BUSINESS DEVELOPMENT FEASIBILITY STUDY OF ARCHITECT CONSULTANT A

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ABSTRACT

The purpose of the study is to determine the feasibility of the development of the business conducted by Architect Consultant A. Research method used is based on the analysis of 6 aspects of business feasibility study, the aspects of Business Environment, Markets and Marketing, Legal aspects, Engineering and Operation, Management and HR and Finance The results of the analysis of each aspect showed positive results stating that the Business Development conducted by Architect Consultant A feasible to run.

Percentage average income Architect Consultant A is 34,87 % every year, during 2013-2016. Four methods are used as tools to calculate the financial aspect consultant architect A feasibility. Net Present Value (NPV) method shows a positive value of Rp 4.391.250.083. Internal Rate of Return (IRR) to calculate business development feasibility study Architect Consultant A is 11,368 % higher than interest rate is 10,50%. Payback period (PP) method Architect Consultant A is 5 month 19 day 4 hour 48 second. Profitability Index (PI) method value is 8,76 > 0. In Conclusion, Business Development feasibility Architect Consultant A is feasible (feasible) realized from, Business Environment aspects, Markets and Marketing, Legal aspects, Engineering and Operation, Management and HR and Finance.

Keyword: Feasibility study, Business development, Consultant, Architect

INTRODUCTION

Architecture is a combination of art and engineering, of which comprised of several processes, such as planning, erection, and finishing. Human habitual requirements and complex personal preferences are an integral part in the space making process. A person as an individual and a person as part of the society as a group is always put in the center of all the considerations and decisions to be made.

Indonesian architecture consultancy practice has been on the rise these past few years. Appreciation towards architecture design has been on a steady rise as it is directly related to people appreciation of the art of building aestethics. Such increase can be seen from the growing demand for construction projects, both in the number of the project and the value of each individual project.
In Indonesia alone, construction boom can be traced from 2012 to 2015. Indonesia enjoyed 13.49% increase during year 2012, and 10.83% increase during year 2013, and a 10.2% increase during year 2014. In average, Indonesian construction sector enjoyed a 11.51% growth in each year during the aforementioned period. In the discussed period, architecture consultancy in Indonesia are having its huge increase in growth in direct relation with the growth of its construction sector.

Consultant A has enjoyed a 65.74% increase of total annual revenue from the period of opening in 2012 to mid 2016. The mentioned consultant is being led by 3 principals from 3 different construction business. Its average increase in yearly revenue from 2012 to 2016 is 34.87%. According to the data provided by consultant A, it is apparent that Indonesian architecture consultancy business is a rewarding and potential business that has an increasing trend in Indonesia.

Consultant A with 6 employees, comprised of 2 senior architects, 2 junior architects, 2 drafters and led by 3 principals. In December 2015, a review is being made regarding the consultant business feasibility. The increase of income from 800 million rupiahs to 3.2 billion rupiahs is being analyzed through 6 business aspects, i.e. business environment aspect, marketing aspect, technical and technology aspects, management and human resource aspect, and financial aspect. The result from such study is being discussed in this master degree thesis. The theoretical benefit from such research is expected to give positive contribution towards further study in business development in building construction sectors, particularly the architecture design consultant. As the indirect consequence, this can become inspiration and positive push for new start-ups in architecture design company in particular, and Indonesian building construction business in general.

The scope of study that is included in the discussion is factors that may result in increase of the firm total revenue reviewed in accordance to the 6 aspects that is mentioned earlier.

**LITERATURE REVIEW**

**Previous research**

**Analytical Feasibility Study of Investation in Development of PT. Aneka Andalan Karya**

The feasibility study of Investation in Development of PT. Aneka Andalan Karya of which purpose is for assessment of the its expansion plan, through the calculation of its investment value compared to the margin of expected company revenue. This study is conducted using aspects such as marketing aspect, production method and technology aspect, management aspect, human resource aspect, legal aspects and economic financial aspects. From those 5 aspects the result hopefully can give indication of the effectiveness of the expansion plan. The calculation comprised of five investation feasibility analysis with the result as follows: Payback Period Method showing the required time for Return of Investment of 311 million rupiahs capital in 2 years and 16 days; Average Rate of Return Method showing the average profit rate of 215.91%; Net Present Value Method is showing value of positive 225 million rupiah; Internal Rate of Return Method showing return of interest of 37.7%. Such result indicates a higher potential return in comparison to Indonesian common bank interest rate of 14%. By Profitabilitiy Index Method results in 1.72 point, which is higher than 1 borderline point.

