digital logistics environment. To provide conceptual grounding, this study applies Osterwalder and Pigneur's BMC to map key business components such as value propositions, key activities, revenue streams, and cost structures, including evidence of BMC's effectiveness in logistics strategy development (Parodos et al., 2022; Sayekti et al., 2023; Prasetya & Maria, 2023; Triatmo et al., 2024). Additionally, the COSO internal control framework is employed to assess control environment, risk assessment, control activities, information and communication, and monitoring, consistent with Puspita et al. (2024), who emphasize incorporating risk management and governance mechanisms into business model design to mitigate revenue leakage and improve efficiency.

To produce a comprehensive scientific understanding, operational issues such as logistics coordination, client management, and cash flow must be analytically linked to Business model canvas components and internal control weaknesses. This approach allows identification of cause-and-effect relationships, such as how an unbalanced revenue model combined with weak receivables control disrupts cash flow, a pattern also observed in other digital logistics studies (Mariyono et al., 2020; Rosário & Raimundo, 2021; Utami, 2023; Wei et al., 2024). The urgency of this research is heightened by Indonesia's macroeconomic landscape, where high logistics costs limit business profitability (Shi et al., 2020; Ikbal et al., 2021; Zagloel et al., 2024). According to the Logistics Performance Index, Indonesia still lags behind several ASEAN countries due to inefficiencies and high transport costs, while rising fuel prices, unstable demand, and infrastructure limitations further weaken industry competitiveness (Purnama et al., 2022; Pandiangan et al., 2022; Amin et al., 2024). Thus, analyzing the company is relevant not only for improving its internal performance but also for supporting broader discussions on the efficiency of national logistics.

Based on these gaps and the conceptual framework described, this study aims to identify BMC-related factors contributing to turnover decline in PT. X's Mid Mile Enterprise Fulfillment Division, to evaluate how the internal control system operates within the division, and to integrate both analyses to propose targeted improvements. In line with these aims, the study focuses on three key areas of inquiry: determining the business model canvas elements that contribute to turnover decline at the company, examining how the internal control system functions within the mid mile enterprise fulfillment division, including the weaknesses that affect financial performance, and explaining how BMC components and internal control mechanisms interact in shaping the division's turnover decline. These focus areas guide the results and discussion to maintain analytical coherence and alignment with the study's objectives.

LITERATURE REVIEW

Distribution Channels within the Business Model Framework

Distribution channel policy is a strategic decision that determines how products are delivered efficiently from producers to consumers. As a bridge between production and consumption, distribution channels ensure that goods reach consumers in the right type, quantity, place, price, and time. Muchlisa and Surianto (2021) emphasize that effective distribution policies depend on selecting appropriate intermediaries and coordinating marketing activities to achieve company objectives. In modern management, distribution policies must align with product characteristics, market potential, and logistical capabilities. When properly designed, they expand market reach and enhance competitiveness, particularly when companies adjust channel structures to consumer absorption capacity across regions (Marvinita et al., 2024). Coordination among producers, distributors, and retailers is also essential to prevent supply imbalances that disrupt sales performance (Putri et al., 2018). In the digital era, integrating conventional and online channels has become a strategic necessity to broaden market access and increase efficiency, responsiveness, and customer satisfaction.

The Business Model Canvas (BMC) provides a holistic framework for analyzing business elements and understanding their interconnections (Susanto, 2022). Consisting of nine components, namely customer segments, value propositions, distribution channels, customer relationships, revenue streams, key resources, key activities, key partnerships, and cost structure, the BMC enables companies to visualize business mechanisms and align strategies with market needs. Pasaribu et al. (2023) note that BMC helps organizations map strategies systematically and identify weaknesses that may hinder performance, such as resource inefficiencies or misaligned objectives. In distribution management, applying the BMC allows companies to evaluate the effectiveness of channel structures, logistics partnerships, and their influence on operational costs (Onstein et al., 2019). Through this approach, firms can optimize supply chain processes, reduce redundancies, and enhance profitability by making more informed strategic decisions.

Factors Influencing Turnover and Distribution Effectiveness

The effectiveness of distribution channels reflects the extent to which the distribution system is able to meet market needs accurately and efficiently. Effective channels are characterized by timely delivery, product availability, and the company's ability to maintain continuity in its relationships with trading partners. Haryanto et al. (2024) explain that the effectiveness of distribution can be seen from the speed of inventory rotation, low return rates, and the reliability of the company's logistics in meeting consumer demand.

