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ASSESSING THE FINANCIAL FEASIBILITY OF YOUR VALUE-ADDED BUSINESS

Geoff Benson, Ph.D.
Department of Agricultural & Resource Economics
North Carolina State University

A large number of small businesses fail each year, unfortunately. There are a number of reasons but one of them is lack of profitability. A second reason is insufficient funds to make it through the startup period. To avoid these pitfalls you should answer these four questions:

1. Will my business be profitable?
2. How much money will I need to start my business?
3. How much money and financial assets do I have to invest or use as collateral for a business loan?
4. Is the level of risk acceptable?

1. WILL THE BUSINESS BE PROFITABLE?

To estimate profitability you need to project revenue and costs once the business is established and reaches the intended volume of production and sales. Costs include operating and investment costs. Use Table 1 to estimate investment costs and transfer the annual cost estimates to Table 2.

Estimate the annual income and expenses once the business is established and reaches the intended volume of production and sales. If there is a seasonal effect on sales and costs, estimate these items monthly or quarterly. Table 2 is a generic example and the specific line items will vary for different types of businesses, such as services, processing and retailing.

The profit projection (pro forma profit and loss statement) is valuable as both a planning tool and a key management tool to help control business operations. The latter is discussed below. Projections provide the owner or operator with a preview of the amount of profit likely to be generated, based on the best predictions about sales and expenses. If these projections show that the venture is unlikely to achieve the desired profit goal it is necessary to re-evaluate your business plan and seek ways to improve financial performance through changes to production, marketing or distribution activities.

Table 1. Estimated Investment Costs

| Item | Useful Life | Initial Cost | Salvage Value | Depreciation ^a | Interest ^b | Prop. Tax & Ins. ^c | Total DITI ^d |
|--------------------|-------------|--------------|---------------|---------------------------|-----------------------|-------------------------------|-------------------------|
| | Years | \$ | \$ | \$ | \$ | \$ | \$ |
| Facilities | | | | | | | |
| Processing | | | | | | | |
| Warehouse | | | | | | | |
| Parking, landscape | | | | | | | |
| Other facilities | | | | | | | |
| Equipment | | | | | | | |
| Processing | | | | | | | |
| Warehousing | | | | | | | |
| Transportation | | | | | | | |
| Office | | | | | | | |
| Other Equipment | | | | | | | |
| Installation | | | | | | | |
| Other | | | | | | | |
| Other | | | | | | | |
| | | | | | | | |
| TOTALS | | | | | | | |

Average annual costs can be estimated using the following simple formulas:

^a Depreciation = (Initial cost - Salvage value) / years of life

^b Interest on investment = ((Initial cost + Salvage value) / 2) X annual cost of capital

^c Property taxes on facilities and equipment = ((Initial cost + Salvage value) / 2) X tax rate, plus
Insurance premiums = ((Initial cost + Salvage value) / 2) X premium rate per \$ insured

^d Total annual cost for depreciation, interest, tax & insurance

Table 2. PROFIT PROJECTIONS (Pro Forma Profit & Loss Statement)

| Item | 1 st Quarter | 2 nd Quarter | 3 rd Quarter | 4 th Quarter | Annual |
|------------------------------|-------------------------|-------------------------|-------------------------|-------------------------|--------|
| | \$ | \$ | \$ | \$ | \$ |
| Revenue: | | | | | |
| Gross sales | | | | | |
| Less returns | | | | | |
| Net sales | | | | | |
| Other income | | | | | |
| Inventory change | | | | | |
| TOTAL REVENUE | | | | | |
| Expenses | | | | | |
| Operating expenses: | | | | | |
| Salaries/ wages | | | | | |
| Rent | | | | | |
| Advertising | | | | | |
| Raw materials, supplies | | | | | |
| Utilities | | | | | |
| Insurance | | | | | |
| Taxes | | | | | |
| Maintenance | | | | | |
| Delivery/transportation | | | | | |
| Interest on working capital | | | | | |
| Miscellaneous | | | | | |
| Capital Charges: | | | | | |
| Depreciation or amortization | | | | | |
| Interest on investment | | | | | |
| TOTAL EXPENSES | | | | | |
| PROFIT OR LOSS | | | | | |

A second approach to evaluating profitability is to estimate the rate of return on assets (investment). The profitability of the business is reported a percentage return on the amount of investment required, using average figures for the life of the project. The formula is:

$$\frac{\text{Average Annual Profit \$}}{\text{Average Investment \$}} = \text{Rate of Return (as a decimal)}$$

This is a particularly useful profit measure if the initial investment is large and if significant amounts of money must be borrowed because the rate of return can be compared to the interest rate charged on loans. The rate of return should be significantly greater than the going interest rate for the venture to justify the investment. Many businesses strive for a rate of return of 15 percent or more.

2. HOW MUCH MONEY WILL YOU NEED TO START YOUR BUSINESS?

The answer to the second question requires making projections of cash flows, including initial investments and working capital to get the business established. These projections will also be helpful in negotiating loan repayment terms if you will borrow money to start your business.