In conclusion based on these 5 calculation methods, such expansion plan in PT. Aneka Andalan Karya is preferred and may result in good company growth.

**Analytical Feasibility Study of Initial Capital Investment for the Purpose of Opening New Branch Dealer of Chanel Multi Wijoyo Motor.**
Feasibility study is one analysis that involves an in depth study of one business activity that is being conducted in order to make a clear decision on its feasibility. Data and variables that is being used in the study is the amount of initial investment, estimated revenue, estimated operational cost, and estimated profit or loss. The collected data will be analyzed by Payback Period Method, Net Present Value, Profitability Index, and Internal Rate of Return. From such calculations, it is derived that the Payback Period is 1 year and 9 months, of which is much shorter than the ideal required period of 3 years. NPV or net value is 137 million rupiah more than 0, which is considered a positive or preferred result from the 197 million investment. PI value is 1.7 times bigger than the expected Rate of Return of Investment. IRR is at 37.752% bigger than common interest rate that is being use as loan, at 6%. Calculation results from aforementioned result shows a positive result, and it is concluded that this is a sound investment.

Business Feasibility Study
Feasibility study is a research conducted with the purpose of making an informed decision regarding the commencement of the business steps. One business can be said feasible if the idea can bring bigger benefit for all stake holder compared to negative benefit that may be incurred (Suliyanto, 2010:3). According to Suliyanto (2010:8) the activity of business feasibility study not only beneficial for starting up a business, but also for business owner that is in the middle of these activity: starting new line of works, developing scope of works, choosing the best investment / project with the most potential benefit. According to Kashmir and Jakfar (2012), there are 5 purpose in doing feasibility study, as follows: avoiding the risk of loss, assisting the process of planning, assisting the process of work, assisting audit and monitoring, assisting control. Business that is being assessed has been operating for 4 years, hence the researcher decide to conduct the feasibility study under the category of developing business. In this stage, there are several aspect in needs of discussion, as follows: business environment aspect, marketing aspect, legal aspect, technical aspect, management and human resource aspect, and financial aspect.

Business Environment Aspect
Politic Economy Social Technology Analysis, according to Ireland (2013, 36 – 44), refers to general environment outside the company. Environmental aspect will have effect towards the whole industry including the company within it, with various degree and level of influence. After the assessment of PEST factor, the result can be described in External Factor Analysis Summary for consultant A, that will be detailed further into Opportunity and Threat for the company. Kodrat (2009) explains that discovery of new strategy and clear assesment of one competitive edge, can be analyzed through five forces model. Included in this model are: competition among the industry, threat of new comers, threat of substitute goods, demand of such service, and supply of such service. Internal analysis description is known as Internal Factor Analysis Summary or IFAS, in which the company will have insight of its Strength and Weakness. The Strength Weakness Opportunity Threat (SWOT) analysis is a historical technic that is being used to deliver a clear and complete understanding of company strategical positioning (Kodrat, 2009:122). SWOT analysis is being conducted by analysing internal factors (strength and weakness) and external factors (opportunity and threat).

Marketing Aspect
Kashmir and Jakfar stated that if proper analysis does not given to marketing, specifically on the business future potential, it may lead to the failure of the company in accomplishing its goal. It is highly probable to rise a threat towards livelihood of the company. A marketer must have a complete knowledge of the market that is going to be penetrated, for example: the availability of
the market, including its size, potential, competitive level, and the size of market share that is being contested by the rival business (2012:40-41). Segmentation, Targeting, Positioning (STP) Analysis is a series of marketing strategy with a purpose of producing company policy in each own respective context (Suliyanto, 2010:93). Marketing mix is a combination of seven variables in marketing system that can be managed by the company (Suliyanto, 2010:83). The services that is being offered by the company, that can deliver benefit, bring fulfillment towards consumer needs, and cause satisfaction is explained in the format of 7P (product, price, people, place, promotion, process, and physical evidence).

