Proceedings of the International Conference on Industrial Engineering and Operations Management

Publisher: IEOM Society International, USA DOI: 10.46254/EU08.20250314

Published: July 2, 2025

# A Case Study of Operational Strategy of a Cocoa Processing Company by Employing Business Model Canvas

# Yue-Yang Chen

Department of Digital Media Design
Tzu-Hui Institute of Technology
Pingtung, Taiwan
Department of Business Administration
I-Shou University, Taiwan
Kaohsiung, Taiwan
ray@isu.edu.tw

# **Lan-Chien Huang**

Department of Early Childhood Educare Tzu-Hui Institute of Technology Pingtung, Taiwan lancyhuang320@hotmail.com

# **Hui-Ling Huang**

Department of Business Administration Chang-Jung Christian University Tainan City, Taiwan ling@mail.cjcu.edu.tw

# Senh-Quay Nim

Graduate Program in the Department of Business Administration I-Shou University Kaohsiung, Taiwan chenray601@gmail.com

#### **Abstract**

Cocoa powder and chocolate are currently highly popular products among the public, leading to the growth and development of the cocoa industry, transforming cocoa beans into powder and various derived products. In Vietnam, the cocoa production and processing industry remains in a developmental stage, predominantly operated by small and medium-sized enterprises. Compared to other industries, these businesses are generally disadvantaged regarding capital, human resources, and competitiveness. This study adopts a qualitative approach to investigate a case company in Vietnam's cocoa industry. Through field observation, interviews, and the collection of relevant documentation, this research seeks to understand the business model of the case company. The analysis is guided by the Business Model Canvas proposed by Osterwalder and Pigneur, which encompasses nine key components: key partners, key activities, key resources, value propositions, customer relationships, channels, customer segments, cost structure, and revenue streams. The objective is to examine how this cocoa production and processing enterprise creates and captures value. Based on the findings, the study proposes recommendations to provide practical insights and references for other enterprises engaged in similar business contexts.

# **Keywords**

Cocoa processing company, Cocoa industry, Business model, Business model canvas, case study

#### 1. Introduction

Cocoa is a tropical evergreen plant native to South America, now widely cultivated across Africa, Southeast Asia, and Latin America. Cocoa trees can only grow in regions located between 20 degrees south and 20 degrees north latitude, near the equator. Cultivated through seeds, cuttings, or seedlings, cocoa trees require an average annual temperature between 18°C and 28°C, high humidity, annual precipitation of no less than 1,000 mm, and altitudes ranging from 30 to 300 meters above sea level. They thrive in deep, potassium-rich, heavy loam or light clay soils, especially those derived from volcanic materials and weathered granite, diorite, shale, and gneiss. The cocoa tree can grow up to 15 meters tall, with broad leaves and small white flowers with pink sepals, which grow directly from the trunk and branches. The fruit takes about 4 to 6 months to mature and is harvested twice a year, with the primary harvest season occurring between October and December. The development of cocoa trees is slow and delicate; they typically begin to bear fruit after 5 to 7 years of cultivation, reaching peak productivity at around 25 years, after which productivity gradually declines. The pod-shaped fruits, measuring 15 to 30 cm long, are green when unripe and contain 20 to 100 seeds. After harvest, the beans undergo several days of fermentation to turn reddish brown and develop their characteristic aroma, after which the pulp is removed to extract the cocoa beans. A five-year-old cocoa tree averages about 3 kilograms of dry beans. Cocoa beans contain 50% to 60% cocoa butter, theobromine, and caffeine. Cocoa liquor is extracted through fermentation, drying, and grinding, an essential raw material for cocoa powder and chocolate production.

In 2005, the Vietnamese Ministry of Agriculture and Rural Development (MARD) established the Vietnam Cocoa Coordination Committee (VCCC) to support policy formulation related to cocoa production. In 2006, a standard system for cocoa trees and products was issued. To promote the development of cocoa cultivation, MARD announced Decision No. 2678 on September 14, 2007, aiming to expand cocoa cultivation to 40,000 hectares by 2015 and 60,000 hectares by 2020. However, various challenges have led to a dramatic decline in cultivated areas. Key factors include price volatility, particularly low prices in 2012, 2013, and 2016. Moreover, green-skinned pomelo, durian, coconut, and orange offer higher economic returns, prompting farmers to switch to these alternatives. In addition, certain cocoa cultivation areas are ecologically unsuitable regarding land and farming conditions. The scattered and small-scale nature of cocoa plantations hinders intensive investment, resulting in poor growth and low yields. Although some provinces developed cocoa promotion policies, limited resources have restricted implementation, with many approved programs receiving inadequate follow-through (Pari et al. 2023). Further challenges include inappropriate planting techniques, excessive planting density, lack of pruning, insufficient fertilization, and general neglect, which lead to poor orchard health and low productivity. Moreover, weak connections between production and consumption channels result in reliance on numerous intermediaries, ultimately reducing growers' incomes.

The Business Model Canvas developed by Osterwalder and Pigneur (2010) is the most recognized and widely adopted among existing frameworks. It synthesizes standard foundations of business model concepts into nine components that reflect how an enterprise creates and captures value: key partners, key activities, key resources, value propositions, customer relationships, customer segments, channels, cost structure, and revenue streams. These nine elements cover four principal business areas: customers, product offerings, infrastructure, and financial viability. The business model acts as a blueprint that enables the strategy to be implemented through structured processes, systems, and organizational frameworks. The model is a powerful tool for description and analysis, often called the Business Model Canvas, or BMC (Razabillah et al. 2023; Teece 2010). Through visual representation, the BMC facilitates a shared language for designing and discussing abstract business models (Ainun et al. 2024; Dewi et al., 2024). This framework has also been applied in Vietnam's manufacturing and service sectors, offering a comprehensive evaluative lens for enterprise operations.

