Evaluating the Feasibility of Business Opportunities

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Factsheet

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Some of the information in this Factsheet is based on principles outlined in the Stage-Gate® process. See Robert G. Cooper, Winning at New Products: Creating Value through Innovation (Fourth Edition). Product Development Institute Inc. 2011. Stage-Gate® is a registered trademark of RG Cooper and Associates Consultants Inc., Oakville ON.

INTRODUCTION

Feasibility analysis is a tool business owners can use to evaluate a proposed change in a business. This change may involve developing a new product, improving an existing product, changing marketing strategy or expanding or contracting the business.

One dictionary defines feasibility as "capability of being used or dealt with successfully." It is that word - successfully - that gives feasibility analysis its real value as a planning and risk management tool. In business terms, success is usually defined as some measure of profit or increased value. An entrepreneur may have other goals, such as expanding the business to allow a family member to join the firm. Even in that scenario, the expansion must provide sufficient extra income to compensate for the additional cost. If the feasibility analysis indicates that the goal may not be met, the entrepreneur can abandon the idea before investing heavily in the expansion. In other words, the feasibility analysis provides a means whereby the entrepreneur can justify whether to proceed with or abandon a business proposal.

A change in business always involves risk. A thorough feasibility analysis identifies factors that contribute to the risk, the probability these factors will happen and their effect on the proposed business opportunity and entrepreneur. This analysis allows the development of an advanced plan to mitigate the risk factors and to establish appropriate contingencies, such as insurance or alternate markets.

THE FEASIBILITY ANALYSIS MINDSET

A feasibility analysis is conducted in several stages. The more complex the business proposal, the more stages of analysis needed. At the end of each stage, the business planner is required to do two things:

- set criteria by which the project will or will not proceed to the next planning phase
- make a decision to proceed to the next stage or to abandon the idea at this point

These criteria depend on the goals set at the beginning.

Example 1

If the entrepreneur sets a goal to increase profit by \$50,000 per year, the criteria may be that profit must increase by at least \$25,000 or it is not worth proceeding. But a market assessment shows the business is unlikely to net more than \$10,000 extra from added sales, so the entrepreneur decides to abandon the project, looking for a different opportunity.

SETTING GOALS

Often, a single goal is set against which the performance expectations of a new enterprise may be measured. At times, a long-term goal and one or two shorter-term goals by which start-up performance may be measured are set. These goals should conform to the S.M.A.R.T. model (Specific, Measurable, Achievable, Realistic, Timely), as the decision to proceed or abandon will be based on the ability of the proposed enterprise to actually reach these goals.

The ability to remain objective is imperative in the setting of goals and throughout the feasibility study. Every step in the process is designed to move the entrepreneur closer to a goal. It is important the goal be clear and remain static, and that the entrepreneur be able to clearly define whether an activity will meet the objective.



In a feasibility analysis, two sets of goals are necessary. The first set defines what the business is expected to achieve in a given time period, while the second set defines the minimum acceptable criteria that must exist if an analysis shows the business plan will not reach its first goal.

Example 2

The entrepreneur may decide a new enterprise should gross \$50,000 in its first year of production, \$125,000 in year 2 and \$200,000 in year 3. At these rates of return, it would be expected to lose \$50,000 in year 1, break even in year 2 and net \$50,000 in year 3. These financial goals would be reached if the venture could sell 10,000, 25,000 and 50,000 widgets at \$5 each respectively in the first 3 years of operation. These are the production goals for the enterprise.

These goals are specific, measurable and timely. The study will reveal whether they are realistic and achievable.

ESTABLISHING CRITERIA

The last activity in each stage of analysis is to set the criteria against which the results of the analysis will be judged. These criteria are based on the goals set for the project, and allow the entrepreneur to decide whether to proceed to examine the idea further or to abandon the idea altogether.

Example 2 continued

The entrepreneur may decide that returns of \$25,000 in year 1, \$75,000 in year 2 and break-even at \$150,000 in year 3 are tolerable. These are the minimum acceptable criteria against which the enterprise is evaluated. If the planning process fails to justify these results, the entrepreneur will abandon the project. Minimum marketing criteria would be any combination of sales volume and price that would result in a lower gross income.

At this point, the entrepreneur should re-examine the methods used to obtain the results. Here are some sample questions to ask in assessing the results.

- Was the technique used appropriate for getting accurate results?
- Did the people surveyed accurately represent the customer base?
- Do these cost figures represent accurately the cost of production and distribution?

Decision to "Proceed" or "Abandon"

The decision-making activity is easier if "minimum acceptable" criteria for each stage are established. Either the project meets the minimum criteria or it does not. If it does not, then the project is abandoned. If the project meets or exceeds the criteria, the entrepreneur can proceed to analyze the next stage.