**Legal Aspect**
Legal aspect assess the legal requirements for conducting the business. Each business may have various legal requirements that is dissimilar and may depend to the complexity of the business itself (Suliyanto, 2010:15). The purpose of legal aspect, as explained by Kashmir and Jakfar (2012:24), is to give answer to the enquiry of authenticity and the completeness of the legal documents supporting the business. Specific analysis of such law in the feasibility studies, according to Suliyanto (2010:16), is being done by analyzing business legal documents, analyzing the appropriateness of business legal standing towards the business idea to be conducted, analyzing the ability of a business in its law conformity, and analyzing legal warranty that is available if the business is being run on loan.

**Technical and Technology Aspect**
According to Kashmir and Jakfar (2012:150), technical or operating aspect also known as production aspect. The analysis of this aspect is to gain assessment of company ability in conducting its core business. It is being evaluated based on its location, area of production, layout and the performance of production machines.

**Management and Human Resource Aspect**
Analysis of management and human resource aspect give an evaluation of workers availability, both in quality and quantity for conducting business operation (Suliyanto, 2010:158). According to Fahmi (2014:103) in evaluating the feasibility of human resource aspect, comfortable working environment is one of the utmost important factor. In this context, it is expected to build a psychological mechanism contract.

**Financial Aspect**
Finance is an aspect that is used in the assessment of company whole monetary condition (Kasmir and Jakfar, 2012:89). Both profit oriented business and non – profit oriented business needs to carefully address the financial aspect before conducting its business. Profit oriented business will make decision that lead to financial profit, while non – profit business study its course of action based on the ability to deliver its activity for accomplishing its altruistic mission (Suliyanto, 2010:183). Feasibility study in financial aspect will be conducted by the study of Net Present Value (NPV), Interest Rate of Return (IRR), Payback Period (PP), and Profitability Index (PI). Future financial projection in revenue will also be conducted in three different scenarios, which are pessimist scenario, moderate scenario, and optimist scenario.

**RESEARCH METHODS**
Based on its purpose, this research can categorized as evaluation and development research, with the following reasons:
1. Providing information and also act as an evaluation of further business development. The evaluation will include the feasibility of such expansion.
2. Showing clear information on the possible alternatives for the purpose of making full informed decision.

Based on its method, this research falls on the qualitative research group, with the following reasons:
1. Reliance towards subjective interviews with first hand sources, conducted in inductive approach during decision making process of the derived conclusion.
2. In accordance to the research problems, the omission of research structure and theoritical structures is the result of focusing on verifying initial theory and keeping the natural setting phenomenon.

The research took place in Architecture Consultant A, located in Jalan Darmo Baru Timur 5 no 16, Surabaya, 60189, East Java. The research thesis is conducted from 2016 May in the period of 6 months. The research is expected to be completed on 2016 November. Problem identification is based on research objects and literature study focusing on actual problems faced by the company. The subsequent steps including the definition of problems as the research scope, and the assumed problem that can be analyzed in both internal and external factor. The result of such process will become the base of 6 aspects feasibility study assessments.

12 steps of the research is as follows:
1. Interviewing first hand sources, including the process of making transcripts as provided in the appendices. The interview is conducted towards 8 informants, as follows:
   a. Mr. Leonardo (code PL – Appendix A)
   b. Mr. Andi Santoso (code AS – Appendix B)
   c. Mr. Samudaya (code SD – Appendix C)
   d. Mr. Stefanus Kwok (code SK – Appendix D)
   e. Ms. Ivana (code IV – Appendix E)
   f. Ms. Vicky (code VS – Appendix F)
   g. Mr. Louis (code LP – Appendix G)
   h. Mr. Tiong Bing (code TB – Appendix H)
2. Synthesizing and crystalization of the previous result into 6 table of business feasibility study, in the format of interview induction table.
3. Data analysis with 6 aspects towards 8 interviewees regarding external and internal factors that may affect the consultant company A.