Given that the cocoa industry is relatively new in Vietnam yet increasingly recognized by both enterprises and the government, this study applies the Business Model Canvas to analyze the operational context of cocoa-related businesses in Vietnam and propose actionable improvements. Based on the above research motivation, this study adopts a qualitative case study approach focusing on Trung Duc Company, a cocoa production and processing enterprise in Vietnam. Through the analysis of key elements within its business model, the study aims to provide a multidimensional understanding of the company's operational structure, areas for innovation, and potential avenues for improvement. The findings are intended to serve as references for current stakeholders and prospective entrants into the industry, offering guidance for setting strategic goals and long-term development plans. Therefore, the objectives of this study are as follows:

1. To examine the status of the cocoa processing industry in Vietnam.

- 2. To analyze and understand the business model of the case company by employing the business model canvas.
- 3. To offer practical managerial recommendations for cocoa production and processing entrepreneurs.

#### 2. Literature Review

# 2.1 Characteristics of the Cocoa Processing Industry in Vietnam

Cocoa beans were likely introduced to Vietnam by the French colonial administration in the 19th century; however, the crop did not take root then. In recent years, the global surge in chocolate demand, particularly in developing countries, has drawn increased interest from international chocolate manufacturers toward Vietnam, where the supply of high-quality cocoa beans remains relatively untapped.

According to statistics from the International Cocoa Organization, a significant aging of cocoa trees in Côte d'Ivoire—the world's largest cocoa-producing country—has brought global attention to Vietnam's cocoa harvest potential. The Vietnamese government's ambition to foster the development of high-quality cocoa products has also attracted the interest of international stakeholders. Currently, the Vietnamese cocoa industry stands at a crossroads, facing a strategic decision between prioritizing quality or quantity. Vietnam is well known for producing low-cost agricultural commodities, particularly coffee, supplying approximately 50% of the world's Robusta beans. Some projections have indicated that by 2020, the global cocoa market will face a supply shortfall of one million metric tons. According to data from the Crop Production Department, Vietnam's cocoa bean production in 2018 amounted to only 5,704 metric tons per year—a significant gap compared to Côte d'Ivoire's annual output of 1.4 million metric tons.

Due to suboptimal yields, the complexity of post-harvest processing, and the intricacies of fermentation, cocoa cultivation in Vietnam has yet to see widespread development. Over recent years, the total cultivated area for cocoa has been declining. According to the General Statistics Office of Vietnam, 38 enterprises are engaged in the cocoa processing industry. These enterprises vary considerably, with the smallest having a registered capital of approximately VND 1 billion (roughly NT\$1.176 million) and the largest, reaching up to VND 63 billion (approximately NT\$74.1 million). Most cocoa processing companies are classified as small or micro-scale enterprises. Consequently, their limited financial and operational capacity results in outdated and rudimentary processing methods, typically restricted to grinding cocoa beans into powder. This yields relatively low economic value and limits the industry's potential for high-end product development.

#### 2.2 Business Model

The term "business model" first appeared formally in the 1970s in computer science journals, describing the connections and structures between data and processes (Dottore 2014; Konczal 1975). With the rise of ecommerce, many newly established companies began to operate their businesses differently from traditional enterprises, prompting the need to distinguish themselves by adopting novel approaches. Consequently, the term "business model" became widely referenced, particularly in start-up discussions (Jensen 2013; Susanto et al. 2024). However, its use was often ambiguous and inconsistent. Due to its frequent and casual application without a precise definition, the concept was often conflated with strategy (Stähler 2002). This confusion was further compounded by the interchangeable use of the terms "business model" and "strategy" to describe any mechanism believed to generate competitive advantage (Mason 2019; Winterhalter et al. 2017).

As a result of translation variations, the term "business model" has also been rendered as "operating model," "enterprise model," or "management model" in various contexts (Zott 2010). The term "business model" will be used consistently throughout this study. Several scholars argue that the definition and conceptual framework of a "business model" can be difficult for the public to comprehend, and it is often easily confused with other management terminology. Some researchers have suggested that within the field of management studies, the business model may be one of the most frequently defined yet most divergent and perplexing concepts (e.g., Haftor et al. 2025; Huy and Vu 2025; Massa et al. 2017). Therefore, a business model can be understood as a conceptual framework depicting a company's operation. It encompasses multiple constituent elements and the relationships between them (Alt and Zimmermann 2001). Since the business model concept emerged, scholarly attention has consistently emphasized the interconnectivity and integration of these elements.

Among the business model descriptions, the most widely used typology is the Business Model Canvas (BMC) proposed by Osterwalde and Pingneur (2010). The BMC has become an influential framework for startups and established enterprises to design clear, effective, and sustainable strategies. The BMC is a visual framework that illustrates the key components of an enterprise's value creation and delivery system (Osterwalder et al. 2005). It is widely applied in the development, analysis, and strategic planning of both new ventures and existing businesses. Furthermore, it is an analytical tool for understanding a company's current operational structure. The BMC generally consists of nine fundamental building blocks, representing the core elements of any business model.

These include Key Partnerships, Key Activities, Value Propositions, Customer Relationships, Customer Segments, Key Resources, Channels, Cost Structure, and Revenue Streams (as shown in Figure 1). These nine components are the foundational pillars of an enterprise's organizational logic. By utilizing the BMC, companies can enhance business performance through a comprehensive and visual representation of all essential elements (Osterwalder and Pigneur 2002). This intuitive layout identifies the interconnections among components, enabling firms to systematically refine the value they offer to customers and improve strategic alignment. For entrepreneurs establishing new ventures, the BMC facilitates early-stage planning and supports critical strategic decisions from inception. As Magretta (2011) notes, "A business model is essentially a system of planning that explains how a company creates and delivers value to its stakeholders." In essence, every business operates based on an underlying business model. The BMC provides a structured method to articulate how an organization creates, delivers, and captures value. Through thoughtful visual design, the model presents the nine key components as interrelated blocks, offering a holistic view of the business logic.

