Economic Feasibility of an Entertainment Photobooth Business in Surabaya

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Abstract
This paper evaluates the business idea in the entertainment industry, specifically photobooths, in Surabaya and is assessed through the prism of the demand, supply, market equilibrium, and price elasticity. The scale is city-wide to indicate the urban demographics of Surabaya and the economic aspects of the lifestyles of the people, and pilot primary data will be in one representative urban district (e.g., Rungkut). The experience has allowed customers to have instant prints and publications and shareable digital photography which photobooths maximize through the sale of youth market segments and markets related to events. Based on urban demography and evidence of creative-economy, the research suggests that demand potential exists but is probably inelastic because there are other alternatives substitutes (studios, mobile photographers, DIY photo printing). Differentiation, location access, and availability of reliable consumable supplies are some of the aspects of feasibility.

Keywords: photobooth, demand and supply, Surabaya, market equilibrium, elasticity

1. Introduction

In Indonesia, entrepreneurship in the creative and lifestyle sector has developed at a fast rate, primarily in the second-largest city of Surabaya. Photobooths especially appeal to youth who are under the influence of social media, with both walk in and special events. Due to the young population, cultural diversity and well-developed middle income, the need for convenient leisure and lifestyle services is increasing. Among the new models is the entertainment photobooth which includes instant photos, a variety of templates and customizable filters.

1.1 Type of Business: Entertainment Photobooth

Photobooth entertainment is a unit that focuses on speed, low cost, and experiences that are likely to be recalled as opposed to more classic portraits that are commonly offered by photo studios. Photobooths enable clients to take and print photos with funny gimmicks, backgrounds and file sharing choices to them immediately. They generate revenue via two major sources:

1. Online services in selected urban centers where pedestrian traffic is heavy like shopping centers and lifestyle drivers.

2. Celebration services like birthday, graduation, wedding, and corporate event services

The experience economy is applicable to the business model where consumers are spending more funds on memorable experiences that can be shared online (Pine and Gilmore, 2011). Its competitiveness is based on differentiation in its design, speed of service and quality of camera being used.

1.2 Location Scope: Pilot District Surabaya (City-Wide)

Surabaya City is used for the scope of this research due to its rich population and concentration of urban populations, and the broad range of socio-economic layers. Indicators of market size can be gotten through secondary data on population structure, the level of education, and income distribution (Badan Pusat Statistik [BPS] Kota Surabaya, 2024). Moreover, the development of the creative economy in Indonesia is boosting the potential of the leisure/technology/content combination ventures (Kementerian Pariwisat, Kementerian Ekonomi Kreatif, 2023).

In case of the primary research, the pilot site is ABC Market, a busy food breed mostly attended by the lower-class consumers. Despite being a working-class neighborhood characterized by low purchasing power, ABC Market boasts of a high number of persons commuting, forming a good demand potential. The target of the quality photobooth business here is to come up with a photography booth with a significantly unique brand image of both Korean and modernity that further raises a notch higher on top of the sleepless consumers is its ability to offer a high-end experience to a low-end clientele. The case demonstrates the ability of differentiation to increase access and increase the value perception.

1.3 Purpose of the Study

The primary aim of the research of this study is to analyze the viability of a photobooth business in Surabaya by analyzing macroeconomic and microeconomic aspects. In particular, the research will:

1. Evaluate the demand and supply of entertainment photobooth in Surabaya.
2. Determine market equilibrium, both in terms of prices likely to be transacted.
3. Calculate the elasticity of demand based on alternative products like the conventional photo studios, mobile photo makers and self-made instant printers.
4. Determine supply chain, consumer trend and competition opportunities and limitations.

This study is an integrated verbal representation of secondary city data with primary observation to determine the feasibility and sustainability of entering the photobooth market in Surabaya.

2. Literature Review

This chapter summarizes the economic principles that will form the basis to study feasibility of the idea of business of photobooth in Surabaya. The principle concepts are the forces of demands and supply, the equilibrium of the market, and the elasticity of demand.