There will be a period from the time you first make a financial commitment to your new business until you have a product to sell. In addition, it likely will take time to build your sales volume and there is a delay between delivering the product and receiving payment. You will need money for any new investments in facilities and equipment and to cover operating expenses until there is enough revenue to make the business self-sustaining. By including the investment costs, projections for start-up costs and projections for sales and production costs through the startup period you can see the cumulative effects on net cash flows over time. Most new businesses operate at a cash deficit at the beginning and it may take up to three or more years to reach your financial operating targets. Quarterly projections are recommended until the business is through the startup phase, which may be three years or more, to determine peak needs for financing and to establish a realistic debt repayment schedule if borrowed funds are needed.

Table 3 illustrates the four main components of cash flow projections for a small family business; operations, investing, non-business (personal), and financing. There is a more detailed cash flow worksheet at the end of this article. This is intended as a guide because the most appropriate cost and income categories will vary according to the specific nature of the business. To keep the number of categories useful but manageable, itemize all categories that account for 5 percent or more of total income or expenses. Group smaller but related items into one category, e.g. include accounting, tax preparation, legal, and other professional fees under "Professional fees".

The first step in developing cash flow projections is to estimate your sales volume and prices. Because of the uncertainty that surrounds any new business, quarterly projections may be the most meaningful. Be sure to consider seasonal trends that may affect your business. Estimate the revenue from these sales after allowing for delays in receiving payment, returns and non-payment.

Estimate the cash operating costs you will incur to generate the projected level of production and sales, including the business overhead expenses. (Note you do not include depreciation charges in cash flow projections, only cash transactions.) You may

be able to obtain some estimates from publications, otherwise you will need to build your own cost estimates from your production and marketing plan.

The third component is your non-business income and expenses because you must live while you establish your new business. Include any wages and investment earnings and estimate your living expenses, including income taxes.

Table 3. Cash Flow Projections for:

| Name _____ | Period _____ |
|--|--------------|
| ITEM | \$ |
| Beginning cash on hand | |
| A1. Operating income | |
| A2. Operating expenses | |
| A3. Net cash from operations (A1 – A2) | |
| B1. Capital asset sales | |
| B2. Capital asset purchases | |
| B3. Net cash from investing (B1 – B2) | |
| C1. Non-business cash income | |
| C2. Non-business uses of cash | |
| C3. Net Non-business inflow or outflow (C1 – C2) | |
| Net cash before financing = A3 + B3 + C3 | |
| D1. New loans and credit | |
| D2. Principal repayments | |
| D3. Net cash from financing (C1 – C2) | |
| Ending Cash on hand | |
| E. Balance: Beginning cash on hand + A3 + B3 + C3 + D3 - Ending cash on hand = Funds unaccounted for (should be 0) | |

Once these three components have been estimated for each accounting period the net cash flow surplus or deficit can be calculated. For a new business the net amount will undoubtedly be negative. The net cash flow should be calculated both for each period and cumulatively through the startup period. The cumulative figures will show when the peak cash flow deficit occurs and the amount. The maximum deficit shows how much financing will be required to establish and operate your business through the startup phase. It would be prudent to add something more for contingencies. The money to cover these cash flow needs can be provided by you (equity financing), borrowed, or some combination of the two. The amount of money you have available to invest is discussed in the next section. If you need to borrow money, these cash flow projections also help you negotiate workable loan repayment terms.

3. HOW MUCH MONEY DO YOU HAVE TO INVEST OR USE AS COLLATERAL FOR A BUSINESS LOAN?

Table 4 is a Net Worth Statement so you can see how much of your own money (your equity capital) you have available to meet the cash needs identified by your cash flow projections. By comparing the total needed with the money you have available, you can determine if you need additional financing and how much. Current assets are easier to convert to cash (more liquid). It may take more time and some expense to turn other assets into cash in order to invest in your new business. Your net worth also represents the collateral you have as security for loans or for a line of credit from a financial institution. Use your equity capital and borrowed funds only for those purposes listed in your cash flow projections to make sure you will be able to continue in business through the crucial start-up phase.

4. IS THE LEVEL OF RISK ACCEPTABLE?

Any new venture carries financial risks. Developing a sound business plan and evaluating financial feasibility reduces the risk of unexpected problems but is no guarantee of success. The purpose of a risk assessment is to identify the nature of the financial risks involved and evaluate the potential impact on you and your business in order to develop strategies to reduce the risk or to be better prepared if these risks do occur. Once this has been done you can determine if the level of risk is acceptable.

There are several approaches to assessing the financial consequences of unfavorable events, such as delays in establishing the business, unfavorable sales performance, an increase in the level of investment required, or an increase in operating expense compared to what you assumed in the business plan. These approaches include sensitivity analysis, breakeven analysis, and contingency planning. Each approach should be used to evaluate the impact on profitability, cash flow and credit needs.

