Economic Analysis Of Billiard and Karaoke Business Performance In The Wonocolo District In South Surabaya

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Abstract
Billiard & Karaoke business is a niche market segment of the entertainment market. Our purpose of researching insights about the rising billiard and karaoke market helps us learn about the trend, supply & demand, factors that affect the business sales, and how the business prices its service, with a goal to learn whether this business is worth the risk for its capital. We receive our insights through observation and interviews, both from secondary and primary data. Through all the data we collected we concluded that the market is profitable and has room to develop if it has the right location and correct plans.

Keywords: Billiard, Karaoke, entertainment

1. Introduction

The entertainment industry has been a famous and notable business segment since the 19th century. The global market for the entertainment sector has risen since the early 20s as the industry has been more attractive for younger targets. The business we are researching is a more specific and niched market segment within the broad entertainment industry; the billiard industry. Around the 19th century the rise of popularity in the billiard industry surged to its peak, particularly in the US and England. And now around the 20th century, billiards and pool have become a mainstream sport around the world.

Billiard is a sport in the entertainment industry played in a rectangular table with a goal of putting the balls in the circle using a stick and a white ball. Unlike other entertainment segments, billiards can be played by any range of age. Due to the rise and need of entertainment in recent years, the booming of billiards was to be expected, younger people have increased compared to the years back then, and a new era of entertainment has appeared globally such as billiards.

1.1 Entertainment Industry.

Analysis shows that market value of the entertainment industry during the 1980s was around $3.6 billion, the majority of the market value is from movies and games. During the 90s the market value of the industry increased by a large margin, it grew from $4.3 billion to $7.5 billion, with the majority of the market value from DVDs (movies) and the revolution of video games as the internet began to grow. From the 2000s the range of the market value went sky rocket to $1.5-$1.8 trillion and the biggest factor of the market value is the digital smartphones. Pre-pandemic era the market value for the entertainment industry grew to an estimated $2.1 trillion and during the pandemic it increased until $2.8 trillion dollars, in 2025 it became approximately $3.1 trillion.

1.1.1 Billiard Segment

The market value of the world of pool and snooker equipment was valued at 368.6 million dollars in 2014 and with the analysis it is expected to reach 500.2 million dollars by 2034, growing consistently at a CAGR (compound annual growth rate) of 3.1%. Even though it has a very intriguing market to join in, its initial investment is very high so it requires capital to buy the table which dominates 63.7% of the segment share in 2024. Although it is expensive, it doesn't require you to pay

monthly as expenses, rather as tools. The growth rate of 3.1% is partially due to continued success in a particular region which favors the sport.

Our aim for this research is to understand the market for billiard and karaoke as a whole, through its specific market and segment that can be observed through simple means such as seeing popularity and the amount of tables used at different times. Reasons behind the popularity in that niche market of the entertainment industry. For our example and business that we get our report from will be around the road Jl. Siwalankerto in the sub-district of Wonocolo, South Surabaya. It is very crowded and used for university students.

1.2 District Area

The area of the billiard business we research from is within the South of Surabaya near the center of Surabaya, it is near a crowded and used road such as Jl. Ahmad Yani and Waru roundabout. ABC billiard location is very near to XYZ University, which is perfect for the target market of the business, young adults such as university students often go to play in the entertainment business such as billiard and internet cafe. It is located very strategically near the consumer area, and peaked at hours where students are free.

2. Literature Review

A billiard and karaoke business are a part of recreational and entertainment services that provide tables and places for customers to play in, usually charged on an hourly basis. Sometimes its operation consists as a stand alone billiard place or as a part of an entertainment venue such as a sports center, bar, or cafe. A billiard business gains their profit from starting with a pool table and providing service around it. Typically operate in a service base revenue model where income from rental fees, food, drink, and events.

The success of a billiard place usually doesn't depend solely on one factor. Multiple factors can have varying effects on the business profitability. To find out about the potential and factors that can affect a billiard business by applying economic theory like supply and demand, market equilibrium, and elasticity. This will help in further grounded the feasibility of creating this business.