2.1 Lifestyle Services Demand and Supply

Lifestyle services in urban Indonesia have been rapidly growing. The high number of students and young residents in Surabaya is designed to support the growth of a vigorous demand in the figure of leisure activities (Santoso and Putri, 2021). Photobooths correspond to such a trend since they are cheap, accessible, and on-the-spot prints (Nissen, 2022). Demands also are affected by things such as cultural trends, exposure to social media, and fear of missing out (FOMO), which intensify among young individuals, as they prefer the trendy experience (Przybylski et al., 2013). Factors like graduations and birthdays also put an added strain on events and photography booths became a category of items perceived as common in urban life.

This demand is affirmed by the popularity of instant photography. Ever since the introduction of the Polaroid Land Camera in 1948, individuals, especially the youths and females, have valued the “capturing the moment” prints (Coe, 1978). The trend is ongoing in today’s day and age, when a modern form of Polaroid tradition emerged whereby a photobooth is able to take rapid snapshots and customize them following specific themes (Van House, 2011). The supply side involves operators dealing with inputs like paper, ink and props and addresses labor and rental expenses. Even though supply is supple, due to small-scale constructions and events, it is limited by consumable items and frequent repairs (Mankiw, 2021).

2.2 Market Equilibrium and Pricing

Market equilibrium is a situation whereby the quantity demanded is equal to the quantity supplied at a certain price. In the case of photobooths, the equilibrium is not solely based on pricing and promotion, but change of location as well. The malls or entertaining avenues are well-trafficked, and the shift caused an outward movement of the demand curve (Kotler and Keller, 2016). The pricing should be able to balance both cost and profitability. When the prices are too high, customers can change to replace it with smartphone printers or photographers; when too low, the margin is no longer sustainable. Social media marketing can also raise awareness and bring a wider audience, which means that the business will achieve a positive balance (Solomon, 2018).

2.3 Elasticity of Demand

Photobooths tend to be an elastic demand and thus, customers are sensitive in regards to price changes. This is due to the following factors:

1. The substitutes (photo studios, printing on phones, etc.) make the prices more price-responsible (Park et al., 2020).
2. Discretionary character: Photobooths are not necessities but more on the need to provide leisure services, and as a result, the change in consumption as prices are increased is more likely.
3. Time horizon: Over time the consumers get used to them, and turn to substitutes which further enhance the elasticity (Mankiw, 2021).

2.4 Summary

In general, it can be proposed that youth culture and social media trends help in increasing the demand for photobooths in Surabaya. However, the market itself is highly competitive, so businesses need to be careful with the pricing and location chosen. The notions of demand and supply, market equilibrium and elasticity offer the theoretical foundation on the consideration of feasibility in the subsequent chapters.

3. Methods

3.1. Methods

This study researches using a mixed-method where primary data is collected in one of the pilot districts, and to support it, secondary data will be utilised.

3.1 Primary Data Collection

Direct observation and interviews carried out in the Rungkut District Surabaya which was a representative urban district collected primary data. A visit to the photobooth outlets in a region was made where aspects observed included consumer traffic in a specific time slot, average wait time, and popular service packages. The owner gave information concerning operational issues, times of high demand and promotion, where the customer made a reflection about preferences and sensitivity of price and tendency of using photobooth services.

Table 1. Summary of Primary Data Collection

Method	Data Collected	Relevance to Analysis
Observation	visitor count, conversion rates, waiting time	Measures demand volume & service capacity
Interview (Owner)	Pricing, peak demand, supply challenges	Provides supply-side constraints & strategy
Interview (Customer)	Frequency, willingness to pay, alternatives	Explains demand elasticity & consumer trends

Source: Interview Results with Owner of Haru Studio (2025)

3.2 Secondary Data Collection

In accordance with the statistics on Badan Pusat Statistik (BPS) Kota Surabaya (2024), the number of its citizens is 3.01 million people or 1.49 million men and 1.52 million women. The median age of the population is 29.2, with the highest proportion of 10 14 years (246,342 people), 40 44 years (247,066 people), and 20 24 years (241,713 people). The younger groups of people (15-34) take up a significant

proportion of the general population, which emphasizes the high potential consumer population among the younger age brackets and early adults with
regard to style and entertainment services like photobooths.