In addition to operational factors, the effectiveness of distribution is also greatly influenced by the quality of partnership relationships. Jaelani and Purnama (2022) emphasize the importance of communication and coordination between companies and distributors to ensure a smooth and efficient flow of goods. Supermini (2013) adds that

the effectiveness of distribution channels has direct implications for customer satisfaction and loyalty, as delays or errors in distribution can lower perceptions of product quality.

Beyond these determinants, technology adoption increasingly plays a crucial role in shaping distribution effectiveness and turnover growth. Digital platforms, supply chain management applications, and logistics tracking systems enable firms to enhance visibility, reduce lead times, and minimize distribution errors (Heinbach et al., 2021; Macnico et al., 2022). Anwari et al. (2024) highlight that digital transformation in MSMEs significantly improves distribution efficiency through automated inventory monitoring and optimized delivery routes. Moreover, strategic distribution channel design affects sales turnover by ensuring that products reach the right markets at the right time (Mariyono et al., 2020; Ikbal et al., 2021). Thus, integrating technology, coordination, and strategic channel management becomes essential to maintaining competitive performance.

Internal Control in Distribution

Internal control systems are important mechanisms that ensure all distribution activities are carried out in accordance with company procedures and policies. These systems are designed to minimize the risk of irregularities, stock losses, and recording errors in the supply chain. Sulfitri (2024) explains that the application of the COSO framework in internal control systems can improve distribution efficiency through the separation of functions, transaction authorization, and continuous monitoring. In line with this, Muanas and Prakoso (2022) emphasize the importance of utilizing information technology in internal control systems, as transparency and digital reporting can accelerate the evaluation process and strengthen the accountability of distribution activities. Saputra and Novita (2023) highlight that weaknesses in the monitoring of goods flows can lead to discrepancies between administrative records and the physical condition of goods, thereby undermining the effectiveness of the distribution system.

In addition, internal control in distribution is increasingly strengthened through the integration of enterprise resource planning-based supply chain systems, which support real-time data accuracy and automatic documentation of goods movement (Li et al., 2020; Macnico et al., 2022). Akhmetshin et al. (2018) emphasize that strong internal control enhances coordination between departments, reduces operational risks, and ensures compliance with organizational standards. Haryanto et al. (2024) further explain that effective controls can significantly reduce logistics costs by preventing stock discrepancies and ensuring better forecasting accuracy. As digitalization accelerates, internal control functions are also evolving into proactive mechanisms that identify potential distribution bottlenecks and support continuous improvement across the supply chain.

RESEARCH METHODS

This study uses a qualitative descriptive approach to describe PT. X's business model is based on BMC theory and analyzes internal control. The study was conducted over three months and focused on the mid-mile enterprise fulfillment division of the company. This qualitative method allows for a deep understanding of real-world business processes and issues by exploring experiences and perspectives from within the company. Guided by the Business Model Canvas (BMC) framework developed by Osterwalder and Pigneur (2010), this study analyses the nine key elements of the business model: customer segments, value propositions, channels, customer relationships, revenue streams, key resources, key activities, key partnerships, and cost structure. In parallel, internal control theory is applied to assess how the company's systems protect assets, ensure accurate reporting, and promote efficiency and compliance, drawing on concepts such as control activities, risk assessment, monitoring, and communication.

Data was collected from the company and its operational team over a three-month period, from May to July 2024. A purposive sampling technique was used to select informants who had direct involvement in mid-mile operations. The criteria included operational supervisors, fulfillment staff, and managerial personnel who possess relevant

knowledge about business processes and internal controls. Data were collected through several structured steps: preliminary observation to map operational workflows, in-depth interviews with selected informants, document analysis of SOPs, reports, and internal guidelines, and methodological triangulation to validate patterns across data sources.

The primary data sources in this study were obtained directly from the field, namely, raw data from interviews with the company's staff. Secondary data sources in this study were obtained from literature studies and documentation studies. The subject of this study is a company that operates in mid-mile enterprise fulfillment services. In this context, the subject of the study is the company itself, including management and employees involved in mid-mile enterprise fulfillment services. This study uses data collection techniques, namely interviews, observation, documentation, and triangulation.

To ensure the validity of the research, this study applies the criteria of credibility, transferability, dependability, and confirmability. Triangulation, member checking, and prolonged field engagement help validate the findings, while detailed documentation supports transparency and reliability. Ethical considerations are strictly adhered to: all participants provided informed consent, and identities are kept confidential. This methodology enables a comprehensive understanding of the company's business challenges, offering theoretical insights and practical recommendations for improving its business model and internal systems.