Data Analysis validation will be written inside quotation marks bracket (“ “) along with codes as follows:
“Direct interview quote” (A-B, C-D)
A = Characters referring to appendix section mentioned
B = Page number of the mentioned appendix
C = Line Number at the start of the quote
D = Line Number at the end of the quote
Example: (A-7, 3-4) signifying Appendix A, page 7, from line 3 to 4 in page A-7.
4. Business Environment Aspect which covers external factors of Indonesian building construction sector. The addressed factors are politics, economy, social, and technology or PEST Analysis that will be summed in opportunity and threats.
5. Internal factors of consultant A, by evaluating Five Forces Model, comprised of newcomer threats, supply power, demand, substitute services or products, competition. The result will be summed in strength and weakness.
6. SWOT analysis matrix to be further developed into SO (growth), WO (stability), ST (diversification), WT (turnaround), to develop strategy for further growth.
7. Marketing Aspect, which comprise of two part, STP analysis and 7p – marketing mix analysis.
8. Legal Aspect, particularly in the effort to gain professional architecture certification, in this case SKA (Sertifikat Keterangan Ahli) from IAI (Ikatan Arsitek Indonesia).
9. Technological Aspect that is directly affecting production process, comprised 2 parts: hardware and software.
10. Management and Human Resources Aspect, that will be broken down into 3 parts, as follows: organizational structure, workload analysis, and incentives salary.
12. Conclusion and Managerial Implications that is important for the company development.

RESULT AND DISCUSSION

Business Environment Aspect
The analysis result based on PEST analysis shows that the architect company A growth is directly influenced by Indonesian economic and political condition, as a result of good government policy. This condition result in higher investment from private sectors and investors. Economical factor directly correlates with increase of society buying power and the increase of technology adoption. The increase of contemporary technology immersion, in return will lead to higher productivity and quality. Social condition is deemed not to be significant towards the architecture company. Internal strength analysis through Five Forces Analysis shows that consultant A is quite competitive in facing new substitute industry. Consultant A effort in adding its competitive edge by picking its marketing niche in a specific market target. There is no evident substitute product nor service. Negotiation process and contract dealing process is easier if prior identification and screening has been thoroughly delivered.

PEST analysis will result in opportunity and threat data, while Five Forces analysis will result in Strength and weakness information. From this step, a further SWOT analysis is conducted with the purpose of finding the effective development methods.

From Company A SWOT Analysis, it is found that Quadrant 1 strategy that can be categorized as part B, or Stable Growth Strategy. This is a beneficial and preferred condition, of which a company have the ability in making the best of available opportunity and potential. Further development of company A, may require stable and gradual growth mirroring Indonesia economic growth, while maintain top tier project portfolio until the expected revenue of 3.2 billion is reached.

Marketing Aspect
Analysis of STP factors shows the utmost importance are, the correct market positioning, both geographical coverage, demographic of client, psychographic or social class, and behavioral including client benefit and user loyalty. By proper marketing execution, the marketing strategy will be clear and focused.

The company positioning has a strong tendency towards commercial project, and may be detailed further in the future time. If an architecture design firm can maintain its quality and provide more added benefit for the building or project owners, it will earn the company a strong clientele that in turn, will lead to strong stream of projects. Such strong presence in the industry, coupled with competitive pricing will ensure the company business sustainability.

Market Analysis of architecture consultant company A shows a majority of commercial project located on the major islands of Indonesia, such as Java, Sumatra, Kalimantan, Sulawesi, Bali, Nusa Tenggara, Irian.

The specific marketing niche of commercial building provide a strong contribution for company A to gain an considerable revenue, compared to private residential oriented architecture company. The company is expected to achieve gradual increase in commissioned project income from 800 million to 3.2 billion by this step.
Market positioning of company A shows a high degree of competitive edge, compared to similar consultant, particularly in Surabaya, the company base city. The company have an arguably better service for the industry, due to a higher understanding of construction working drawings that lead to better drawing and technical documentations. The principal various insight and experience in construction sector make the company able to understand the industry from a multi faceted point of view. The company strive to keep its quality with the goal to create a good environment, as stated in the company vision “Together We Shape the Better World.”

The company pricing is classified based on the project size and difficulties. The pricing range from private residential project, spirituality / religious project, hospitality project, and commercial project.