This is where it is critical to remain focused and objective. If a "maybe" enters the decision, the goal or the information is not well defined. It may be necessary to re-define the goals and start over, or to do the activity more thoroughly.

STAGES OF EVALUATION

Feasibility analysis is a practical process. It forces the entrepreneur to examine the real circumstances that the venture is likely to encounter. This is where the entrepreneur's understanding of business management is challenged. The more thoroughly he or she can examine the various business factors, the more reliable the conclusions of the feasibility study.

Stages of Feasibility Analysis

- 1. Examine the idea.
- 2. Examine the management capabilities of the entrepreneur.
- 3. Examine the technical capabilities of the organization.
- 4. Examine the marketing potential for the product or service.
- 5. Examine the cost and financing needs.

These stages are the same as the components of the business plan, so the information gathered during the feasibility study can be transferred directly to the business plan, resulting in a more effective and accurate business plan.

FEASIBILITY PROCESS

Figure 1 illustrates a process for conducting a feasibility analysis. It can be altered according to the complexity of the project and the amount of risk involved, and is adaptable to any business development situation.

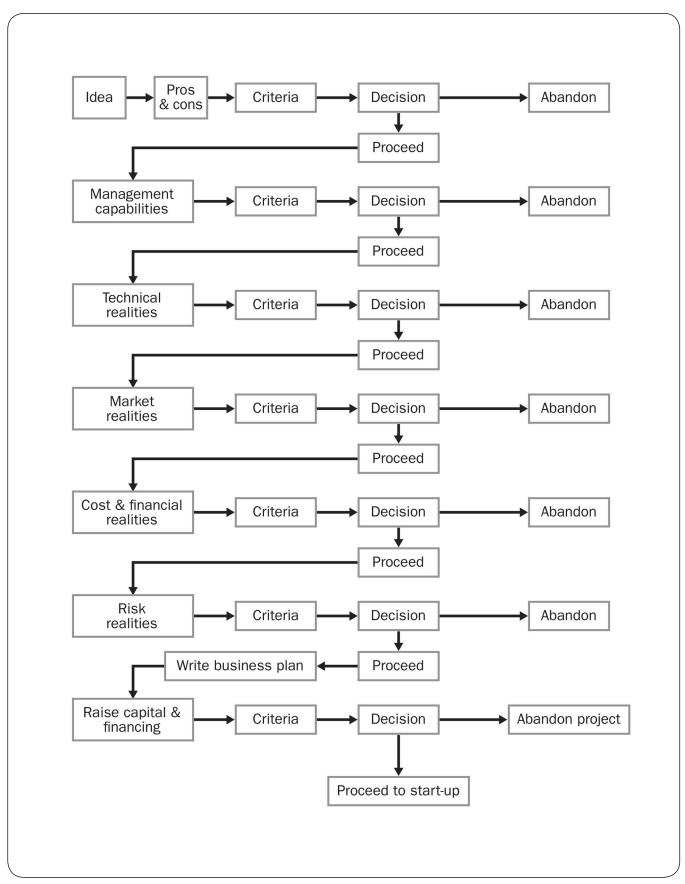


Figure 1. Feasibility process flow chart.

The Idea

Every idea has some merit and drawbacks. At this stage, the entrepreneur will concentrate mostly on the obvious benefits and limitations.

- Does the idea appear to meet set goals?
- What factors could prevent it from being successful?
- Is the entrepreneur's family prepared to make the sacrifices necessary for this project to work?

It is difficult to remain totally objective through this stage. A healthy level of scepticism allows the entrepreneur to discover the warning signs and pitfalls that can sabotage any good idea.

Criteria considerations:

- Are the benefits from this idea sufficient to justify the cost in terms of finance, personal stress and family sacrifice?
- What is the minimum ratio of benefits to cost that is tolerable?

Management Capabilities

Management experts agree that the most important factor for success in any business is the management team that makes the decisions, yet it is the factor most often overlooked in determining the feasibility of a venture. When beginning a feasibility study, consider the following:

- What management skills are lacking in order to have effective control over this enterprise?
- Can these skills be acquired?
- What effect will involvement in this project have on the family and other enterprises?
- Will this new enterprise produce the lifestyle that I want for my family and myself?

Criteria considerations:

- What specific skills need to be developed or hired?
- At what point does the lack of available skills become an obstacle?
- On a scale of 10, how much support is there from family for pursuing this opportunity?

Technical Realities

An assessment of the idea must consider the question, "Can it be done?" In other words, are the entrepreneur and organization capable of producing the product and taking it to the marketplace? Specific questions might include:

- Is there access to the required raw materials?
- What technology, equipment and processes are required?
- Do staff understand the required technology, equipment and processes?
- Does it appear that the production system is workable and affordable?

Criteria considerations:

- How much time can be devoted to this project at the expense of other enterprises?
- How much change is required to accommodate this project?
- At what point is it not worth the effort?