RESULTS

Business Model Canvas Elements Influencing Turnover Decline

The results of this study describe the application of the Business Model Canvas (BMC) at PT. X, a digital logistics company based on an application. Each element of the BMC, including customer segment, value proposition, channels, customer relationship, revenue streams, key resources, key activities, key partnerships, and cost structure, was analyzed based on the suitability between the company's business model design and its realization in the field. A summary of the triangulated data from the respondents is presented in Table 1 below.

Table 1. Data Triangulation

BMC Indicator	**Participant Code**				
	Respondent 1	**Respondent 2**	**Respondent 3**	**Respondent 4**	**Respondent 5**
Consumers Segment	Manufacturing Industry, Agriculture, and SMEs	Manufacturing Industry, Agriculture, and SMEs	Manufacturing Industry, Agriculture, and SMEs	Manufacturing Industry, Agriculture, and SMEs	Manufacturing Industry, Agriculture, and SMEs
Value proposition	Fast service, secure delivery, competitive pricing.	In the logistics world, there are few competitors, and the distribution of goods is easier.	Speed of order pick-up fleet to cargo, the easiest transaction system, and insurance guarantee from the company	Order processing speed, fleet pick-up to cargo, the easiest transaction system, and insurance coverage from the company	order acceptance speed, easy transaction system, insurance guarantee from the company, and timely payments.
Channel	Social media, familiarization with canvassing, customer testimonials, and ratings.	Social media, billboard advertisements, and applications that can be downloaded via the Play Store.	the company application, social media, customer testimonials, and ratings	Did not respond	No response.

BMC Indicator	Participant Code				
	Respondent 1	**Respondent 2**	**Respondent 3**	**Respondent 4**	**Respondent 5**
Consumers Relationship	Cargo owners receive a discount every 7 deliveries, complaints, criticisms, and suggestions to partners.	Cargo owners receive a discount every 7 shipments, complaints, criticisms, and suggestions to partners.	Cargo owners receive a discount every 7 shipments, complaints, criticisms, and suggestions to partners.	Cargo owners receive a discount every 7 shipments, complaints, criticisms, and suggestions to partners.	Cargo owners receive a discount every 7 shipments, complaints, criticisms, and suggestions to partners.
Revenue Streams	Sales results for freight forwarding services	Sales results from goods delivery services	Sales results for freight forwarding services	Sales results for freight forwarding services	Results of freight forwarding service sales.
Key Resource	Specialized application for fleet owners, human resources, and investor funds.	Special applications for fleet owners, human resources, and WhatsApp	Special application for fleet owners, human resources, and WhatsApp	Special application for fleet owners, human resources, and WhatsApp.	Special application for fleet owners, human resources, and WhatsApp
Key Activities	Fleet owners can search for cargo according to their fleet capacity, find available fleets in the requested area, monitor shipments 24 hours a day, and develop applications.	Fleet owners search for cargo according to their fleet capacity, can search for available fleets in the requested area, monitor shipments 24 hours a day, and develop applications.	Fleet owners search for cargo according to their fleet capacity, can search for available fleets in the requested area, monitor shipments 24 hours a day, applications development	Fleet owners search for cargo according to their fleet capacity, can search for available fleets in the requested area, monitor shipments for 24 hours, and develop applications.	Fleet owners search for cargo according to their fleet capacity, can search for available fleets in the requested area, monitor shipments for 24 hours, and develop applications development
Key Partnership	Cargo: Unilever, Mayora, Japfa; Fleet: Bintang Timur, Bhirawa, PT. Margono, Dinoyo Putro, Pelni Logistic.	Cargo: Coca-Cola, Pocari Sweat, Unilever, Japfa, Shopee	Cargo: Unilever, Japfa, Mayora, Coca-Cola	Cargo: Pocari Sweat, Japfa, Indolacto, Red Lion Cement, Unilever, Express Factory, and Coca-Cola.	Cargo: Coca-Cola, Singa Merah, Orang Tua Group, Shopee Express, Japfa, Pocari Sweat, Indolacto
Cost Structure	Payments to fleet owners, building rental costs, employee salaries, and special operational costs for marketing staff.	Payments to fleet owners, building rental costs, employee salaries, and special operational costs for marketing employees	Payments to fleet owners, building rental costs, employee salaries, and special operational costs for marketing employees	Payments to fleet owners, building rental costs, employee salaries, and special operational costs for marketing employees	Payments to fleet owners, building rental costs, employee salaries, and special operational costs for marketing employees

The results of business model mapping based on the Business Model Canvas (BMC) framework are presented in Table 2.

