

Decision thresholds and developmental stages in the expanding business

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ABSTRACT

Business owners and those who counsel them are often surprised by the crisis nature of operating a young, growing business. Even after the business has passed the breakeven point and seems comfortably in the profit range, these financial crises seem to occur. In this paper the authors present an explanation for these crises and suggest how they may be anticipated and planned.

The traditional breakeven model has one crisis point, the point where the business "breaks even" or passes into the profit range. It is suggested here that fixed costs are not truly fixed in an expanding business, but rather increase in a staircase fashion. This produces discontinuities in the fixed cost and total cost curves. That is to say, a growing business must be continually expanding and must pay for the higher costs of expansion. There is a series of breakeven points (or times when profits will be quite thin) rather than a single breakeven point. As a result, expanding businesses face three stages in their life cycle – startup, profit management, and expansion. To some degree, they will alternate between profit management and expansion as long as they continue to grow. Entrepreneurs should recognize that the profits generated in the profit management stages need to be conserved and handled wisely in anticipation of the expansion stages.

INTRODUCTION

Business owners often find themselves overwhelmed by the seeming crisis nature of operating a small business. Just when the outlook seems rosy and the owner thinks the business is reasonably established, another crisis seems to come along. Those who counsel small business owners also seem to be surprised by the number of times a business appears to be healthy and then flounders.

In this paper the authors discuss an explanation for the crisis nature of a young, growing business and suggest how decision thresholds and stages in the life of a business can be anticipated and planned.

A BREAKEVEN MODEL FOR A GROWING BUSINESS

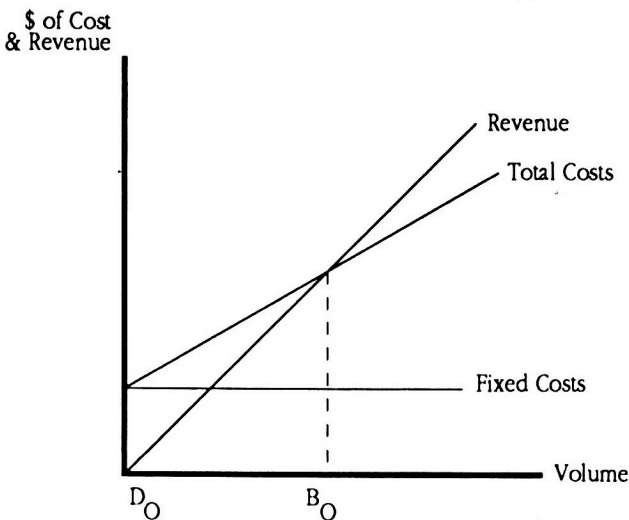
A tool that is often used by new business owners and their consultants is breakeven analysis, or what is also referred to as cost-volume-profit analysis.⁷ The traditional breakeven model for a business is presented in Exhibit 1. If a business owner and his or her financial consultant think of the operation of the business in this fashion, they will adopt the view that the business will struggle to expand volume to the breakeven point or to the point of an acceptable profit level. After this point is reached, the owner can breathe a sigh of relief because he or she is past the crisis point.

In other words, there is only one major decision point (or so it would appear); the decision to start the business. Likewise, there is only one major turning point; the point where the business begins to make a profit. Waiting in the wings is this one financial crisis that will determine whether the business will succeed or fail. (For those unfamiliar with breakeven concepts, the Horngren and Foster cost accounting text³ has an excellent discussion.)

The problem with this one-crisis type of thinking is that after the business is comfortably in the profit range, the owner feels that he or she "has it made." The startup struggle is behind, and it is clear sailing ahead. When crisis after crisis seems to be the norm, the business owner feels he or she is the victim of particularly bad luck; his or her consultant may feel the owner is particularly inept at managing the business.

