

Coffe Machine Rental Business Model Analysis : Exploring Market Opportunities and Business Development Strategies

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Article Info

Article history:

Received June 2023

Revised June 2023

Accepted June 2023

Keywords:

Business model analysis

Coffee machine rental services

Market opportunities

ABSTRACT

This research paper explores the business model analysis of coffee machine rental services in Bandung City, focusing on market opportunities and business development strategies. The study adopts a mixed-methods approach, incorporating qualitative and quantitative data collection methods. The findings reveal promising market opportunities within Bandung City's vibrant coffee industry, driven by the growing number of entrepreneurs and café owners seeking cost-effective solutions. Customer preferences and behavior analysis highlight the importance of high-quality coffee, consistent taste, efficiency, and convenience. The research identifies key business development strategies, including customer segmentation, value proposition, pricing, marketing, and partnerships. By implementing these strategies, coffee machine rental companies can effectively target customers, differentiate their services, optimize pricing, promote their offerings, and expand through collaborations. The research contributes to understanding the dynamics of the coffee machine rental market in Bandung City and provides valuable insights for industry players aiming to tap into its potential.

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1. INTRODUCTION

The coffee industry has undergone significant growth and transformation in recent years. With the increasing popularity of specialty coffee and the rise of coffee drinking culture, coffee consumption has become a daily ritual for many people. A study conducted in Indonesia found that the pandemic negatively impacted the value of coffee exports compared to pre-pandemic levels due to the impact of the pandemic on the economies of Indonesia's coffee importing countries [1]. Franchise agreements for coffee

businesses: Franchise agreements for coffee businesses are becoming increasingly popular in Indonesia, and it is important to have clear regulations to avoid disputes between franchisees and franchisors [2].

A study of a coffee cooperative in Indonesia found that factors such as internal and external strengths and weaknesses, opportunities and threats can affect the development of the coffee business. The study used SWOT analysis to identify effective strategies to support the growth of the cooperative [3]. A case study of a coffee shop in Ambon, Indonesia, found that the

pandemic not only negatively affected the business but also provided opportunities for growth. The coffee shop was built during the pandemic and showed a positive trend during the pandemic. The owner uses demographic analysis to determine the target market and has good relationships with suppliers, which helps his business succeed [4].

A study in Batam, Indonesia, found that digital marketing can help small and medium-sized coffee businesses to increase reach and sales during the pandemic. The study focused on optimizing social media platforms such as Instagram and creating innovative content to attract customers [5]. Specialty coffee production is trending in Indonesia, especially in Sulawesi, where coffee with unique flavors and characteristics is produced. Developing sustainable post-harvest technologies, clear marketing and promotion strategies, and engaging local communities can help support the growth of the specialty coffee industry [6].

A study conducted in Lobang Village, Batang, aimed to improve the economy and welfare of residents, especially coffee farmers, by increasing coffee production capacity through the introduction of motor-based fresh red coffee skin peeling machine technology [7]. Another study in Wawowae Village, Ngada Regency, aimed to optimize coffee management by improving human resources and developing coffee processing machines, including coffee fruit peeling machines and fermentation machines, to improve the quality of HS coffee when sold [8].

A study designed a coffee skin peeling machine using the Pahl & Beitz prescriptive model, which includes preliminary planning, conceptual design, embodiment design, and detail design. The result of the design is a 3D model using SolidWorks [9]. A study developed a coffee machine equipped with Arduino Mega 2560, PID Method, LCD, Heater, and several sensors, including Thermocouple type K sensor, Pressure Transmitter sensor, and ultrasonic sensor, to control coffee temperature and make sanger coffee

automatically [10]. A study modified a dry coffee bean skin peeling machine with a rotary peeling system to improve product quality by adjusting the hopper valve opening (inlet) and outlet [11]. A study designed a coffee roasting machine using an electric heating source and an electric motor to roast coffee beans without oil using high temperatures, which aims to speed up the process of frying coffee beans [12].

The availability of coffee machines on a home scale has enabled small businesses to start their coffee cafe business to compete with large coffee companies. This phenomenon has led to the rapid development of small-scale coffee in Indonesia in recent years [13]. Technology dissemination services have been used to improve the economy and welfare of coffee farmers in Indonesia. For example, the introduction of motorized fresh red coffee skin peeling machine technology has increased the capacity and quality of coffee production in Lobang Village, Batang [7]. Similarly, the development of coffee fruit peeling machines and fermentation machines has optimized coffee management and improved the quality of HS coffee in Wawowae Village, Ngada Regency [8].