Table 2. BMC Theory Analysis

Customer Segments	Value Proposition	Channels	Customer Relationship	Revenue Streams
Fleet Owners • Demographic: Expedition services, fleet rental business owners, fleet owners • Psychographic: cargo according to fleet tonnage, reducing empty loads when returning, and convenience in transactions • Geographic: Java and Bali islands Consumer • Behavior: need fast payments, regular shipments, shipping of general, valuable, special, or refrigerated goods, and point-to-point deliveries Cargo Owners • Demographic: micro, small, medium, and large businesses • Psychographic: customers looking for special offers, cost-efficient delivery, seeking convenience, security, and providing various fleets for monthly rentals • Geographic: Java and Bali islands • Consumer Behavior: customers who frequently and regularly use freight services, need	Fleet Owners • Ease of finding cargo, joining with partners through an application-based system • Reduce empty loads for fleets • Provides access to dozens of cargo owners • Fast and reliable payment solutions • Project, routine, and recommended cargo opportunities • Reduced TKBM (labor handling) fees Cargo Owners • Ease of renting fleets via app-based system • Transparent, competitive, and fair pricing • Access to dozens of trusted fleet owners • Safe and flexible fleet options • Guaranteed service in every shipment • Monthly truck rental programs • Payment on term basis • Detailed and real-time shipment tracking	• Promotion via Instagram, Website, Email, Billboard Ads, and marketing visits • Communication through WhatsApp application • Providing service via application	Fleet Owners • Acquisition: special prices for new customers, access to large company shipments, routine and project cargo, and referrals • Up-selling: attractive pricing offer • Retention: business partner appreciation, Pertamina discount program Cargo Owners • Acquisition: special offers for new customers • Up-selling: express shipping, special packaging options, 25% discounts, special rates for MOU partners • Retention: cashback program and partner appreciation	Revenue from freight service sales
Key Resources • Physical: application, Google Meeting tools			Key Activities • Fleet searching • Cargo searching • Goods delivery	

Customer Segments	Value Proposition	Channels	Customer Relationship	Revenue Streams
special fleets, and ship general, valuable, special, or refrigerated goods	• Intellectual: trademarks, technical experts • Human: development, marketing, operations, sales, data analysis, customer support, and investor relations teams • Financial: investor capital, insurance, and application maintenance funding		Fleet rental and payment processing	

Key Partners	Cost Structure
• Associations • Fleet rental business owners • Cargo owners • Investors	Fixed Costs: warehouse rent, permanent employee salaries, travel and marketing expenses, security, app and website development, advertising bills Variable Costs: fleet rental fees, insurance, entertainment expenses, and shipping costs

On the fleet side, the company's demographic characteristics target expeditions, fleet rental service owners, and fleet owners. Based on psychographic segmentation, the company understands fleet motivations and purchasing behavior deeply. It targets segments seeking cargo matching fleet tonnage, return cargo, and transaction ease. Geographically, it focuses on Java and Bali for the largest fleets and cargo demand. Behaviorally, this includes fast payments, regular deliveries, and handling general, valuable, specialized, or refrigerated goods via point-to-point without warehouses. For cargo parties, demographics target micro businesses like building material stores; small ones like chili collectors needing extra fleets; medium manufacturing; and large construction or mining firms. Psychographically, shippers seek discounts to cut costs, plus convenience, speed, security, and fleet variety; regular shippers want affordable monthly rentals (Osterwalder & Pigneur, 2013). Geographically, emphasis is on Java and Bali for most shippers. Behaviorally, it covers frequent users, special fleet needs, and shipments of general, valuable, special, or refrigerated goods.

The company offers a fleet for easy app-based cargo search, reduced empty cargo returns through trusted cargo owners, access to project/regular/recommended cargo, fast payments, dock labor cost management, easy partner onboarding, and special offers for new customers (Zagloel et al., 2024; Triatmo et al., 2024). Cargo parties get easy partnering, competitive, transparent rates without surprises, app-bridged vendor matching, trusted fleet selection via reviews/testimonials/history, secure/flexible payments, shipment insurance, affordable monthly rentals, and real-time tracking. Distribution channels encompass platforms for communication and promotion: Instagram, websites, email quotes, billboards, direct sales visits, WhatsApp, and app services (Shi et al., 2020). On the fleet side, the company acquires customers through new-customer specials and access to large-company cargo; fleets automatically receive project, regular, and recommended cargo. Strong relationships enable up-selling with attractive prices; retention includes partner hosting and My Pertamina discounts. For cargo, specials for new customers; up-selling via express delivery/special packaging. Retention offers

25% discounts (max IDR 150,000 on min IDR 200,000 shipments), cashback (IDR 250,000 for 5 shipments/30 days; IDR 600,000 for 10), partner hospitality, and MOU specials. Revenue comes from freight services, calculated by distance (km) and cargo weight, funding product development, market expansion, and tech infrastructure.