As can be seen from Figure 1, at the heart of the entire Business Model Canvas lies the Value Proposition. The right-hand side of the canvas focuses on how this value proposition connects with the target customers through various forms of interaction and relationship-building. In contrast, the left-hand side of the canvas illustrates the key resources, activities, and partnerships required to deliver this value proposition. However, the left half of the canvas describes the "product or service" aspect of the business model. From the identification of key resources, key activities, and key partners, one can derive the cost structure. On the other hand, the right half outlines the "market and customers" to which the product or service is directed. One can determine the revenue streams by analyzing the customer segments, value propositions, relationships, and channels. Subtracting costs from revenues

yields the profit model of the business. The core element that bridges the "product" and the "market" is the value proposition, the central logic for creating and delivering value.

Key Partners The network of suppliers and partners that make the business model work.	Key Activities  The most important things an agency must do to make its business model work	Value Proposit The bene citizens of expect from services.	fits an	Customer Relationships The types of relationships an agency establishes with specific citizen segments.	Customer Segments  The different groups of people or organisations an agency aims to reach and serve.
	Key Resources  The most important assets required to make a business model work.			Channels How an agency communicates with and reaches its citizen segments to deliver a value proposition.	
Cost Structures  All costs incurred to operate a business model.			Revenue Streams The revenue streams within an agency's business model.		

Figure 1. The Business Model Canvas (Osterwalder and Pigneur, 2010)

# 3. Research Design

# 3.1 Methodology

A business model refers to the conceptual framework that describes how an organization creates value, delivers it to customers, and captures profits in return (Osterwalder 2010). This study adopts Osterwalder's (2010) Business Model Canvas as the analytical tool to examine the company's future operational goals and strategic directions. The objective is to derive managerial implications that are both practically applicable and generalizable. Given that the Business Model Canvas encompasses key elements of organizational operations, this study selects Trong Duc Company, a cocoa industry enterprise in Vietnam, as the case subject. Through in-depth analysis, this study

aims to provide practical and pragmatic recommendations for stakeholders in the cocoa industry.

The case study method, initially introduced in 1870 by Harvard Law School, was originally used to train students in applying legal principles. Over time, it has been widely adopted in medical and management education, becoming one of the most influential pedagogical and research tools. After decades of development, case studies are broadly applied across disciplines such as psychology, sociology, political science, economics, and applied fields including public infrastructure and educational counseling (Yin 2002). Qualitative research is an approach that seeks to construct a holistic and in-depth understanding of social phenomena. Researchers must immerse themselves in natural settings, interact closely with research participants, and adopt one or more data collection techniques to observe, learn, and internalize the social world from the participants' perspectives. This process facilitates a comprehensive and profound interpretation of social behaviors or phenomena. According to Yin (2001), the selection of a research method depends on three conditions: (1) the type of research question; (2) the degree of control the researcher has over actual behavioral events; and (3) whether the research focuses on contemporary or historical phenomena. When research questions begin with "how" or "why," when the researcher has little control over the events, or when the phenomena being studied occur within real-life contexts, the case study method is considered a particularly suitable strategy.

Case study research is a qualitative method characterized by individualized, in-depth, and descriptive inquiry. It aims to uncover the similarities and differences across cases by deeply understanding each one, thereby revealing meaningful patterns. It is especially appropriate for studies using "organizations" as the unit of analysis and is commonly applied to practice-based problems (Yin, 2001). While scholars may offer slightly varying definitions of the case study method, its core characteristics can generally be summarized as follows: (1) conducting research in natural settings to study current phenomena; (2) employing multiple methods for data collection; (3) focusing on individual cases, with subjects ranging from a single entity to multiple cases; (4) lacking variable control or experimental design; (5) being most suitable for exploratory phases where prior research is limited; and (6) enabling in-depth understanding of the case, including perspectives of participants directly involved in the phenomenon (Benbasat et al. 1987; Gall et al. 2007).

#### 3.2 Research Methodology

According to the underlying meaning of case study methodology, a case is a descriptive account of a real-world situation, typically presented in written form, to stimulate critical thinking. It allows readers to identify the core facts, pinpoint key problems, and explore viable solutions. As Afuah and Tucci (2003) emphasized that a case presents interrelated facts that provide context for a problem and aims to uncover feasible resolutions. The events and information described must be authentic and not fabricated, and the case must objectively portray one or several central issues.

Case selection is a critical component of case study research. It is essential to consider whether a case possesses distinctive characteristics or represents a broader trend within the industry. Only under these conditions can the research findings be deemed valuable and applicable. This study adopts a single-case research design to analyze the business model of Trong Duc Company in Vietnam and offer practical management insights to current stakeholders and future entrants into the industry. Trong Duc Company was established on May 31, 2005, and has since worked closely with farmers in Đồng Nai Province, supporting them in cultivating, maintaining, and expanding cocoa plantations with confidence. The company has launched cocoa-based products in the market, including cocoa powder, chocolate, cocoa liquor, and wine, with cocoa powder as its primary product. According to Mr. Nghiêm, the company's General Director, Trong Duc achieved total revenue of VND 2.53 billion in 2018, with after-tax profits of VND 433 million, representing a 5.6% year-on-year increase. The company's workforce size varies from 80 to 110 employees. In addition to purchasing cocoa pods from local farmers, Trong Duc cultivates 12 hectares of cocoa. During harvest, the company recruits many seasonal workers to meet labor demands.

#### 3.3 Data collection

The diversity of data sources and the variety of data types are key concerns in case study research (Yin, 2001). This study's primary data sources include documents and archival records, interviews, direct observations, participant observations, and physical artifacts. Although these five sources of evidence are distinct, they are highly complementary. Therefore, a well-conducted case study should incorporate as many different types of evidence as possible to enable data triangulation and enhance the overall quality and credibility of the research.

