Feasibility Study Analysis of Establishing Archery Sports Special Place

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Abstract. This study essentially discusses the basic concepts related to the decision and process of selecting a sports archery business project in order to provide economic and social benefits over time. Archery sports is a sport that requires special skills, both accuracy, coordination mental training and improves the physical condition of the prime. In Medan, it's still a bit of practice archery, but many people love this sport. From the data collected, there are three locations where archery in the city of the field of the Sunggal Knights is located at Jl. Tunggul Hitam no.1A, Kec. Medan Sunggal, Avros Educational Park Aval address at Avros Street No.60 Medan, and the Knights of Johor Archery Club which is located at Jl. The work of Darma Gg. Ujung Family, Medan Johor. Therefore a feasibility study was undertaken in establishing an archery sports place in the field. The aspects to be considered in making feasibility studies are market and marketing aspects, technical and equipment aspects, management aspects, legal aspects, economic and social aspects, and financial aspects. Financial analysis using own capital got Payback Period 3 years 5.8 months, Net Present Value Rp 11,684,026 and obtained Internal Rate of Return of 17%.

1. Introduction
Given the impending conditions of uncertainty, certain considerations in an enterprise are required, where the basis of these considerations can be generated through a study of various aspects of the viability of a business to be carried out, so that the results of the study can be used to decide whether or not to have or not. The above mentioned is shown in the business feasibility study will be a lot of teams from various experts in accordance with their respective fields or aspects such as economics, law, psychologists, accountants, technological engineers and so forth.

Archery sports is a sport that requires special skills, both accuracy, coordination and mental training and improves the physical condition of the prime. In Medan, it's still a bit of practice archery, but many people love this sport. From the data collected in the field of wisata.com.com in 2016, there are three locations where archery in the city of the field of the Sunggal Knights is located at Jl. Tunggul Hitam no.1A, Kec. Medan Sunggal, Avros Educational Park Aval address at Avros Street No.60 Medan, and the Knights of Johor Archery Club which is located at Jl. The work of Darma Gg. Ujung Family, Medan Johor.

From the results of observation and supported from the data obtained from medanwisata.com The author wants to try to establish a business where archery sports, which in which can provide income for writers and also can help the community economy around the business location to be run, but the
current problem is the financial condition is very minimal, the existing funds from own capital of Rp. 10,000,000. With a little capital need to seek additional capital, one of them by seeking additional capital to the investors who want to invest money in order to benefit from the business of this archery sporting place.

A business feasibility study is an activity that studies in depth about an activity or business or business to be run, in order to determine whether or not the business is run [1]. The aspects to be considered in making feasibility studies are those studied are market and marketing aspects, technical and equipment aspects, management aspects, legal aspects, economic and social aspects, and financial aspects [2,3] Understanding is feasible in this assessment is the possibility of business ideas or projects that will be implemented to provide benefits (benefits), both in the sense of financial benefit and social benefit. To find out the feasibility of a business plan required financial and nonfinancial analysis. Financial analysis is the analysis used to determine the feasibility of a business plan from the financial side by using the measurement criteria investment [4]. Small businesses play their role in tackling big business in Indonesia by increasing national product of the country, in terms of diversifying sources of income, increasing the labor force, lowering unemployment rate, and providing stimulation for technical and vocational education [5,6] The feasibility used along with its advantages and disadvantages associated with public sector in Arab countries. The goal is to help the community the project manager in the decision-making process and assess the overall performance [7]. Feasibility studies are also common in the culinary business. An example is the feasibility study of the establishment of Cozy Chocolate Home Industry [8,9].

2. Methodology/Experimental
The type of research used is descriptive. Descriptive is a method used to describe or analyze a research result but not used to make wider conclusions. [10] This research focuses on six aspects which consist of six independent variables and two dependent variables.

The criteria for the business feasibility of this sports venue are as follows [11,12,13].