2.1 Supply and Demand

About supply and demand, it indicates much a customer is willing to pay for the goods and services. "Supply and demand are defined by observable reservation prices: each buyer's maximum willingness to pay (WTP) and each seller's minimum willingness to accept (WTA). Market demand and market supply are the cumulative distributions of buyers' and sellers' reservation prices, respectively"(Inoua & Smith, 2023). A customer's demand for billiards will be determined by their willingness to pay for a session of the game. This WTP is influenced by the customer evaluation of the experience. The customer demographic and economic capabilities will also influence the WTP.

A billiard supply would be on its owner minimum willingness to accept for providing its service and the expectation for the minimum profit based on that willingness. This WTA is usually created according to the amount of starting cost and with the minimum of covering the base cost. The business needs to ensure its prices cover its operational costs and provide a reasonable profit margin. Therefore, it's important to understand the market supply and demand to determine the needs and cost of providing and producing either a product and service.

2.2 Market Equilibrium

About market equilibrium, it is the dynamic process of matching price between a customer WTP and an owner WTA. "Equilibrium in economics is the state where supply and demand balance so that the quantity supplied equals the quantity demanded at a given price; prices and allocations remain stable unless external factors change."(Oberdieck & Schulte, 2025). The equilibrium price will be influenced by a couple of factors like customer preferences, economic capabilities, price of the complementary service, cost of maintenance, and amount of competition. Therefore, it's important to understand the market equilibrium to mark the point in which we can maximize the owner profit and the buyer willingness to pay. It provides an insight into the market condition and the usual benchmark of price for the service or product on that market.

2.3 Elasticity

About elasticity, it is the basis where it shows how responsive a price change coming from supply and demand or other external factors. "Elasticity theory is the framework that explains how

quantity demanded or supplied responds to price changes, and how firms and policymakers use those responsiveness estimates to set prices, design promotions, taxes or subsidies, and improve market outcomes. It emphasizes that understanding elasticity helps businesses optimize pricing."(Dela Cruz et al., 2023). Something called elastic when it easily responds to changes, and something called inelastic when it's unresponsive to changes. It's important to understand elasticity because it guides making decisions on pricing, revenue, and regulation.

3. Methods

3.1. Methods

In this research, we used observation and direct interviews at the ABC Billiard. We chose interviews and observations because we believed they were sufficient to understand our research objectives. We wanted to understand the operational methods, management practices, and experiences of the entertainment. We used descriptive methods to describe the situation and conditions in detail based on the interviews and observations. This research was conducted at an entertainment place called "ABC Billiard", located at Jl. Siwalankerto No.156, Siwalankerto, Kec. Wonocolo, Surabaya, Jawa Timur 60236, and we chose this entertainment place because we have a friend who is the owner of the place. We also used recording tools such as a phone to record the voice of the owner when we interviewed her, and took some notes to give some questions and wrote the answers. The purpose of this interview is to gather personal experience, opinions, and detailed information related to the research focus. We also get so many lessons from this interview like how to understand customers behaviour, service quality, and manage the sustainable partnership with the suppliers.

3.1 Primary Data Collection

Q1: What is the most like service that you give for your customers?
A1: In other places usually you can't request some songs, but in this place you as a customer can request songs that customers want.
Q2: Who are your main business customers?
A2: Most of the customers who are playing there are the XYZ students, because it's near XYZUniversity.
Q3: What do customers usually look for in your business?
A3: The customer searches for an affordable price, comfortable space or proper facilities.
Q4: What kind of services or packages are preferred by students more than families?
A5: For university students they prefer being able to request a song, a good cushion, and a good deals such as 55k for 3 hours.
Q6: How do you maintain your partnership with suppliers?
A6: Being a loyal client to our supplier will create an everlasting partnership.
Q7: If operational cost or product prices increase, how do you adjust the rent or services without losing any customers?
A7: We're gonna offer many facilities, for example, complementary foods and some snacks, we will also give customers many affordable packages.
Q8: How do you make new customers feel attached and make them want to come back again?
A8: We listened to our customers and created changes. Most of our customers are students who are going to bring their friends to come and play so it's like mouth to mouth and it gives free marketing for us.
Q9: Are customers sensitive about price increase karaoke rentals or billiard tables?
A9: As far as we can see people will notice if the price changes but we haven't seen any significant reaction, only minor differences. But we also noticed that people prefer billiards more than karaoke.
Q10: What strategy do you use to keep your billiard and karaoke place unique and different from competitors?
A10: We create a clean, friendly, and comfortable atmosphere. Also, our space is not that big so it creates a more private experience.
Q11: What was the biggest challenge you ever faced when first opening this business and what lessons did you learn?
A11: The very first time we open the place we need to make our price low so it can compete with the surrounding place, But because it is very low, it's hard for us to make profit.