In addition, before conducting on-site visits and interviews, this study sent the interview outline, relevant research materials, and a checklist of required data to the interviewees. The purpose was to allow the participants to prepare and provide the necessary information for the research. Before commencing the interviews, the research objectives

and the concept of the business model were further explained to the management of Trong Duc Company in Vietnam to ensure mutual understanding. During the interviews, the researcher guided and assisted the interviewees in clarifying questions to avoid responses deviating from the research topics and ensure that the answers were valid and relevant. Data collected from multiple sources were labeled, categorized, and organized systematically to establish a searchable case study database. This approach will enhance the research's rigor, reliability, and overall quality.

# 4. Case study and findings

#### 4.1 Interview outline

To explore the development of the cocoa industry in Vietnam, this study first conducted a literature review, followed by semi-structured interviews with relevant stakeholders. An interview guide was prepared in advance to ensure systematic data collection. The interview questions were designed based on the nine elements of the Business Model Canvas proposed by Osterwalder and Pigneur (2010) in Business Model Generation. The interview guide covered the interviewees' experiences, perceptions, feelings, and personal suggestions. All interviews were fully recorded and transcribed verbatim for subsequent analysis. A total of 24 questions were developed, categorized as follows: Value Propositions (3 questions), Key Partnerships (3 questions), Key Activities (2 questions), Key Resources (3 questions), Customer Relationships (2 questions), Customer Segments (4 questions), Channels (3 questions), Cost Structure (2 questions), and Revenue Streams (2 questions). These questions are presented in Table 1.

Table 1. Interview questions on the nine elements of BMC

BMC	Interview Questions		
elements			
VP 2	1. What is Trong Duc's brand and market positioning?		
	2. Who are Trong Duc's main competitors, and how does it differentiate itself?		
	3. How do customers perceive Trong Duc? What value does Trong Duc deliver to them?		
KP 5	4. Does Trong Duc have any long-term partners?		
	5. How does Trong Duc select its business partners?		
	6. How does Trong Duc collaborate and coordinate with its partners?		
I KA I	7. What should Trong Duc focus on as its core business activities?		
	8. What services does Trong Duc provide to its primary customer segments?		
KR 10	9. What resources does Trong Duc invest in to achieve its business goals?		
	10. What resources are required to serve its customer base effectively?		
	11. What key resources are essential for its operations?		
	12. How does Trong Duc maintain relationships with its existing customers?		
	13. Are there dedicated staff members responsible for managing customer relationships?		
CUS 1:	14. Who are the primary and secondary customer segments of Trong Duc?		
	15. What are the characteristics of Trong Duc's customer base?		
	16. What new customer segments does Trong Duc plan to develop?		
	17. How does Trong Duc differ from other competitors in the industry?		
CH 18	18. What are the features of Trong Duc's current channels, and what are the challenges in		
	developing new ones?		
	19. How does Trong Duc promote its services to a broader audience?		
	20. How are its virtual channels (e.g., Facebook, website) managed and promoted?		
	21. What are the major cost items in Trong Duc's operations?		
	22. What measures have Trong Duc adopted to reduce or save costs?		
2	23. What are Trong Duc's main operating items?		
	24. What are the significant sources of revenue, and what proportion of total income do they		
	represent?		
	represent.		

Note: VP: Value Propositions; KP: Key Partnerships; KA: Key Activities; KR: Key Resources; CR: Customer Relationships; CUS: Customer Segments; CH: Channels; COS: Cost Structure; RS: Revenue Streams

#### 4.2 Results and Findings

#### 4.2.1 Value Propositions

We summarized the replies below to the three proposed questions when conducting the interview.

(1) Trong Duc is a local enterprise classified as a small to medium-sized business. Accordingly, our primary target customers are those who prioritize product affordability and place less emphasis on packaging aesthetics. In the

future, we aim to gradually expand our customer base to include younger consumers, working professionals, and individuals willing to pay a premium for high-quality products. Our core philosophy is "serving both farmers and customers." A distinctive feature of our business model is that local farmers supply us with raw materials and serve as our customers. Moreover, they actively help promote our products within the community, extending our market reach.

- (2) Trong Duc has consistently maintained a leading position in product quality and sales performance in the mid-to-low price segment. However, under the influence of globalization, an increasing number of foreign enterprises, backed by substantial financial resources, have entered the Vietnamese market, emerging as formidable competitors. Notable examples include global brands such as Milo and Ovaltine.
- (3) Most customers choose Trong Duc's products because they offer a reasonable balance between price and quality, providing value that aligns with consumers' willingness to pay. This reflects our core business philosophy. In addition, Trong Duc's cocoa powder is a domestically produced product and a source of national pride. Combined with the "Vietnamese people prioritize Vietnamese goods" campaign, it offers consumers a compelling and patriotic choice in purchasing decisions.

Value proposition is the core reason customers choose a particular company over its competitors. It consists of a unique combination of value elements that benefit target customers by addressing their problems and fulfilling their needs. A strong value proposition can help a business secure its position in existing markets and expand its market presence. Trong Duc Company's core value is "serving both farmers and customers." By taking both parties' perspectives and genuinely empathizing with their thoughts and needs, Trong Duc aims to foster mutual understanding. The company's mission is to support farmers cultivating cocoa trees to ensure a stable income and secure production conditions while allowing consumers to enjoy high-quality products at reasonable prices. Although this core value may appear simple, upholding both principles that serve farmers and consumers in a world filled with countless distractions and temptations is tough.

In summary, Trong Duc has clearly defined its market position, adhering firmly to its value proposition of supporting both farmers and consumers. The company strives to deliver its core mission by maintaining cost efficiency and maximizing effectiveness.

# 4.2.2 Key Partnerships

We summarized the replies below to the three proposed questions by conducting the interview.