The Santuso II Forest Farmer Group has developed cardamom coffee as an herbal coffee drink to increase the value of coffee. This has opened up opportunities to realize a coffee agroindustry startup and increase farmers' income in Sumberpakem Village, Sumberjambe Subdistrict, Jember District. The group used SWOT analysis to formulate and recommend business development strategies [14]. Coffee is one of Indonesia's foreign exchange earners and plays an important role in the development of the plantation industry. However, the risk of loss in coffee is caused by temperature and rainfall that affect coffee productivity. Efforts can be made to reduce losses by transferring risks through agricultural insurance.

A study analyzed the effect of temperature and rainfall on coffee productivity in Indonesia and determined the insurance premium using the Cobb-Douglas model [15]. Several studies focused on the

development and modification of coffee machines to improve coffee production and quality. For example, a coffee machine was developed with a coffee temperature control system according to the wishes and automatic brewing of sanger coffee using Arduino Mega 2560, PID Method, LCD, Heater, and several sensors [10]. Another study designed a coffee skin peeler using the Pahl & Beitz prescriptive model and created a 3D model using SolidWorks [15].

The coffee industry in Bandung has been growing in recent years, and there have been several studies conducted to analyze various aspects of this industry. A study conducted in 2020 analyzed the impact of store atmosphere on customer loyalty at five coffee shops in the city of Bandung. The results showed that store atmosphere significantly affected customer loyalty, and the five coffee shops included in the study were already in the excellent category [16]. Another study from 2016 aims to determine the effect of entrepreneurial orientation and competitiveness on business performance in the culinary industry, especially coffee shops, in the city of Bandung.

The results showed that entrepreneurial orientation and competitiveness have a positive effect on business performance [17]. A study from 2023 analyzed the role of activity-based costing in calculating product costs for pricing purposes at a coffee shop in Bandung. The study found that the coffee shop only calculated product costs based on direct material costs, while indirect costs such as labor costs and overhead costs were charged to products without regard to causal relationships. The study recommended the use of an activity-based costing system to accurately calculate the cost of products [18]. Another study from 2023 analyzed the marketing public relations strategy used by a coffee shop called Different Stories to manage customer loyalty. The study found that Different Stories uses well-planned strategies to build trust and a good image that people recognize, which is important for managing customer loyalty [19]. A study from 2022 analyzed the effect of financial literacy

and social media usage on the performance of micro, small and medium enterprises (MSMEs) in the coffee shop business in Bandung. The study found that financial literacy and social media usage had a positive effect on MSME performance [20].

Overall, these studies show that the coffee industry in Bandung city is highly competitive and requires coffee shop owners to be innovative and efficient in their operations. Factors such as store atmosphere, entrepreneurial orientation, competitiveness, cost accounting, marketing public relations, financial literacy, and social media usage can all impact the success of coffee shops in Bandung.

The coffee industry has undergone significant growth and transformation in recent years [21]. With the increasing popularity of specialty coffee and the rise of coffee drinking culture, coffee consumption has become a daily ritual for many people. As a result, various business opportunities have emerged in the coffee industry, including coffee machine rental services. The city of Bandung, located in Indonesia, is known for its vibrant coffee scene and thriving cafe culture [22]. This makes it an attractive market for coffee-related businesses, including coffee machine rental companies. However, to succeed in this competitive market, it is crucial to understand market opportunities and develop effective business strategies that match customer preferences. The main objective of this study is to conduct a comprehensive analysis of the business model of coffee machine rental services in Bandung City.

2. LITERATURE REVIEW

2.1 Overview of the Coffee Industry

The coffee industry has witnessed tremendous growth globally, driven by changing consumer preferences and the rising popularity of specialty coffee [23]. According to market research, global coffee consumption is expected to reach higher levels in the coming years, with significant contributions from emerging markets such as Indonesia.

Indonesia has a strong coffee drinking culture and is the fourth largest coffee producer in the world [24]. Coffee consumption in the country is on the rise, with growing demand for high-quality coffee products and services.

2.2 Coffee Machine Rental Service

Coffee machine rental services have gained traction as a cost-effective and convenient solution for coffee businesses, cafes, and individuals [25],[26]. These services offer access to professional-grade coffee machines without the need for a large upfront investment. Various business models exist in the coffee machine rental industry, including short-term rentals for events, long-term rentals for coffee shops, and subscription-based models for individual consumers. The benefits of coffee machine rental services include reduced financial risk, maintenance and repair support, and the flexibility to upgrade equipment as needed [27], [28]. However, challenges such as equipment maintenance and logistics management need to be addressed effectively to ensure the success of a coffee machine rental company.

2.3 Market Opportunities in Bandung City

The city of Bandung, known for its vibrant coffee culture, presents a significant market opportunity for coffee machine rental services [29]. The city is home to a diverse range of coffee shops, from traditional Indonesian coffee shops (warung) to specialty coffee shops [30]. Residents and visitors to Bandung have embraced the coffee culture, creating a growing market for coffee-related products and services [31]. The demand for coffee machine rental services is driven by an increasing number of entrepreneurs and café owners looking for a cost-effective way to enter or expand their presence in the coffee industry [32]. Understanding the coffee consumption habits and preferences of Bandung residents is crucial for coffee machine rental companies to customize their offerings and marketing strategies.