It must be remembered that the traditional breakeven model is a financial model rather than a model for decision making. In addition, this model is intended to be used only for what accountants refer to as the "relevant range" of production. It is not intended to be operational over a long period of time, nor is it supposed to be accurate at low or high ranges of volume. If

Exhibit 1
Traditional Breakeven Analysis



breakeven analysis is to be applied to the early life of a growing business, then a better breakeven model is needed.

The fixed costs of a growing business are not likely to operate in the flat, straight-line pattern shown in Exhibit 1. As pointed out by Welsh and White,¹⁰ it is more likely that so-called fixed costs will operate in a stairstep pattern (see Exhibit 2). Fixed costs include such items as interest, rent, insurance, depreciation, taxes other than income taxes, and salaries. In a static business these costs will remain constant over a wide range of volume. However, in a growing business these expenses tend to increase in plateaus as resources become strained and it is necessary to add another increment. Rent is fixed until space is no longer adequate; then more space must be rented. Salaries are fixed until the present personnel can no longer do the work; then another person or group must be hired.

If fixed costs actually operate in plateau or stairstep fashion, then total costs will also have discontinuities or breaks, as shown in Exhibit 2. The total cost line might be described as having a "saw tooth" pattern. Superimposing a revenue line over this new total cost line leads to the breakeven graph in Exhibit 3. It may be noted from Exhibit 3 that the growing business then has three breakeven points. If the graph continued, it would have an infinite number of breakeven points as expansion continued. In other words, every time a business expands it has more fixed costs to cover, and a new breakeven point and financial crisis are created.

Of course, the contribution margin rate could be high enough to cover the new expansion costs and avoid actually making a loss. In this case, the revenue line in Exhibit 3 would be steeper, so that the last two breakeven points are avoided. But still profit margins would shrink as total costs, in a step-wise fashion, approach closer and closer to total revenues.

The decision thresholds and breakeven points for a growing business are presented in Exhibit 4. Rather than one major decision point as in the traditional breakeven model, there is an infinite number of decision points and expansion opportunities. Furthermore, there is an infinite number

Exhibit 2 Stairstep Pattern for "Fixed" Costs in a Growing Business

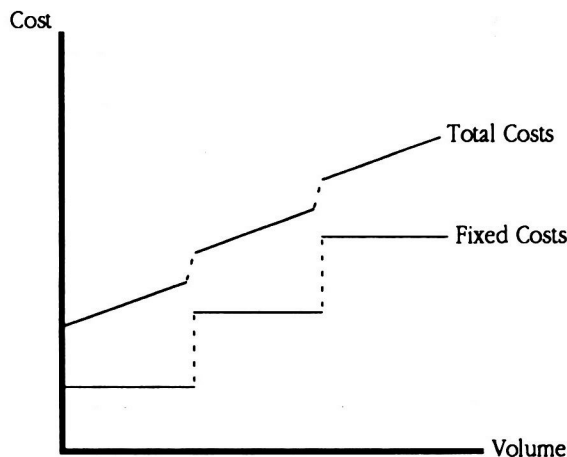
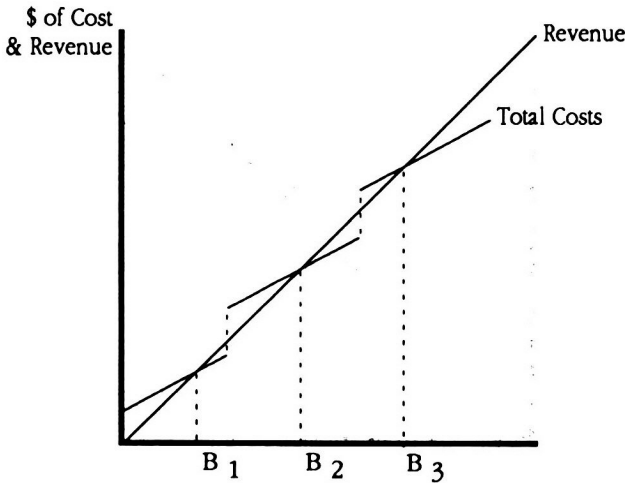


Exhibit 3 Breakeven Analysis for a Growing Firm



of breakeven or crisis points. Rather than the one crisis point as Exhibit 1, the business owner will confront crisis after crisis as expansion occurs. The recurrence of crises does not particularly mean the manager is a poor manager. On the contrary, it is because he is a good manager and has a growing business.