- (1) Regarding raw material sourcing, Trong Duc has signed procurement contracts with nearly 30 local farmers in the region to ensure a stable supply of raw materials required for production. This approach secures our input resources and provides farmers with economic security. On product distribution: our products are distributed through partnerships with major supermarket chains, including Big C, Co-op Mart, Lotte Mart, and Aeon. In addition, we collaborate strategically with convenience store chains such as Family Mart, VinMart, and B'Smart. Beyond these retail partners, our products are distributed through a network of regional agents, enabling us to reach a broad and diverse customer base across Vietnam.
- (2) As a small and medium-sized enterprise (SME), Trong Duc is always open to collaborating with distributors nationwide. However, our prospective partners must meet at least one of the following criteria: either possess a certain level of market recognition or be willing to enter into a contractual agreement of no less than six months.
- (3) The marketing, research and development, sales, and supply departments are responsible for identifying, coordinating with, and establishing partnerships. The CEO of Trong Duc oversees and takes full responsibility for the performance of these collaborations. Key partners refer to specialized individuals or entities that assist in accomplishing specific tasks. Through strategic partnerships, enterprises can optimize their business models, reduce operational risks, and access essential resources. As revealed through interviews, Trong Duc's key partners include major supermarket chains, convenience store franchises, and various distributors. All current strategic partners of Trong Duc were carefully selected through multiple rounds of collaboration and evaluation. Trong Duc has established numerous long-term partnerships. The company's leadership invested considerable effort in data collection and field visits to identify suitable partners. While not all selected partners met expectations, this did not deter Trong Duc from adhering to its core principles of collaboration

In summary, Trong Duc seeks partners with strong brand recognition or the capacity for long-term cooperation. The company does not prioritize quantity over quality when selecting strategic partners; instead, it insists on choosing the most suitable collaborators for mutual growth. Trong Duc expects that when key partners fall short

of expectations, they are willing to improve and align with the company's pace and standards. The fundamental premise of collaboration is that the partner must demonstrate both potential and the right attitude.

#### 4.2.3 Key Activities

By conducting the interview, we summarized the replies from the two proposed as explained below.

- (1) Trong Duc operated across three primary business segments: cocoa powder and related products, cocoa beverage shops, and guided farm tours. Among these, cocoa powder constitutes our core offering, with an average monthly output of 12 metric tons of finished cocoa powder. In addition to this, we also produce chocolate, cocoa liquor, and cocoa butter.
- (2) Trong Duc's primary customer services are quantity, quality, and on-time delivery. They are consistently committed to fulfilling these pillars, with a firm promise to offer the most competitive pricing in the market. Key activities refer to the most essential and indispensable actions that a company must undertake. These activities are necessary to create the value proposition, access the market, maintain customer relationships, and generate profit. As a company operating in the cocoa industry, Trong Duc's key activities focus on offering a wide range of cocoa-related products, including cocoa powder, chocolate, cocoa liquor, and cocoa butter. In addition to its product offerings, Trong Duc also operates a cocoa beverage shop and organizes cocoa farm tours for experiential learning. However, its core business remains centered around cocoa powder production. Trong Duc's operational focus lies in strategic coordination. The sales and supply department first gathers and analyzes demand from key partners, based on which it plans production schedules, coordinates with raw material suppliers, and sets production budgets. These processes require comprehensive planning and execution by the entire Trong Duc team to ensure the company's operations run efficiently and effectively.

#### 4.2.4 Key Resources

We summarized the replies below to the proposed questions by conducting the interview.

- (1) Trong Duc is not authorized to issue shares as a limited liability company. Their financial resources have depended mainly on bank loans and contributions from members and relatives.
- (2) Through the official website, Facebook page, and hotline, the Sales and Supply Department is responsible for addressing all customer needs, providing after-sales service, and responding to customer inquiries and feedback.
- (3) Trong Duc's business operations require three key resources: human resources, costs, raw materials, and fuel. Among these, we consider human resources to be the most critical.

Key resources refer to the essential assets required to operate a business model. Both tangible and intangible resources and assets owned by the enterprise play a crucial role in enabling it to enter the market and generate revenue. Compared to many other industries, the cocoa industry has a distinctive characteristic: its most critical resource is human capital. Trong Duc has sufficient departmental structures to ensure smooth operations as a company engaged in processing and trade. This organizational setup enables Trong Duc to efficiently fulfill tasks in collaboration with its key partners. Therefore, staff in each department are expected to possess the professional capabilities necessary to carry out their specific duties effectively. When key partners request large quantities, Trong Duc's personnel are prepared to work overtime to meet these demands and deliver high-quality outcomes. The production timeline is typically extremely tight, requiring significant human resources throughout the entire process, from planning to product delivery. In conclusion, human resources are the most vital key resource for Trong Duc, and the company must carefully maintain and manage this asset to sustain its business operations.

#### 4.2.5 Customer Relationships

We summarized the replies below to the proposed questions by conducting the interview.

- (1) Ensuring consistent product quality is the most effective strategy to maintain a stable customer base. At the same time, Trong Duc demonstrates genuine interest and concern for primary retail channels, including chain supermarkets, convenience stores, and independent retail distributors. They are firmly committed to offering our partners the most competitive prices and the highest possible discounts on our products.
- (2) Trong Duc has not yet established a dedicated department for managing partner relationships. This responsibility is presently shared by customer service personnel within both the sales and supply departments, under direct supervision and support to ensure operational effectiveness by the CEO. Maintaining customer relationships necessitates a deep understanding of customer preferences and needs. Accurately capturing customers' emotional resonance toward the company and designing products and services tailored to their requirements, even proactively anticipating their future expectations, is essential for fostering long-term supply and demand relationships. This embodies the concept of sustainable business development.
- (3) Trong Duc has been operating for fifteen years and has adopted the motto "Everyone Loves Cocoa" as a

guiding principle in customer relationship management efforts. They aspire for each of our products to resonate deeply with our customers. Business has a well-known saying: "The customer is always right." Customers come with their hopes and demands; even when they cannot clearly articulate them, they expect Trong Duc to understand. Their approach to customer service involves both persuasion and patient explanation. When customers may act irrationally or make unreasonable demands, Trong Duc responds with empathy and rational communication, always aiming to clarify the actual circumstances.

While Trong Duc faces the pressure of rising costs and time constraints, our customers are also under stress from work, relationships, or daily life. Therefore, they make a conscious effort to consider issues from our customers' perspective. At the same time, as the primary point of contact, they also hope that their customers will extend the same understanding and consider our position.