Table 4. Net Worth Statement

Name _____ Date _____

| Business Assets | Cost/ Basis | Market Value | Business Liabilities | Market Value |
|--|------------------------|-------------------------|--|-------------------------|
| Checking & savings accounts | | | Accounts payable | |
| | | | Taxes due | |
| Items held for sale | | | Current notes and credit lines | |
| Prepaid expenses | | | Accrued interest - short term loans | |
| Supplies on hand | | | - Term debt | |
| Accounts receivable | | | Term debt principal due in 12 mo. | |
| | | | | |
| Other current assets | | | Other current liabilities | |
| | | | | |
| Total Current Assets | | | Total Current Liabilities | |
| | | | | |
| Vehicles | | | Term debt principal due after 12 mo. | |
| Machinery and equipment | | | Leases and contracts, remainder | |
| Buildings/improvements | | | | |
| Real state | | | | |
| Securities, certificates | | | | |
| Other fixed assets | | | Other fixed liabilities | |
| Total Fixed Assets | | | Total Fixed Liabilities | |
| | | | | |
| a. Total Business Assets | | | b. Total Business Liabilities | |
| | | | | |
| c. Business Net Worth (a – b) | | | <u>Current Assets (market)</u> = _____ Current ratio Current Liabilities | |
| | | | | |
| d. Net Worth Last Year | | | <u>Total Liabilities</u> = _____ Debt to Total Assets (market) asset ratio | |
| e. Change (c – d) | | | | |
| Personal Assets | | | Personal Liabilities | |
| Bank accounts, stocks, bonds | | | Credit card, charge accounts, other loans | |
| Automobiles, boats, etc. | | | Automobile loans | |
| Household goods, clothing | | | Other loans, taxes due | |
| Real estate | | | Real estate, other long-term loans | |
| f. Total Personal Assets | | | g. Total Personal Liabilities | |
| | | | | |
| h. Total Personal Net Worth (f-g) | | | <u>Total Personal Liabilities</u> = _____ Debt to Personal Assets asset ratio | |
| Total Net Worth, Market Value (c + h) | | | | |

Sensitivity Analysis evaluates the financial impact of different assumptions about business performance. There are two general approaches, estimating the effects of a specific and more conservative projections of revenue (lower), investment (higher) and costs (higher) or by assuming specific percentage changes in revenue, the level of investment and operating costs, for example, using a 10 percent change.

Breakeven Analysis has several meanings. It is a term that is sometimes used to mean calculating a breakeven selling price based on projected production costs. Here it is used to describe the time or the sales volume it will take to recoup the initial investment. Normally, there is a lower risk when the breakeven sales volume is smaller or when the time required to breakeven is the shorter.

In their simplest form, the formulas are:

$$\frac{\text{New Investment \$}}{\text{Profit margin per unit sold}} = \text{Number of units to be sold to break even}$$

OR

$$\frac{\text{New Investment \$}}{(\text{Profit margin per unit sold} \times \text{Sales per month})} = \text{Months to break even}$$

Contingency Planning involves asking the “What If” question. The owner or operator of the proposed business identifies potential problems and then assesses the financial impacts. An extreme case of contingency planning is to ask the question “If everything goes wrong, what is my exit strategy.”

Risk assessment can be discouraging so it is important to remember the purpose, namely, to determine if the level of risk is acceptable and to be better prepared if problems do arise. The risk assessment helps you identify the nature of the financial risks involved and evaluate the potential impact on the business in order to develop strategies to reduce the risk or to be better prepared to withstand them if these risks do occur. Strategies to cope with risk include buying insurance, maintaining a cash or credit reserve, and setting clear priorities for business operations and performance.

CONTROLLING

The profit and cash flow projections for your business plan also serve as targets or benchmarks for “controlling” the business once it is in operation. Controlling means monitoring and evaluating business performance. As the business becomes a reality and actual income and expenses are known, they should be recorded and compared to your projections. Any unfavorable results, such as smaller profits caused by lower than projected sales revenues or higher than projected expenses, should be investigated

promptly and necessary changes made to address the causes and correct the problem(s).

SUMMARY

Financial feasibility depends on profitability, cash flow and financing and adequate preparation to cope with financial risk.

Profitability is assessed by making projections of income and expenses once the business is established, preferably both in dollar terms and as a rate of return on assets (investments). If the projected net returns fall short of the goal it is necessary to reevaluate the plan and look for changes that will boost income, cut costs, or both.

Cash flow projections help identify the amount of money needed to operate the business, starting from day one until the business is self sustaining. These projections show the peak needs for financing and when the peak is likely to occur.

Preparing a net worth statement will show you how much money you have and the amount of collateral available as security for loans. Even if the business has long-term profit potential you may not have adequate financial resources. In this case it will be necessary to re-evaluate your plan and look for ways to reduce your financing needs, for example, by co-packing rather than building your own processing facility, by renting a facility rather than buying real estate and building your own, or buying used equipment rather than new.

Risk assessment helps identify the potential impact of the risks any new business faces and is the basis for developing risk management strategies should problems arise.

Evaluating the financial feasibility of your new venture is time well spent and will increase the chances of success. These projections also form the basis for monitoring performance once the business is in operation and allows for the early detection of financial problems.