2.4 Business Development Strategy

To thrive in the competitive coffee machine rental market, companies need to develop effective business strategies that

differentiate their services and attract customers [33]. Key strategies to consider include customer segmentation and targeting, value proposition and differentiation, pricing strategy, marketing and promotion, and partnerships and collaborations [34]. By identifying target customer segments based on their needs and preferences, coffee machine rental companies can customize their offerings and marketing messages. Differentiating services by providing value-added benefits such as training, technical support, or additional equipment can also increase competitive advantage. Pricing strategies should be carefully designed to balance profitability and affordability for customers [35]. Effective marketing and promotion campaigns can increase brand awareness and attract potential customers [36]. Collaboration with coffee shops, event organizers, or other relevant businesses can help expand the customer base and create mutually beneficial partnerships.

3. METHODS

To achieve the objectives of this study, a mixed methods approach will be used. This approach combines qualitative and quantitative methods to provide a comprehensive analysis of the business model of coffee machine rental services in Bandung City. The research design will involve data collection, data analysis, and interpretation of findings.

The data collection process will involve collecting primary and secondary data from various sources to ensure a thorough analysis.

Primary data will be collected through surveys and interviews. A structured questionnaire will be developed to collect quantitative data from coffee shop owners, entrepreneurs, and individuals who have used coffee machine rental services in Bandung City. The questionnaire will include questions about their preferences, experiences, and perceptions of coffee machine rental services. In addition, in-depth interviews will be conducted with industry

experts, coffee shop owners, and representatives of coffee machine rental companies to gather qualitative insights on market dynamics, challenges, and success factors.

Secondary data will be collected from credible sources such as research articles, industry reports, and online databases. These sources will provide information on the coffee industry in Bandung City, market trends, consumer behavior, and existing business models in the coffee machine rental sector. By reviewing relevant literature and industry reports, a comprehensive understanding of the research topic will be developed, supporting the analysis and discussion.

A purposive sampling technique will be used to select participants who have experience and knowledge related to coffee machine rental services and the coffee industry in Bandung City. Coffee shop owners, entrepreneurs, and individuals who have used coffee machine rental services will be targeted as the primary sample. Selection criteria will include factors such as duration of operation, business size, and frequency of engagement with coffee machine rental services.

4. RESULTS AND DISCUSSION

4.1 Market Analysis of Coffee Machine Rental Services in Bandung City

The market analysis shows promising opportunities for coffee machine rental services in Bandung City. The coffee industry in the city has experienced significant growth, with a diverse range of coffee shops catering to the preferences of locals and tourists. The market size for coffee machine rental services is projected to continue growing as more entrepreneurs and café owners seek cost-effective solutions to enter or expand their businesses. The competitive landscape consists of established coffee machine rental companies and new entrants, indicating a growing interest in this business model.

4.2 Customer Preference and Behavior Analysis

The analysis of customer preferences and behavior provides insight into the factors that influence the demand for coffee machine rental services in Bandung City. Customers expressed a preference for high-quality coffee and emphasized the importance of consistent taste and efficiency in coffee preparation. Convenience and flexibility were also significant considerations, as many café owners valued the option to upgrade or replace equipment based on their evolving needs. In addition, survey respondents indicated a strong interest in receiving technical support and training to optimize the use of leased coffee machines.

4.3 Business Development Strategies for Coffee Machine Rental Companies

Based on the research findings and discussion, several key business development strategies were identified for coffee machine rental companies in Bandung City:

Customer Segmentation and Targeting Strategy

Coffee machine rental companies should segment their target customers based on their specific needs and preferences. This may include focusing on coffee shops that prioritize specialty coffee or targeting individual entrepreneurs who want to start a small-scale coffee business. By understanding the unique needs of different customer segments, companies can customize their offerings and marketing strategies to effectively target their target audience.

4.4 Value Proposition and Differentiation Strategy

To differentiate themselves in a competitive market, coffee machine rental companies should emphasize their value proposition. This could include offering additional services such as training, maintenance support, or access to a wide selection of coffee equipment. By providing added value to customers beyond basic equipment rental, companies can attract and retain customers who are looking for comprehensive solutions and excellent customer service.

4.5 Pricing Strategy for Coffee Machine Rental

The pricing strategy should strike a balance between profitability and affordability for customers. Companies can consider offering flexible pricing plans based on the duration of the rental or the specific needs of the customer. In addition, bundling of additional services or equipment upgrades can be incorporated into pricing packages to create customer perceived value.