Marketing Mix analysis of company A comprised of 7 combinatorial “P” variables, including Product, Place, Price, Promotion, People, Process, Physical Evidence. From further investigation and case study, it is evident that 3 variables are held more importance to the young architecture company, compared to the rest. The variables are discussed as follows:

1. **Product**, is the utmost important variable for architect due to a clear STP. A Specific project knowledge and deep understanding of the required service give a strong boost in marketing possibilities. A finished projects presented in company portfolio is one of the biggest factors that may lead to future commissioned projects.

2. **People**, as architecture consultant gravitates heavily on specific design service, skilled and trained work force is essential. A good designer is expected to have good technical skills, good human behavior and preference understanding, pleasant attitude, and great communication skills.

3. **Process** is an important factor in increasing production efficiency. Highly efficient process will lead to lower production and operational cost.

The rest of the factors relies heavily on how the development of the first three factors. i.e. Great service in itself is a good promotion.

**Legal Aspect**

Company A has increase its legal presence and requirements for architecture consultancy business. Due to its commercial projects positioning, it is mandatory for the company to be recognized as a legally sound firm. This is due to the benefits of legal protections, such as clear separation of private responsibility from company responsibility, clear and more transparent financial and tax process, to name a few. Hence, the company A has progressed on forming PT. Another important legal aspect is recognition of local architecture board. In this case, the local architecture board refers to IAI (Indonesian Association of Architect). A recognition in the form of proper training and certification may provide the company with stronger credibility and possible legal defense when such requirement arises. In 2016, the 3 principals of the company has finished all of the training level provided by the association and has been recognized as nationally registered architect.

**Technological Aspect**

Company A current location is situated in a residential vicinity. Such location give contribution to the nice and quiet atmosphere for the office, that is essential in the creative design process. Continuous computer hardware and software update also held a certain amount of importance due to the industry heavy reliance towards technology. The 3 years computer equipment life span is a must for the company.

**Human Resource and Management Aspect.**
Company A daily operation is based on its organizational structure. The current structure is quite simple and straightforward. The team mainly consist of designers, divided into three level, principals, seniors and junior architects. Further development may require additional administrative forces and financial accounting staff. Clear communication of the structural organization is important for the seamless interaction during the whole process. Further improvement may also include level of career for the staff, up to the level of associate or partner.

Job description each of the consultant component covers the range of position available and the function of each position. The current range of position is junior architect, senior architect, principal, and supporting roles to the whole consultancy business. Complementing services such as structural design, mechanical electrical design, interior design are being outsourced to independent consultant, and may be offered to the client when the demand is present. Compensation and reward system for the employee are divided into several incentive package based on the position and the contribution given. Prior work experiences and display of skill also being accounted as one of the factor in the staff salary and commission. Additional bonus based on work performance are scheduled to be given at the end of each financial year.

Financial Aspect
In order to reach 400% increase of income, the company focus is mostly put into finding new clients. Factors that are being put into considerations are estimated cost, estimate income projection, estimated profit, estimate change of capital, estimated cashflow in 2016 to 2019. Net Present Value of company A is 4 billion rupiahs. Based on this founding, company A is deemed to be business feasible. Interest Rate of Return shows the value of 11.37%. This value is higher than expected ideal value of 10.50%. Based on IRR analysis, company A is deemed to be business feasible. Payback Period analysis shows the expected investment payback to be made on the following year. Based on the current financial performance, company A is able to breakeven the initial investment in 5 months 19 days 4 hours and 48 seconds. Company A is deemed to be feasible based on the payback period analysis. Payback Profitability Index of company A is 8.76. This value is higher than the expected borderline value of 0. Based on this result, company A is able to be developed as a feasible business.

CONCLUSION
The final conclusion of the feasibility study, the architecture business consultant A is feasible after its assessment in business environment aspect, marketing aspect, legal aspect, technical aspect, management and human resource aspect, and financial aspect. In the case study of architecture firm start-ups below 6 years, it is possible for them to focus only on some of the 6 aspects. During their growth it is essential to continue to strive and develop other aspects as well. In future research, it is expected to focus on architecture firms and its senior principals as it may give further insight on the operation process inside a construction consultant company.

REFERENCES
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