In conclusion, the core value proposition upheld by Trong Duc centers on serving farmers and customers. Trong Duc firmly believes that staying attuned to the evolving needs of our customers is vital. Every employee at the company is responsible for customer service; this is the foundation of our corporate culture.

#### 4.2.6 Customer Segments

We summarized the replies below to the proposed questions by conducting the interview.

- (1) Trong Duc's primary customer base consists of low- to lower-middle-income households (earning less than USD 800 per month per household). Recently, the company has begun introducing premium products targeting middle- to higher-income consumers, including chocolate, cocoa liqueur, and cocoa butter. Low-income consumers have traditionally preferred budget-friendly products, often placing price considerations above quality, as long as they fit their financial constraints. However, there has been a recent and noticeable decline in customer retention, with some consumers abruptly ceasing to use Trong Duc's products, indicating a relatively low level of brand loyalty.
- (2) Although Vietnam continues to experience robust economic growth, with an annual growth rate exceeding 6%, the country is still classified as a lower-middle-income economy, with a per capita income of approximately USD 2,600 per year. Given this economic reality, Trong Duc remains committed to serving its core target segment: low- to lower-middle-income consumers. These consumers are now generally able to meet their basic living needs and are beginning to demand higher-quality products, provided the pricing remains affordable. The company plans to gradually expand its customer base by attracting younger demographics, working professionals, and individuals willing to pay a premium for high-quality products.
- (3) Trong Duc is currently the only Vietnamese cocoa powder brand to have successfully entered all five major supermarket chains in the country: Big C, Lotte Mart, Aeon, Co-op Mart, and VinMart. The cocoa industry in Vietnam holds promising growth potential, attracting ongoing investment from multinational corporations seeking to establish or expand their presence in this emerging market. Consequently, Trong Duc faces significant competitive challenges from established competitors and new market entrants.

In summary, Trong Duc's target customers are primarily low- to lower-middle-income consumers, and the company operates through wholesale partnerships with large-scale supermarkets, convenience stores, and distributors. Its core product offering remains cocoa powder. Nevertheless, the company is expanding its market reach to include young professionals and high-value consumers willing to invest in premium-quality cocoa products.

#### 4.2.7 Channels

We summarized the replies below to the proposed questions by conducting the interview.

- (1) To ensure that customers receive the most favorable pricing, Trong Duc employs two types of distribution channels. First is the Zero-level Channel (Direct Marketing Channel): This channel involves a direct connection between the company and the end consumers, with no intermediaries involved. In this model, our products are sold directly to the final customers, reducing intermediary costs and enhancing price competitiveness. The second one is the One-level Channel: This channel includes a single intermediary besides the company and consumers. In consumer goods markets, this intermediary is typically a retailer. For instance, the distribution partners include major retail chains such as Big C, Lotte Mart, Aeon, and various authorized distributors.
- (2) The company has actively and proactively sought partnerships with reputable large-scale supermarkets and convenience store chains to expand its market presence in major cities. In addition, we are fostering collaborations with small-scale distributors in rural and local communities to ensure that our products reach every corner of the country. Due to limited financial resources, we cannot invest in advertising campaigns

through television or mass media. Instead, we focus our promotional efforts on targeted platforms such as websites related to food, sports, and tourism. We also engage in localized sponsorships of sporting events, provide scholarships for outstanding and underprivileged students, and participate in charitable initiatives that help promote our products to the broader public.

(3) The website, Facebook, and customer service hotline are the three primary channels through which customers contact the company. These platforms showcase all their products and their respective prices. From 8:00 AM to 10:00 PM, the customer service representatives are available to respond to inquiries and process customer orders.

With the continuous advancement of technology, businesses today have an increasing number of channel options. In addition to traditional physical retail outlets, virtual channels have become one of the key avenues for boosting sales. Accordingly, Trong Duc also relies on buzz marketing, which capitalizes on word-of-mouth promotion, whereby existing customers recommend new customers through informal communication networks. Another important sales channel strategy employed by Trong Duc lies in its core value proposition—"Serving both farmers and customers." This guiding principle inspires customers and suppliers to voluntarily promote the company or broker potential collaborations driven by shared values and trust in the brand. Furthermore, with a strong emphasis on credibility, Trong Duc is committed to providing only the best quality products. As a result, customers tend to associate the brand with reliability and are likely to think of Trong Duc whenever service or product needs arise. Communication methods have been revolutionized in the age of smartphones and widespread internet access. Instant messaging platforms such as Facebook, Zalo, and email enable businesses to engage in real-time, efficient, and streamlined communication with various stakeholders.

In summary, Trong Duc has adopted diverse business development channels. Whether engaging with customers or suppliers, the company prioritizes real-time communication, emphasizing seamless and transparent information exchange. Trong Duc employs dynamic (interactive) and static (informational) communication strategies to minimize the risk of misinterpretation or expectation gaps between stakeholders. By leveraging instant messaging technologies, the company remains agile in responding to market demands and strives to fulfill customer needs through flexible, multi-channel approaches.

#### 4.2.8 Cost Structure

We summarized the replies below to the two proposed questions by conducting the interview.

- (1) At the initial stage of operations, the investment in machinery and the associated operating costs represented a substantial expenditure, accounting for more than 50% of the total production cost. To date, the three primary cost components for the company are personnel expenses, marketing expenditures, and raw materials and fuel, which account for approximately 16%, 21%, and 38% of total expenditures, respectively.
- (2) Cost reduction has consistently been a significant concern for our company. Recently, the company has implemented the following measures to control and reduce operational expenses. First is conserving raw materials and fuel. Since material consumption constitutes a significant portion of total costs, we aim to minimize the use of raw and auxiliary materials and fuel without compromising product quality. The second is enhancing equipment utilization and maximizing the efficiency of existing machinery. To achieve this, the company has established comprehensive maintenance and inspection protocols, improved repair quality, and enforced strict adherence to operational procedures. These efforts help prevent equipment breakdowns, extend equipment lifespan, and ultimately increase production output, lowering the cost per unit. The third one is to improve product quality and reduce defective outputs. Poor quality and high rates of defective products lead to unnecessary waste of raw materials, labor hours, and production costs. We strive to minimize the occurrence of nonconforming products to reduce such losses. Finally, promoting a culture of frugality and diligence. The company fosters a spirit of thrift and rigorous cost control throughout all operations. We strictly oppose extravagance and wastefulness and are committed to continually reducing manufacturing expenses through meticulous financial planning and resource management.