Kelompok Umur	Penduduk (Laki-Laki) (Ribu)	Penduduk (Perempuan) (Ribu)	Penduduk (Laki-Laki + Perempuan) (Ribu)
0-4	98.070,0	92.253,0	190.323,0
5-9	118.098,0	111.574,0	229.672,0
10-14	126.914,0	119.428,0	246.342,0
15-19	124.481,0	117.094,0	241.575,0
20-24	123.369,0	118.344,0	241.713,0
25-29	113.131,0	111.452,0	224.583,0
40-44	122.094,0	124.972,0	247.066,0
45-49	110.402,0	114.726,0	225.128,0
50-54	99.971,0	104.626,0	204.597,0
55-59	81.459,0	89.578,0	171.037,0
60-64	60.278,0	71.348,0	131.626,0
65-69	45.728,0	54.858,0	100.586,0
70-74	29.417,0	35.556,0	64.973,0
75+	25.630,0	40.467,0	66.097,0
Jumlah/*Total*	1.494.734,0	1.523.288,0	3.018.022,0

Table 2. Summary of Secondary Data Collection

4. Results and Discussion

4.1 Primary Data Insight

4.1.1 Observation

An existing photobooth store in Surabaya was observed three times consecutively to determine customer traffic, conversion and consumer profiles. The results suggest that the foot traffic and the demand towards the photobooth business vary significantly according to day of the week and time of the day:

1. Weekday afternoon (16:00 - 17:00): 18 passers, 5 entrants, and 3 buyers of a session.
2. Weekday evening (19:00 - 20:00): 30 passers, 9 entrants, and 7 buyers of a session.
3. Weekend evening (18:0019:00): 45 passers, 15 entrants, and 12 buyers of a session.

This is equivalent to conversion rates of about 16% on weekday afternoons, 23% in the evening and 27% in weekends. The increased weekend data indicates the increased availability of leisure time and high consumer potential to entertain.

The package priced at Rp45,000 was the most appealing as four printed photos in combination with a digital file. But at that degree of price-sensitivity accessibility and profitability seem to be in balance. The mean waiting time was 8 minutes and depended on the rule of thumb that was not unacceptable to an average customer; however, with the possibility to increase the lines considerably, congestion might cause a decrease in satisfaction. According to the customer profiles, they were mainly youth aged 17-25 (students and young workers) at around 70%, with a percentage of 20% of family and 10% other categories.

4.1.2 Interview with Business Owner

The photobooth owner interview (XYZ Studio, Rungkut) was useful in terms of supply-side information. The owner pointed out that the demand was mostly high in the period of the graduation season, honoring holidays and in the afterpay-weekends. Instagram Reels and Tik Tok videos were found to be the best platform in drawing customers through promotion methods through social media.

There were however supply side challenges. Photobooth business especially relies heavily on consumables (ink, photo paper, props), and service disruption can happen when a supply chain is delayed particularly when dealing with imported goods. Operation risks are also involving equipment failures (especially printers). One photography studio and one smaller photobooth kiosk were found locally that represented competition.

4.1.3 Interview with Customer

The customer interview, which was held with an 18-year old university student demonstrated demand side behavior. The respondent said he came to the photobooths more than 10 times a year to capture specific events such as birthdays and graduations. A price limit of Rp75,000 per session was acceptable, but only on special events. Speed, fun experience, and an ability to share on social media were the key factors that made us decide to use photobooths over some alternatives. The tolerance of waiting time was only approximately around 15 minutes after which the respondent reported that they would leave or seek an alternative.