Key resources include physical ones like apps, Google Meetings, websites for communication/promotion; intellectual trademarks (logos/names/slogans); technical experts in IT, marketing, software/data engineering, DevOps, cybersecurity, logistics, UI/UX, project/product management; human resources like development/ marketing/ operations/ sales/ data/ customer support teams; and finances from investors, insurance, app usage (Rosário & Raimundo, 2021). Key activities involve online platforms connecting shippers/transporters, fleet hiring per needs, price negotiations, payments, scheduling, real-time monitoring, and end-to-end shipment tech development. Key partnerships with forwarders/truck rentals for fleet needs, cargo owners for loads, and investors; these avoid heavy investments and leverage resources. Cost structure features fixed costs: building rent, salaries (permanent/contract), marketing travel, security, app/website development, advertising, entertainment, freight, operational bills (electricity/Wi-Fi). Variable costs, such as fleet rentals/insurance, are balanced against delivery sales based on delivery distance/cargo amount.

Identification of Internal Controls

In PT. X, business processes are effective and efficient. The application-based logistics business model also has a few competitors. From the results of interviews with respondents, the advantages of using this application in goods distribution include speed in finding a fleet, easy and monitored distribution, insurance guarantees, and convenient payments to fleet owners, which are benefits enjoyed by both application users and the company. With this, the company has carried out its duty to implement internal control. In the internal control system, the company is required to supervise, check, and encourage efficiency in the company, and encourage compliance with management policies (Mariyono et al., 2020)

In terms of the established procedures, there are still weaknesses in maintaining the stability of the company's revenue, particularly in the sales of its freight forwarding services. Calculations are based on competition with other logistics companies and do not adequately consider monthly and annual operating costs. Furthermore, the fleet search process remains ineffective in utilizing the developed application, which is designed only for fleet owners and internal teams. However, it is easy to register as a fleet owner through the application, posing a risk of internal fraud. This ease of registration could cause the company significant losses, as the selection process for fleet owner partners is insufficiently stringent (Heinbach et al., 2021).

Interaction of BMC and Internal Control in Turnover Decline

During the cargo search stage, marketing representatives attract cargo owners to PT. X, who must create an account on the application, provides ID, phone, and email. After account creation, owners place fleet rental orders specifying fleet type, capacity, vehicle year, and cargo details, including type, weight, loading, and delivery addresses. Payment terms, including a maximum 7-day payment window, late fees, and virtual account transfers, are agreed upon during registration. During the fleet search stage, the operations team processes fleet specifications and cargo details. Fleet owners either use existing accounts or register by submitting their and their drivers' information, fleet type, and account details. The company conducts cargo auctions, calculates expected income per trip, and adjusts revenue against fixed and variable costs based on distance and cargo volume (Triatmo et al., 2024).

During the goods delivery stage, the company also provides services through the application to facilitate communication between the cargo owner and the fleet owner. From loading until the goods reach their destination, real-time documentation through the application must be carried out by the driver appointed by the fleet owner. This serves

as a reference for payment to the fleet owner after the cargo is received by the owner. During delivery and unloading, the company provides goods security services to prevent damage and loss. Insurance coverage is provided for each delivery, calculated based on the quantity and value of the goods (Todorovic et al., 2018).

The billing stage consists of two processes: payment to the fleet owner and billing to the cargo owner. In the payment process, finance is carried out during the delivery order check once the goods are received by the cargo owner. The finance department then transfers the payment to the fleet owner's registered account. In the billing process, an invoice is sent via email and the cargo owner's application, containing a virtual account number for payment via bank transfer. If the cargo owner does not pay the invoice within 7 days, a penalty of 1% per month of the shipping cost is applied.