Market Realities

The success of any venture depends on the ability to get the right product into the right marketplace at the right time and the right price. The marketing world is littered with failed products that could have been successful if the formula for success had been different. Effective market research is the most important activity an entrepreneur can undertake to reduce risk.

Key areas to research

- features and benefits of the product or service
- target market (Who is most likely to buy?)
- distribution options (best way to reach the target buyers)
- market demand (How many possible buyers, what volume and price?)
- competition (What products and companies compete?)
- trends (What is the expected life of the product?)
- expected price (highest, lowest and most often prices)
- expected sales (volume and market conditions)

It is important to understand that customers rule the marketplace. They alone determine whether the product will sell in sufficient numbers and price to be viable. Market research can reveal the probability of product success.

Criteria Considerations:

- What are the minimum values on sales volume and price needed to be viable?
- Is the potential for growth in sales adequate?
- Is this product the best option available?

Cost and Financial Realities

Each of the previous analyses generated information on anticipated costs and expected returns. Once this information is transferred to a ledger, three statements can be created:

- pro forma (projected) income and expense statement
- cash flow statement
- opening balance sheet

These statements are essential to creating a solid business case to justify the proposed venture. In the original goals, return on investment (ROI) might have been stated. It is possible to calculate a projected ROI.

The entrepreneur is seeking answers to the following questions:

- Does the profit level meet or exceed stated goals?
- Are the set-up costs within the range of financial options?
- Will this proposal provide sufficient return on investment?
- How will this investment affect net worth?

Criteria considerations:

- Is the cost of sales acceptable relative to the product price?
- Does the venture meet or exceed the profit goals?
- Does the expected return meet or exceed the minimum acceptable level?
- Is there a better way to reach my financial goals?

Risk Realities

Investments are made in the expectation of a return to the investor. In general, the greater the return expected, the more willing the investor will be to invest. People vary in their ability and their willingness to take risks. The ability varies with the extent of the cost and the wealth or asset value of the investor. The willingness varies with the amount of those assets that the investor is willing to place at risk. These risks may be financial or social. In either case, they can have a significant effect on the entrepreneur and his or her family.

Managing risk is a function of controlling the factors that contribute to possible losses against the investment. Feasibility analysis is a risk-management tool because it helps the entrepreneur identify the risk factors involved in the project. Other risk management tools are those practices that contribute to consistent quality and safety of the product being sold or that contribute to a low unit cost of production.

The feasibility analyst might ask these questions:

- What can go wrong with this project?
- Is there a way to prevent any of these from happening?
- What is the probability that any of these factors will go wrong?
- What is the probability that two or more of these will go wrong?
- What will be the effect on the project and the family if they do?
- Can the effect of these risks be reduced through insurance and at what cost?
- How able and willing is the entrepreneur to assume these risks?

Risk control is the utilization of systems that minimize the effect of a negative occurrence.

- **Quality control and safety programs** reduction of the risk of injury or harm to customers
- Production efficiencies competitive advantage through low cost of production
- Thorough market research improved chance of marketplace success
- Accurate cost estimates improved accuracy of estimating profit and return

Criteria Considerations:

- Do the risks involved in this venture exceed the benefits?
- What specific risks need to be avoided or controlled?
- Is the cost of risk abatement through prevention and insurance affordable?
- What is the maximum amount of risk that can be handled?

WRITING THE BUSINESS PLAN

The information that has been collected to this stage is sufficient to allow the entrepreneur to write a complete business plan. Business plan forms and electronic business plans are available wherever business books and software are sold. These may come in a variety of different formats, but all require essentially the same information.

FINANCING THE NEW ENTERPRISE

The business plan is a key tool for obtaining financing for a new business venture, but it is not a guarantee a financial institution will lend the necessary money to finance the capital and operating costs of the enterprise. The information acquired during the feasibility study will make the business plan more attractive to investors and lending institutions.

There will be one more "proceed or abandon" decision to be made at this stage. If several financing sources reject the business plan, the entrepreneur must re-examine the business case and decide whether to proceed with the proposal. One option is to review all sections of the feasibility analysis and determine whether improvements can be made. Another is to reject the idea completely and look for a better idea.

Criteria Considerations:

- How much funding is needed to operate the enterprise effectively?
- Should the business case be improved in order to keep trying?
- Does this proposal put too much at risk?

SUMMARY

Feasibility analysis can be conducted on any business proposal, from growing a new variety of sweet corn to the building of a processing plant. The amount at risk determines the intensity and thoroughness with which it is conducted. The quality of the information and analysis determines the accuracy of the resulting business case.

RECOMMENDED READING

Robert G. Cooper. 2011. Winning at New Products: Creating Value through Innovation (Fourth Edition). Product Development Institute Inc., www.prod-dev.com.

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