![Block diagram]

**Figure 1. Block diagram.**
• Market and Marketing Aspects
  On the market aspect will set the price to be charged to each user, and divide the market based on 3 groups,
  o Market segmentation by geography
  o Market segmentation by age
  o Psychological market segmentation and develop the marketing strategy.
• Technical aspects and equipment
  Technical and equipment aspects determine strategic location and layout. And check the equipment needed
• Aspects of Management and Organization
  Aspects of Management is a process to make preparations for it to run again properly. Aspects range management
  o Number of manpower required
  o Organizational structure and shape job description for each workforce
• Legal Aspects
  The legal aspect explains various matters relating to the issue of legalization, agreement, licensing and so forth.
• Economic and social aspects
  How is the economic and social impact for the community around the establishment of the place of business
• Financial aspect
  This aspect discusses how to calculate funding needs, determine the cost of each user’s rent, the length of the capital recovery period, and the feasibility rating, with the criteria used among others:
  o Payback Period (PP)
  o Net Present Value (NPV)
  o Internal Rate of Return (IRR)
  In pricing is used profit-based pricing method. Profit pricing targets are generally in the form of determination of the number of annual profit targets expressed specifically [14,15].

3. Results and Discussion

3.1. Analysis of Market Aspects and Marketing
Based on the results of data processing of market and marketing aspects, the results obtained based on feasibility
  • 53% of respondents are interested in archery and want to try archery.
  • The target market starts at the age of 14 years both men and women
  • The price applied can cover the operational cost.
So according to the above aspects of the business where the archery sport worth to run

3.2. Analysis of Technical and Equipment Aspects
Based on the results of data processing of technical aspect and equipment, the result of feasibility is based on
  • Land area contained in the fishing line 1 Medan Deli sub-district for 3,500 m²
  • Range of firing up to 60 m
  • Can accommodate 14 players/hour.
  • The layout design of the archery sports venue can be seen in Figure 1 as follows.
3.3. Analysis of Management Aspects
Based on the results of data processing of management aspect, the results obtained based on feasibility
- Number of manpower required 6
- The minimum education background of graduates from SMA / SMK to S1.
- For employees’ day off can be done by way of scheduling.
Working hours in this archery business for 8 hours, starting from 8:00 to 12:00 and will be resumed at
14:00 to 18:00. But for 2 hours of rest, there should be kept at least 2 people just in case if there are
visitors who come.
This archery sport place is open every day, so for the day of employees are done by turns every
person is only given a holiday once a week but with a record of the task in everyday, there must be a
replacement. The organizational structure used is the line. Where the delegation of authority directly
vertically and completely from the leadership against his subordinates

3.4. Legal Aspect Analysis
Based on the results of legal aspect data processing, a feasibility result is based on the business entity
in this business is Commanditaire Vennootschap (CV) where the permission can be handled by
the notary from the beginning until the issuance of the business license. So according to the above aspects
of the business where the archery sport worth to run.

3.5. Analysis of Economic and Social Aspects
Based on the results of data processing of economic and social aspects, Feasibility results are based on
The economic impact will be felt by the community around business location establishment where the
archery is among others
- Increased family income
- There is a double income pattern

Figure 2. Layout design place sports archery.
• Open employment opportunities for the community
  While the social impacts that will be in the natural by the community around the location of the establishment of the archery sports venue other
• The existence of a means to exercise archery other than football field foot
• District deli field is known by many people.
• The change of mindset of people around the location

3.6. Financial Aspects Analysis
Based on the results of data processing.
• Payback Period that already exists like the re-invitation period faster than the economic age (5 years)
• Net Present Value value if in accordance with its positive NPV
• Appropriate Internal Return Rate if IRR is greater than bank credit interest (15% and 17%)

Then the results of data processing on the financial aspects can be seen in Table 1 as follows.

| No | Method                  | Results          | Information |
|----|-------------------------|------------------|-------------|
| 1  | Payback Period          | 3 years 5.8 Months | Worthy      |
| 2  | Net Present Value       | Rp 11.684.026    | Worthy      |
| 3  | Internal Rate of Return | 17% > 15%        | Worthy      |

4. Conclusion
The initial capital to start the archery business is Rp 162,823,000, based on RI law number 20 the year 2008 this business is included in the small business category. The price of archery sport that will be established in the District of Medan Deli cost Rp 30,000 / jam. Investment repayment period is for 3 years 5 months 8 days. The business of archery sports place is said to be feasible based on the results of the feasibility of six aspects of research and calculation of financial aspects which has been done then got the conclusion that the business where the archery sport is feasible to run.

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