4.1.4 Synthesis of Primary Data

The combination of the primary data indicates that the demand of photobooths in Surabaya is predetermined by the youth culture, the willingness to share it via social media, and the event-based activities. The supply side on the other hand is exposed to risks in the consumables and equipment reliability. Customers are sensitive to price, however they are also sensitive to theming and experience as well.

4.2 Secondary Data Insight.

4.2.1 Demographics

According to BPS Kota Surabaya (2024) the overall population of the city of Surabaya amounted to 3.01 million residents with the figures 1.49 million males and 1.52 million females as the foundation ones. The demographic distribution information indicates that younger generations make a high percentage of the population. of the city. An example is that the population of 10-24 years accounts for over 24% of the population with another big proportion of members belonging to 25-34 years. This means that there is a very good foundation of digitally sensitive youths who are trendsetters- the main market segment with regards to photobooth service. According to Figure 1 (Population Distribution by Age Group), the ages 10-14 (246 342 people in the group), 15-19 (241 575 people in the group), and 20-24 (241 713 people in the group) are noted as some of the highest in population in the city. Also, they are the most social media users, the second aspect making photobooth services relevant (BPS Kota Surabaya, 2024).

4.2.2 Economic and Lifestyle Indicators

Surabaya is not only a demographic spot, but also an economic one in East Java. The size of the middle class in the city has increased with increased disposable incomes. The Ministry of Tourism and Creative Economy (2023) suggests that urban consumption is already notable in divisions such as lifestyle (cafe, entertainment, and creative experience).

Additionally, there are numerous universities, shopping malls, and event spaces in Surabaya, the natural environment of photobooth demand. The large student populations particularly those in areas such as Rungkut increase the demand for affordable and shareable forms of leisure (Santoso and Putri, 2021).

4.2.3 Summary of Secondary Data

Secondary information confirms that the high percentage of the youth in Surabaya and the increase in the consumption trends of middle classes proposes a good environment to the photobooth businesses. But too much density brings with it competition, and differentiation is important.

4.3 Economic Analysis

4.3.1 Related Businesses and Their Impact

Some of the businesses that are directly connected with the photobooth services in Surabaya are their competitors or their complements:

1. Photography studios

Competitors who have superior quality portraits but not always at lower cost. Their presence makes the photo booths under pressure between speed and fun instead of formality.

2. Selfie museums and specialized entertainment places

Competitors with experience in photography. They can replace photobooths, but also increase the interest of the consumer in photo-related leisure, thereby indirectly affecting the photobooths.

3. Cafes and event organizers

Supplementary businesses that may be partners of photobooths. As an example, cafes can provide discounts to photobooth in case of food sales, and event planners can make photobooths a part of event packages.

These companies affect the photograph booth market since they can determine the competitive tension and business partnership. Teaming would increase market coverage whereas competition would bring in innovation.

4.3.2 Demand Determinants

Demand of photobooth services in Surabaya is at least three-fold depending on the factors:

1. Demographics

This rate of youth and young adults is natural, as it forms a demand base (BPS Kota Surabaya, 2024).

2. Social media and trends

Trendsetters such as Tik Tok drive demand due to their amplifying effect by promoting virality and FOMO, thus pushing people towards showing what they have done in a way they can share with others (Przybylski et al., 2013).

3. Income and affordability

Its demand will be influenced by the amount of disposable income. Lifestyle services are more inclined to be expended by middle-class households when they have portions of their budget (Kotler and Keller, 2016).

4. Factors (Non-compulsory)

Occasions/ events: the demand is seasonal, particularly around the time of graduation and holidays.

4.3.3 Supply Challenges

Photobooth businesses in Surabaya have two large supply issues:

1. Consumable dependence

The business operations are based on a high share of imported ink, specialty photo paper and maintenance of the printer. The availability can decrease and the prices can go up due to shocks in supply chains or an increase in the price of inputs (Mankiw, 2021).