DISCUSSION

The results of the study indicate that PT. X's business model represents the nine key elements of the Business Model Canvas (BMC) framework as proposed by Osterwalder and Pigneur (2010), namely customer segment, value proposition, channel, customer relationship, revenue stream, key resources, key activities, key partnerships, and cost structure. Through this approach, the value stream, operational processes, and customer relationship strategies within the digital logistics business were mapped. In terms of customer segments, two main groups are targeted: the fleet and cargo parties, with primary operational areas in Java and Bali. This segmentation strategy reflects consideration of demographic, geographic, psychographic, and behavioral factors in defining the target market

This supports the perspective proposed by Wijaya (2016) that customer segment mapping in BMC plays an important role in determining the direction of the company's value proposition and service strategy development. In the context of the national logistics industry, Kharlamov et al. (2020) emphasize that customer segmentation must consider the characteristics of the supply chain and the intensity of delivery requirements in each region, making the decision to focus on the manufacturing industry and MSMEs with regular delivery needs a strategic move.

The value proposition includes ease of cargo search through the application, fast fleet matching, secure insured delivery, and flexible payment options. These reflect efforts to build digital efficiency and customer trust, consistent with Todorovic et al. (2018), who state that digital logistics firms rely on efficiency and trust-based relationships for competitiveness. Yu et al. (2013) further explain that adaptive distribution flexibility is reflected in the diverse fleet, while flexible payment options influence the performance of the distribution network. Regarding channels, the company employs social media, digital applications, and physical media such as billboards to reach customers. Barus et al. (2023) note that distribution channels include both physical routes and communication media that foster trust. The integration of digital applications allows direct linkage between marketing and operations, aligning with Anwari et al. (2024), who highlight digital transformation's role in enhancing communication channel efficiency and competitiveness.

In terms of customer relations, the company maintains loyalty through discounts, cashback, and reward programs, aligning with Osterwalder and Pigneur (2013), who emphasize that customer relationship management enhances retention and engagement. Meanwhile, revenue primarily comes from freight services based on distance and weight, with a cost structure combining fixed and variable costs, as highlighted by Wijaya (2016) and Setiawan (2018) in balancing cost efficiency and revenue growth.

The company's key resources consist of technology-based applications, skilled human resources, and investor capital. According to Akhmetshin et al. (2018), the success of internal control in modern management depends on the quality of human resources and integrated information systems. The company combines physical and intellectual resources to enhance operational effectiveness, focusing on digital platform development, cargo fleet relationship management, and real-time shipment monitoring. Strategic

partnerships with fleet owners, shipping companies, and investors further strengthen its operations. Yu et al. (2013) highlight that cross-institutional cooperation enhances relational performance, while Henk (2020) adds that effective control requires institutional coordination for efficiency and legitimacy.

In the context of internal control, the company has implemented mechanisms across all business stages, from cargo and fleet searches to goods delivery and payment collection. However, weaknesses remain in fleet partner verification, which could lead to fraud. Li et al. (2020) state that effective internal control relies on the COSO framework's five components: control environment, risk assessment, control activities, information and communication, and monitoring. Thus, the company must strengthen risk assessment and control activities through stricter partner validation and audits, ensuring compliance, efficiency, and integrity within its digital-based control system.

The results of this study indicate that the company has integrated technology-based business model components with an adaptive internal control system. Digital companies need to regularly update their audit and verification mechanisms to minimize potential irregularities. The digital transformation implemented also reinforces the view that technological innovation is a major factor in enhancing the competitiveness of the national logistics industry. Hence, success depends not only on digital innovation but also on the implementation of strong internal controls, strategic collaboration, and consistent maintenance of trust with customers and business partners.

CONCLUSION

The results of this study reveal that PT. X's internal control system and business model require significant reinforcement to operate more effectively and efficiently. The main findings show weaknesses in the fleet partner verification process, the optimization of digital application features, particularly the cargo search function, and the high operational costs in the mid-mile enterprise fulfillment division. These factors collectively reduce financial efficiency and increase the risk of fraud in the partner registration and payment process.

From a practical perspective, these findings underline the need to strengthen risk assessment and control activities in accordance with the COSO framework. Enhancing digital verification, optimizing application use by cargo owners, and evaluating the cost structure can improve transaction accuracy, reduce fraud potential, and increase profitability. This study reinforces the relevance of integrating the business model canvas and COSO internal control framework as a dual analytical approach for mapping value creation while ensuring operational integrity in digital logistics platforms.

This research is limited to qualitative analysis within a single division and company context, thus restricting the generalization of findings. Future studies should include comparative analyses across multiple logistics companies or apply quantitative validation methods to measure the relationship between business model elements, internal control effectiveness, and financial outcomes. Strengthening these areas will contribute to developing more sustainable and competitive digital logistics models in Indonesia.

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