The breakeven model in Exhibit 4 then becomes a model for risk and decision making as well as a financial model. Rather than a steady financial pressure on decision-making, the entrepreneur experiences erratic financial pressures on decision making with each step or plateau in the fixed cost line. The success of the business will depend on proactive rather than reactive planning for the next step in the expansion of the enterprise.

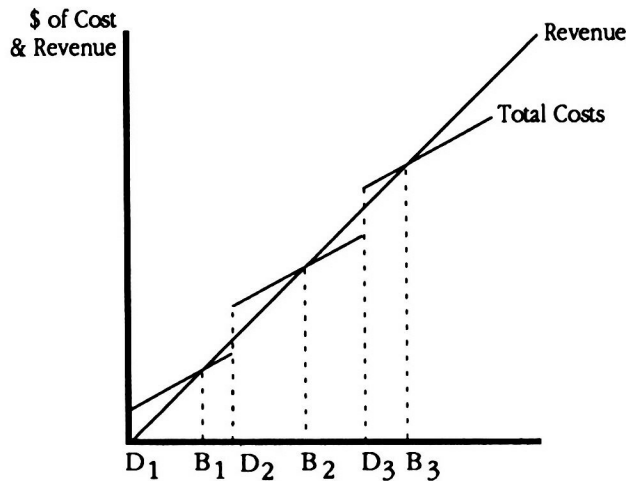
STAGES IN THE DEVELOPMENT OF A GROWING COMPANY

From a decision-making standpoint, the areas in Exhibit 4 between the decision thresholds (D_1, D_2, D_3) and intervening breakeven points (B_1, B_2, B_3) can be described as stages in the life of a new business. From D_1 to B_1 , that is from the business inception to the initial breakeven, there is a startup phase. From B_1 to D_2 , that is from the initial breakeven to the first expansion, there is a profit management phase. From D_2 to B_2 , that is from the first expansion to the second breakeven point, there is an expansion struggle phase. The first expansion is followed by a second phase of profit management from B_2 to D_3 . The phases of expansion and profit management then repeat themselves.

That is to say that a business has three types of decision making stages that it will go through during its life – startup, profit management, and expansion struggle. As long as it is growing, it will alternate to some degree between expansion struggle and profit management. Expansion struggle will be the difficult times when revenues do not meet or exceed the costs of expansion. Profit management will be the good times as the benefits of past expansions are gained.

Exhibit 4

Decision Thresholds and Breakeven Points for a Growing Firm



The challenge to a business owner and to those who provide consultation and advice to business owners is to recognize what stage of decision making the business faces, and to anticipate and to prepare for the next crisis point or decision threshold. In the remainder of this paper the authors will discuss the characteristics of these stages along with the crisis points and decision thresholds that occur in a particular stage.

Stage One: Startup. The decision to start a business has been dealt with extensively in small business literature. It is not intended here to belabor what has been discussed and established about this decision threshold. Typical of this type of decision is the conflict concerning whether to stay with a safe situation or launch out into a new business. Obtaining capital, locating and acquiring resources, and dealing with legal and financial records are also concerns.

Once the decision has been made to begin the business, the early life of the business will be characterized by long hours and hard work. This stage is also typified by a learning process as the owner deals with new situations that seem to occur almost daily. Although familiar with business in general, the consultant may also find this is a learning process as situations peculiar to a particular business or industry arise.

Stage Two: Profit Management. The second general stage in the life of a young business is the profit management stage, which starts when the business initially becomes profitable and lasts until expansion becomes an issue.

It might first be noted that the turnaround point toward profitability may not be particularly distinct. The business may hover around marginal profitability for months (or even years in some cases) and may experience losses in some of these months.