The cost structure is the composition of all expenses required to operate a business. According to the interview findings, the most significant portion of Trong Duc's operating expenditures lies in raw materials and fuel, accounting for over 38% of the recorded costs. The company's cost structure primarily comprises personnel, marketing, raw materials, and fuel costs. Trong Duc believes that if a firm can proactively manage the sourcing of raw materials and implement efficient strategies for workforce allocation, it will facilitate gradual business expansion and enhance its competitiveness in the market.

#### 4.2.9 Revenue Streams

We summarized the replies below to the two proposed questions by conducting the interview.

- (1) The company's core business operations encompass a range of cocoa-based products and services, including cocoa powder, chocolate, cocoa liquor, cocoa butter, and cocoa beverage shops, as well as cocoa farm tours and experiential activities. Among these, cocoa powder remains the company's primary product focus.
- (2) In 2018, the company's total revenue reached VND 2.53 billion (approximately NTD 32.43 million). Of this, 93% was generated from the sales of cocoa powder and related cocoa-based products, 6% from the cocoa beverage shop, and only 1% from cocoa farm tour experiences.

Revenue streams refer to the sources of income generated through customers' willingness to pay for the value offered. Trong Duc's ability to satisfy customers and motivate them to purchase its products reflects its distinctive value proposition. To maintain operations, Trong Duc must hold a significant amount of cash reserves. This is because nearly half of its partners operate under a consignment model: they sell Trong Duc's products on its behalf and only settle payments after the products are sold. Specifically, it typically takes one to two months to deliver products to major supermarket chains and convenience stores to complete the sales and receive payment. For distributors, the sales and settlement cycle can take two to three months. Consequently, if Trong Duc lacks sufficient cash reserves, it may be unable to proceed with new plans, even if new customer orders arise.

In summary, Trong Duc's revenue stream is primarily driven by the fulfillment of orders, beginning with internal planning and culminating in product distribution to key business partners. This process ultimately creates the company's income flow.

# 5. Conclusion and discussion

According to the interview results, this study found that Trong Duc Company has integrated various marketing communication methods to optimize effectiveness in achieving its business profitability goals. A well-managed company must deeply understand its needs and select the most suitable customer segments. Trong Duc, a relatively young enterprise with an 18-year history, has gained recognition from numerous domestic and international customers. In contemporary society, where profit often drives corporate decision-making, Trong Duc's adherence to its core value propositions is admirable.

This study adopts the framework of the Business Model Canvas proposed by Osterwalder and Pigneur (2010) in *Business Model Generation*, aiming to help Trong Duc better grasp its business model environment. By utilizing the nine components of the business model—value proposition, customer segments, customer relationships, channels, key resources, key activities, key partnerships, cost structure, and revenue streams—this study designed a set of in-depth interview questions to explore how Trong Duc has managed to secure its position in the cocoa processing industry. It also seeks to understand how the company ensures domestic customers continue using its products without turning to competitors. The findings are summarized as follows.

- 1. Evolving quality standards in the cocoa industry have raised entry barriers and increased competition.
- 2. The value proposition defines the company's culture and future direction.
- 3. While "the customer is king," not all customers are equally valuable. Firms must identify and serve the most suitable target segments.
- 4. Word-of-mouth marketing plays a crucial role in channel strategy.
- 5. Mutual benefit fosters sustainable customer relationships.
- 6. The most valuable assets of a company are its internal personnel.

In summary, this case reveals that the core of Trong Duc's business model lies in its value proposition. The company maintains its culture through a shared revenue and symbiotic approach, focusing exclusively on areas where it excels. This business model may serve as a reference for new entrants. When a company identifies a model that best fits its characteristics, it is well on the path to success. By selecting a unique and representative company as the interview subject, this study provides results that serve as a valuable reference for new entrants. It also assists the company under investigation in refining and innovating its service model, ultimately enhancing competitive advantage. The findings offer actionable insights for industry practitioners and provide a basis for reviewing and rethinking their business models. In Vietnam, the cocoa industry remains an emerging sector. Existing studies primarily focus on cultivation methods, regional distribution, development status, and success factors among farmers. Research on the cocoa *processing* industry is relatively scarce. This study identifies operational weaknesses by analyzing Trong Duc's business model through in-depth interviews while offering a more holistic understanding of industry operations. It also provides insights into the cocoa processing industry's current landscape, challenges, and future trends, laying a solid foundation for further academic explorations.

Due to the complexity of the Business Model Canvas framework, this study was limited to a single case... Including more companies would have yielded a broader understanding of the cocoa industry in Vietnam. Additionally, the limited sample resulted in a smaller volume of qualitative data, which constrained the depth of discussion in certain areas.