Q12: How do you maintain the quality of facilities while keeping prices affordable?
A12: We maintain the quality by evaluating how we can cut costs in places where we don't really need it. Cutting costs can only get you so far, so we still increase prices like 20.000 per hour and slowly increase the price to Rp25.000 per hour, but we see the customers first are they gonna still come with these prices or not.
Q13 : When is the most crowded time, and how can you manage customers during peak hours or full bookings?
A13 : We usually use a waiting list. If we already have a full book, they're gonna give us name and number, and if there's already an empty table we're gonna contact them.
Q14 : What steps do you take to address unexpected situations, such as equipment damage or a decrease in visitors?
A14 : We need to think and do something fast, like if the speaker broke that night we're gonna repair it and contact a supplier or service to rent a new speaker. We also have a routine check up.
Q15: What advice do you have for students who want to start a karaoke or billiard business
A15: You really need to think about it if you're gonna seriously open a billiard business because a billiard table is not as cheap as you think, so the investment should be enough and if it fits your budget then a few tables is enough.

From this interview we learned that we need to learn environmental behavior because all questions were related to human behavior like how we offered them packages, facilities, services, and many other things else. We also need to see what's around us, because this place is near XYZ University so this business place got a lot of customers who are from XYZ University.

3.2 Secondary Data Collection

Surabaya is one of the largest and most dynamic cities in Indonesia, Based on the 2024 population data by Databoks Katadata, in Mid 2024 Surabaya CIty Population reached 3.02 Million residents. (Surabaya City Population: 3.02 Million 2024) almost 7% of the total East Java total population. The age range of the population in Surabaya City is 15-59 years old on average, so the percentage of potential labor is 66%, showing that most residents are actively involved in the workforce. This high number reflects how Surabaya continues to expand across many sectors, from trade to services to manufacturing and digital industries. It also shows that the people of Surabaya are not only productive but also play an important role in maintaining the city's economic growth.

In terms of education, about 35% are residents that are high school graduates, while nearly 10% have a bachelor's degree. This shows that a huge part of Surabaya residents are well-educated and capable of supporting modern industries. Surabaya has well known universities, so institutions help produce skilled graduates who contribute to different professional fields in the city. With better access to schools and training programs, Surabaya continues to build a stronger human resource base that attracts businesses and investors looking for capable workers. indicating Surabaya City is well developed and strong based in terms of economy (Education Levels of Surabaya City 2024).

Despite these strengths, some challenges remain. Around 3.9–5% of the population still lives below the poverty line, meaning that not all residents benefit equally from the city's progress. This situation highlights the importance of inclusive growth, where all social groups have equal access to opportunities. The local government has taken several steps to address this issue, such as improving social welfare programs, upgrading public housing, and expanding healthcare and education services. These efforts are meant to ensure that economic growth also improves the quality of life for everyone in the city.

Economically, Surabaya is one of the most developed cities in Indonesia, with per capita regional GDP of approximately Rp 245.68 Million per year and economic growth rate of 5.76 % in 2024 (Surabaya's Economy Grows 5.67% Leading in East Java), surpassing the other provinces on average. Despite the riches, around 3.9-5% of residents still live below the poverty line. (Low-Income Communities in Surabaya Reach 1.08 Million People).

Overall, the data shows that Surabaya has a large, educated, and economically active population. Its strong labor market, educational achievements, and stable growth make it a key economic center in East Java. As the city continues to grow, Surabaya is expected to keep playing an important role in Indonesia's future, equality and business opportunity for all of its residents.