It may also be noted that breaking even may be thought of in the accounting sense as covering all explicit expenses of the business or it may be thought of in the economic sense as covering all explicit expenses of the business plus an adequate return to the owner. In most cases, the owner will probably decide that the economic breakeven is the most relevant constraint. That is, the owner wants to feel he or she can make a living from the new venture.

Once the business is safely into the profit area, responses of the owner may vary. Some may be overly optimistic. They will feel that the hard work and decisions of the first stage are now behind them. They may want to spend profits on extraneous business items such as redecorating the office or buying a new vehicle, or they may want to withdraw an excessive amount of the profits from the business. The financial position seems lavish and unbounded.

Other business owners may be overly pessimistic. Previous work by the authors² discussed a client who was the owner of a successful personnel agency. In spite of being well into the profit range, she refused to take an adequate amount out of the business for her living expenses.

Both owner and consultant should be aware that a growing business will soon be faced with the necessity for expansion. A primary concern in the profit management stage should be preparation for expansion with a business plan. Expansion decisions may be either forced on the business or planned. The latter are by far more desirable. Forced decisions involve a reaction to financial constraints while planned decisions consider financial contingencies. In preparation for expansion the owner should be counseled to retain adequate profits for a controlled expansion. He should also be prepared to obtain outside financing. Talking to a banker about a line of credit for furnishing working capital is appropriate. Likewise, seeking out potential investors or locating other sources of long-term capital is also appropriate.

In spite of the fact that profits may be adequate in the profit management stage, the cash position may be less than rosy. Again drawing on the work of Welsh and White,¹⁰ the cash position may lag behind profits by a substantial margin. Particularly in seasonal businesses, the owner may find it necessary to build up inventory and pay out cash within a short period of time, whereas cash inflows only result after the inventory is sold and payment is later received. When cash is available, care must be taken that it not be wasted on extraneous items because funds will be needed for future expansions.

Stage Three: Expansion. The first expansion period of the business lasts from the decision to expand until the second-breakeven point (D_2 to B_2 on the graph in Exhibit 4). If the owner has prepared in stage two for expansion, then the decision should be a relatively easy one. If the owner has not prepared for expansion, the decision may be forced by a backlog of unfilled orders. Then expansion will be more difficult because the owner is neither financially or psychologically prepared. As the decision is made under the pressures of mounting orders, customers may be dissatisfied; and the need for doing something quickly may result in poor choices.

Expansion decisions have physical, financial, and managerial aspects. From a physical standpoint, the business may be faced with a need for more space in which to operate. More equipment of the same kind or more efficient equipment may need to be purchased or leased. Introducing new products or services may involve different types of equipment and more operating space.

From a financial standpoint, the increased space and equipment must be financed as well as more working capital acquired to serve as a base for expanding sales. Profits generated in the profit management phase may be utilized; and new capital may need to be generated. If profits have been conserved and sources of capital already explored, the financial stresses of expansion can be minimized.

From a managerial standpoint, expansion will involve new challenges and decisions for the owner. New employees may need to be hired. The span of control may be increased so that the owner needs to delegate some managerial authority if this has not been done previously. More formalized organization structure in the form of organizational charts and job descriptions may be appropriate.

Once the decision to expand has been implemented, then the business is in a situation very much like stage one, in which there is a struggle to recoup the increased rent, depreciation, salary, and interest costs associated with expansion. The cash shortages may be even more severe than the lack of profits, particularly if outside sources of funds have not been secured.

As noted above, this new encounter with the first stage may severely erode profits but not enough to actually cause the business to show a loss. Revenues and contribution margins may be adequate to cover increased costs after expansion. Nevertheless, profit margins can suffer and be thin compared to those before expansion.

SUMMARY: THE FIRST THREE STAGES

To summarize the first three stages of operation, it should be noted that the first stage is characterized by hard work and learning as the owner struggles to make the business initially profitable.