2. Human and technical resources

Since the machine is imported from China, most technicians do not have a spare part of the machine and are not familiar with how the machine runs.

These two problems underscore the significance of the supply chain planning and technical training that maintain the running of operations in an unproblematic manner.

4.3.4 Market Balance (Equilibrium vs Surplus/Shortage)

The market in Surabaya on photobooth seems to be in a partial equilibrium where the market experiences tendencies to be short or have a shortage especially in Rungkut, unlike the west part of Surabaya where photobooths are everywhere. During peak times like graduation and birthday events, the demand is higher. It is observed that there are waiting times and queues over the weekends, implying that the existing supply cannot serve high demands of weekends. On the other hand, on the low weekday afternoons, the demand might not be met by the supply, thus resulting in capacity idleness. On the whole, the leveling off will occur when the supply is dynamically dependent on the demand. Businesses need to deal with capacity (e.g. with staffing that is a flexible host alongside reservation) to restore fluctuations.

4.3.5 Elasticity of Demand

The photobooth services demand in Surabaya is price elastic, and this could be proven by having several conversations with the service users, as well as the secondary information:

1. The examples of substitutes are numerous, including that of mobile photographers, selfie museum, and instant smartphone printers (Park et al., 2020).

2. People who are camera shy tend to avoid taking photos.
3. The interviews with customers revealed that the willingness-to-pay ceiling is about around Rp75,000 beyond which the demand declines.

Elasticity means that firms should not be aggressive with their pricing, but be competitive depending on value differentiation (themes, props, and experience). The elasticity with bundling of services with events/partnering may also be possible to be lower so that the services will be less switchable.

4.3.6 Opportunity Costs

When an entrepreneur decides to invest in a photobooth business, they end up sacrificing alternative demands with regard to capital and time. There are opportunity costs of:

1. Investing in food stalls or cafes that have potentially better margins and can be available every day.
2. Renting out space in bazaars or events as it usually has less competitors.

Although photobooths theoretically align well with the cultural and lifestyle inclination of the Surabaya youth market, entrepreneurs should be aware of whether the same level of investment would result in better or more, stable returns when it comes to other alternative businesses.

4.4 Synthesis of Findings

The primary and secondary data enable the identification of opportunities and risks. At the demand level, the high number of young people in Surabaya and the popularity of photobooth popularized by social media make young people always interested in a photobooth. The problems with consumables, as well as labor, might restrict scalability on the supply side. Market equilibrium indicates disequilibrium of peak and non-peak demand, and this demands creative management techniques. The differentiation and low cost are emphasized by elasticity. Analysis of opportunity cost serves to remind the businesspeople to take alternative enterprises into serious consideration.

To conclude, the findings show that the photobooth business idea in Surabaya is viable and it is competitive with heavy differentiation, proper supply chains and cooperation with other relevant businesses.

5. Conclusion

This paper has discussed the probability of opening an entertainment photo booth business in Surabaya through the demand, supply, market equilibrium, elasticity and opportunity cost analysis. Results contribute to the fact that the high number of young residents of Surabaya, the high penetration of social networks, the development of consumption by the middle classes makes good prerequisites of service based on lifestyles. Prime research proved that customers are price-conscious, although they appreciate the use of photobooths due to convenience, creative and shareable interactive experience. Secondary data also highlighted the fact that youths demographics and lifestyles are important continuous drivers of demand.

The supply side has advertising consumption, employing skilled labor, and competition with photo studios, selfie museums, and mobile alternatives, which raises elasticity. The Tamperings can be seen as shortages in the peak times and idle conditions during weekdays. The business needs to implement differentiation strategies in order to be competitive. Specifically, the efforts made by the XYZ Studio to provide an upper-class experience to a low-class space, the ABC Market, serve to show how bringing the upper-class ambiance into the low-class space can not only increase the level of value but also decreases the elasticity factor and guarantees long-term feasibility of the business.

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