4. Results and Discussion

4.1 Primary Data Insight

So after this interview we learn so many things about opening a business because its not only about the business type you open but its about how your business gonna attract a lot of customers, only having a good quality of facilities its not enough if the services was bad, the main factor its all about the services, because many people have a different behaviour and if we can fully listen their behavior they will satisfied and come back to play again, or maybe they gonna bring their friends to play together so its basically mouth to mouth and its a good investment because its like free marketing. Also learn placement and what is surrounding us because it will give a big impact for our business like this billiard place close to XYZ University and get a lot of customers from that University because only one factor it's all about the placement geography.

We also need to focus on adjusting pricing like what we get from these interview their business at first is hard to get profit because they put prices so low, so we really need to paying attention at adjusting prices so we can get profit from it, and also need to observe the customer behavior if the place full of people their try to increase the prices and if the customers don't bother about it so we keep the prices increase, but if the customers pretty sensitive about increases of the prices we need to put it back the previous price. And now we gonna talk about how to be unique and different than other business that has the same type of business, we need to be creative and not only found the solution but need find the problem also, like in the business that we interview they give you a special treatment such as we as customers can request a song which in other places we can't do such a thing like that, and talk about unique their business beat their competitors you can see it by the google reviews this place has a better reviews than their competitors, so we need to be creative find the problem that happened around us and give the best solution.

4.2 Secondary Data Insight

To get an idea of what college students in Surabaya typically spend monthly, several sources offer useful benchmarks. One estimate puts student living costs, such as food, transport, utilities, etc. in Surabaya in the range of IDR 1,000,000 to 1,500,000 per month, depending on housing type and lifestyle. Rent for boarding rooms can vary from about Rp 500,000 to Rp 2,500,000 per month based on location, amenities, and size.

Outside of rent, students may spend huge amounts on meals, entertainment, and transport, meaning freely spending without thinking is limited. This means each cafe visit has to feel worth the cost. In Wonocolo's cafe market, many establishments price food and drinks in a way that fits student budgets—menus where a drink + simple snack comes under Rp 50,000 per person are common. This suggests that ABC Billiard & Cafe, if positioning toward younger and budget-conscious audiences, should offer combos (snacks + drink), special discounts during low-traffic hours, or price tiers so that customers can choose based on what they want.

Competition is medium to strong. There are more than 40 cafes and eateries within Wonocolo. Yet, relatively few places combine recreation (like billiards) with casual cafe service. Billiards are very popular among college students or even younger audiences such as high school students. Not to mention Billiards are a classic game that existed years ago, so older audiences or people after work could chill and hang out playing Billiards. That will give ABC a good advantage service atmosphere + games in one place could attract both students and local working adults. Marketing toward groups (friends hanging out, karaoke nights, casual game meetups) can help drive repeat visits.

Still, challenges remain. Some target customers have tight budgets, entertainment is often one of the first things cut when money is short. Given that, ensuring affordability while maintaining quality in space, service, and cafe/games equipment is important. Good reviews, friendly staff, clean tables, reliable Wi-Fi—all matter a lot.

Overall, secondary data indicates a promising market in Wonocolo for ABC Billiard & Cafe. With careful pricing, combo offerings, and an appeal to younger audiences who want both relaxation and entertainment with said it also attracts older audiences like people from work needing to chill and relax for a while, the cafe can carve out a loyal customer base. The key will be balancing cost and experience so that each visit feels worth what people pay, especially for students and younger residents.

5. Conclusion

In conclusion, running a billiard business near a university offers a good and profitable chance for property owners. When people work together, they can share ideas and create creative and unique new concepts that will attract customers. It should be affordable for customers while providing great services — for example, allowing customers to request any song they like, having welcoming employees who are friendly and enjoy chatting with customers. Based on our observations and analysis, our competition is medium-strong. There are more than 40 cafes in Wonocolo, yet relatively few combine recreation like billiards with good services. Billiards is very popular, especially among students, so this will give us a great advantage.Therefore, the main factors for success are building pleasing services for customers, choosing a great location, maintaining quality facilities, offering affordable prices, and providing a comfortable design.

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