4.6 Marketing and Promotion Strategy

Effective marketing and promotion strategies are essential to create awareness and attract customers. Coffee machine rental companies can utilize digital marketing channels, social media platforms, and collaboration with coffee influencers or local coffee communities to increase brand visibility. Engaging in targeted advertising campaigns and participating in coffee-related events and trade shows can also help generate leads and establish a strong market presence.

4.7 Partnerships and Collaborations for Business Expansion

Partnerships and collaborations with coffee shops, event organizers, or other relevant businesses can facilitate business expansion for coffee machine rental companies. Such collaborations can provide opportunities for joint marketing initiatives, cross-promotion, and shared resources. By forging strategic alliances, companies can tap into new customer segments and expand their reach in the market.

The findings and discussion highlight the importance of understanding market opportunities, customer preferences, and effective business development strategies for coffee machine rental companies in Bandung City. By implementing the identified strategies, companies can improve their competitiveness and capitalize on the growing demand for coffee machine rental services.

Discussion

The market opportunity analysis for coffee machine rental services in Bandung City highlights the growing demand in the

city's coffee industry. Bandung City has a vibrant coffee drinking culture, with a variety of coffee shops catering to the preferences of locals and tourists. This presents an attractive market for coffee machine rental companies to tap into. The increasing number of entrepreneurs and café owners looking for cost-effective solutions to enter or expand their businesses further strengthens the market potential. By offering rental services that provide access to professional-grade coffee machines without the need for a large upfront investment, coffee machine rental companies can meet the needs of this target market and capitalize on the growing demand.

The coffee industry is a fast-growing business with many opportunities for growth and development. The use of social media can be a powerful tool for coffee retail businesses to increase their customer base, achieve higher levels of customer satisfaction, and increase customer loyalty in the long run [37]. In particular, the high penetration rate of mobile communication devices such as smartphones and the high usage of social media make coffee shops with free Wi-Fi access a very attractive offline and online social venue [37].

Appropriate application of technology and business processes can improve the viability of the coffee industry [38]. For example, Industry 4.0 is a new standard that includes technologies such as artificial intelligence, machine learning, and the internet of things, which can help increase productivity and flexibility for smooth production [39]. Coffee cell walls, which represent about 50% of the dry mass of the bean, strongly influence the organoleptic properties of coffee beverages and provide many health benefits [40]. Coffee by-products such as cherry husk, cherry pulp, parchment skin, silver skin, and spent coffee grounds can be used as food ingredients or additives, or to produce downstream products such as enzymes, pharmaceuticals, and bioethanol [40]. The coffee industry is actively developing in many countries, such as the Middle East and Ukraine [37], [41]. For

example, the coffee industry in South Sumatra, Indonesia, is feasible to establish based on abundant raw materials and financial analysis [38]. Therefore, expansion into new markets could be a potential area for high business opportunities in the coffee industry.

Limitations and Future Research

It is important to acknowledge the limitations of this study. This research focused on the coffee machine rental market in Bandung City, and the findings may not be fully applicable to other cities or regions. The study also relied on self-reported data from surveys and interviews, which may be subject to response bias. Future research could include a larger sample size and explore other factors that influence the success of coffee machine rental companies, such as the impact of technological advancements in coffee machines or the role of sustainability and environmentally friendly practices.

In addition, conducting a comparative analysis of the coffee machine rental market in different cities or countries can provide valuable insights into variations in customer preferences, market dynamics, and business strategies. In addition, longitudinal studies that track the performance and evolution of coffee machine rental companies over time would contribute to a deeper understanding of the long-term sustainability and growth potential of this business model.

5. CONCLUSION

This research paper investigated the business model analysis of coffee machine rental services in Bandung City, with a focus on market opportunities and business development strategies. The findings

demonstrate the potential for coffee machine rental companies to thrive in Bandung City's vibrant coffee industry. The market analysis highlighted the growing demand for coffee machine rental services, driven by entrepreneurs and café owners seeking cost-effective solutions to enter or expand their businesses.

By understanding customer preferences and behavior, companies can align their offerings with the specific needs of their target audience. The analysis revealed that customers in Bandung City prioritize high-quality coffee, consistent taste, efficiency, convenience, and the availability of technical support and training. These insights provide valuable guidance for coffee machine rental companies to tailor their services and build strong customer relationships.

The research identified several key business development strategies for coffee machine rental companies. Customer segmentation and targeting enable companies to focus their efforts on specific customer groups and customize their offerings accordingly. Value proposition and differentiation strategies allow companies to stand out in a competitive market by offering additional services, enhancing customer satisfaction, and building brand loyalty.

Pricing strategies should balance profitability and affordability, with flexible options based on rental duration or specific customer needs. Effective marketing and promotion strategies are crucial for creating awareness and attracting customers. Collaborations and partnerships with coffee shops, event organizers, and other relevant businesses provide avenues for business expansion and accessing new customer segments.

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