#### Reference

- Afuah, A. and Tucci, C.L., *Internet Business Models and Strategies: Text and Cases*, Mcgraw-Hill College, NY, 2003.
- Ainun, P., Rakib, M. and Syam, A. Business model design in developing small businesses: a business model canvas approach, *International Journal of Research and Innovation in Social Science*, vol. VIII., 2024. 10.47772/IJRISS.2024.8080124.
- Alt, R. and Zimmermann, H.D., Introduction to special section on business models, *Electronic Markets*, vol.11, no.1, pp. 3-9, 2001.
- Benbasat, I., Goldstein, D. K. and Mead, M. (1987). The case research strategy in studies of information systems. *MIS Quarterly*, vol. 11, no. 3, pp. 369 386, 1987.
- Dewi, S., Pamudji, A. and Anggitasari, A. Business model canvas for siega autobox automated locker, *SISFORMA*, vol. 11, pp. 63 70, 2024.
- Dottore, A., Business model adaptation in new ventures: are technology-based firms different? *Proceedings of the 28<sup>th</sup> Annual British Academy of Management Conference*, pp. 1-35, Belfast, United Kingdom, September 9 11, 2014.
- Gall, M. D., Gall, J. P. and Borg, W. R., *Educational research: An introduction*, Pearson Education, Boston, 2007. Haftor, D.M., Climent, R.C. and Kallmuenzer, A., Business ecosystems as a way to activate lock-in in business models: a theoretical integration, *International Entrepreneurship and Management Journal*, vol. 21, no. 77, 2025, https://10.1007/s11365-025-01078-5.
- Huy, P. and Phuc, V. Does effectiveness of digital accounting system intensify sustainable business model innovation with mediating role of digital business ecosystem? *Journal of Innovation and Entrepreneurship*, vol. 14, no. 3, 2025, https://10.1186/s13731-024-00444-x.
- Jensen, A.B., Do we need one business model definition? *Journal of Business Model*, vol. 1, no. 1, pp. 61 84, 2013.
- Konczal, Ed., Models are for managers, not mathematicians, *Journal of Systems Management*, vol. 26, pp. 12 15, 1975.
- Magretta, J. Understanding Michael Porter: The Essential Guide to Competition and Strategy. Boston, Harvard Business Press, MA, 2011.
- Mason, R.K., The Practical Application of Business Model Innovation as a Process-Driven, Competitive Strategy in Networked Markets, unpublished Master disseration, Nonash University, 2019, https://10.13140/RG.2.2.15085.44009.
- Massa, L., Tucci, C. and Afuah, A., A critical assessment of business model research, *Academy of Management Annals*, vol. 11, no. 1, pp. 73-104, 2017
- Osterwalder, A. and Pigneur, Y., Business Model Generation, John Wiley & Sons Inc., Hoboken, 2010.
- Osterwalder, A. and Pigneur, Y., An e-business model ontology formodeling e-business, *Proceedings of the 15<sup>th</sup> Bled Conference on E-Commerce*, Bled, Slovenia, June 16-19, 2002.
- Osterwalder, A. and Pigneur, Y., Business Model Generation, John Wiley & Sons:Hoboken, New Jersey, 2010.
- Osterwalder, A., Pigneur, Y. and Tucci, C.L., Clarifying business models: origins, present, and future of the concept, *Communications of the Association for Information Systems*, vol. 15, pp. 1 25, 2005.
- Pari, F., Syarief, R. and Hannan, S., Business development strategy for CV Hadi Corp convection in the domestic market with a canvas business model approach, *International Journal of Research and Review*, vol. 10, pp. 505 512, 2023.
- Razabillah, N., Junaedi, S., Daeli, O. and Arasid, N., Lean canvas and the business model canvas model in startup piecework, *Startupreneur Business Digital (SABDA Journal)*, vol. 2, pp. 72 85, 2023.
- Stähler, P., Business models as an unit of analysis for strategizing, *Proceedings of the International Workshop on Business Models*, Lausanne, Switzerland, vol. 45, no. 7, pp. 2009-2995, 2002.
- Susanto, D. and Hidayati, A., Strategic business development of XYZ gaming using SWOT and business model canvas, *Business Review and Case Studies*, vol. 5, no. 3, 467, 2024.
- Teece, D.J., Business models, business strategy and innovation, *Long Range Planning*, vol. 43, no. 2, pp. 172 194, 2010.
- Winterhalter, S., Weiblen, T., Wecht, C.H. and Gassmann, O. Business model innovation processes in large corporations: insights from BASF. *Journal of Business Strategy*, vol. 38, no. 2, pp. 62 75, 2017.
- Yin, R.K., Case Study: Design and Methods. Bookman, Porto Alegre, 2001.
- Yin, R.K., Case study research: Design and methods, CA: SAGE Publications, Thousand Oaks, 2002.

Proceedings of the 8th European Conference on Industrial Engineering and Operations Management Paris, France, July 2-4, 2025

Zott, C. and Amit, R., Business model design: an activity system perspective, *Long range planning*, vol. 43, no. 2, pp. 216 - 226, 2010.

# **Biographies**

**Dr. Yue-Yang** Chen has been a professor at I-Shou University in Kaohsiung and Tzu-Hui Institute of Technology in Pingtung, Taiwan (R.O.C.), since 2021 and 2025. His research interests include IT/IS/IM strategy, knowledge management, online consumer behavior, and strategic alignment analysis. He has published his research in Journals such as Enterprise Information Systems, Journal of Organizational Computing and Electronic Commerce, Journal of Computer Information Systems, Knowledge-Based Systems, Sensors and Materials, Computers & Education, and Journal of Knowledge Management. He can be contacted at: ray@isu.edu.tw.

**Dr. Lan-Chien Huang** received her Ph.D. from the National Pingtung University of Science and Technology, Taiwan. She is the vice president of Tzu-Hui Institute of Technology in Pingtung, Taiwan. Her research interests include agribusiness management, recreation management, marketing strategy, and landscape design. She can be contacted at: lancyhuang320@hotmail.com

**Dr. Hui-Ling Huang** is an Associate Professor at the Department of Business Administration at Chang Jung Christian University, Taiwan (R.O.C.). Her publications focus on consumer behavior, channel management, and knowledge management. She has published her research in Journals such as Service Business, Journal of Knowledge Management, and Journal of Knowledge Economics. Hui-Ling Huang can be contacted at ling@mail.cjcu.edu.tw

**Senh-Quay Nim** received an MBA degree from I-Shou University, Taiwan and then back to Vietnam for business. Currently, he is a company manager in Vietnam. He can be contacted at: chenray601@gmail.com