In stage two the business, which has passed the breakeven point and has begun to make a profit, requires careful management. Some owners may feel they "have it made" and others may even discount their own successes. The cash position may show great variability, particularly in a seasonal business. At this stage, the financial adviser can render great assistance by helping the owner to plan for future expansion. This will involve spending profits wisely and looking for future sources of long- and short-term capital.

The third stage occurs after the first expansion. This stage renews the struggle to bring sales volume up to a profitable level. Expansion stresses the physical, financial, and managerial resources of the firm, and a recovery period is necessary.

LATER STAGES OF PROFIT MANAGEMENT AND EXPANSION

The early life of the business may be characterized by very short stages of profit management and expansion. If sales are very small to begin with, then this very small base may double or triple very rapidly. Thus, expansion is frequently needed and, indeed, is almost an ongoing process. As the rate of increase slows down, the periods of expansion elongate and overlap. In a mature, but slowly growing business, expansion phases may come only every five to ten years. In a young expanding business the phases may be compressed into periods of weeks or months.

It is important that small business owners and their consultants realize that frequent crises are the norm for a young, expanding business. Otherwise, they may be asking themselves why their business affairs are not going smoothly like those of a mature business.

It is also important to note that all expansion phases are not alike. Expansions that involve increasing sales of existing products are different from expansions into new product lines. Expansions in the same area are different from expansions into new territories. When the owner decides to expand into new products or new territories, the risks are greater and the learning process may be very similar to that of stage one.

As a case in point, a successful business owner in Cleveland, Ohio, supplied foods to the majority of Oriental restaurants in that city. His ventures included wholesale distribution, a retail outlet, a cooking school, and bean sprout production. When he talked to his financial consultant, he was planning a noodle factory and a shopping center. The problem with this businessman's policy of expansion was that each one brought new risks and a new learning process. Although he had been able to successfully ride out the expansion phases of his earlier ventures, the consultant felt the new plans would severely strain the business resources.

The owner was encouraged to build a business plan to maintain and expand his present operations and to postpone expansions into new ventures. This strategy avoided the premature onset of financial pressures caused by the step-up in fixed costs. At last report he was concentrating on his business and planning a scaled-down version of the shopping center financed through internally generated profits.

SUGGESTIONS FOR FURTHER RESEARCH

Previous work has suggested that anticipating and planning for financial phases in small businesses can turn management crises into opportunities.⁵ In "snatching victory from the jaws of defeat," managers encounter decision thresholds. Entrepreneurs experience these thresholds as multidimensional and confusing.⁴

In this article the authors have attempted to separate otherwise confusing stages of development into three clear and distinct stages of opportunity. The authors have dealt with the young, growing business. There has been no attempt to discuss the static or contracting business. An enterprise in the contraction phase presents particularly interesting problems. As parts of the business are shut down, it would seem that discontinuities in the fixed cost curve would again occur. When revenues decrease without proper retrenchment and decrease in fixed costs, the crisis phenomena would likely reoccur. As in the expanding business, the crisis periods should not be interpreted in a negative fashion but rather should be recognized as the normal effect of a declining market and an essential part of retrenchment. Further research is needed to define the thresholds and decision points in the static or contracting business in order that successful realignments can be made during these phases.

SUMMARY AND CONCLUSIONS

Small business owners and their financial consultants need to be aware of the breakeven model for young, growing businesses. Stage one of the business is a startup phase which lasts until profitability is first achieved. Stage two is a profit management phase when profits must be conserved for future expansion. Stage three is expansion when sales volume forces the business to move to a higher level of fixed costs, and there is a struggle again to make adequate profits. Because fixed costs tend to increase in plateaus, the growing business will alternate to some degree between profit management stages and expansion stages throughout its life.

The "saw tooth" pattern of total expenses creates crisis periods for the business that will become less pronounced as the business matures. The owner of a young business should not expect the smooth growth pattern characteristic of a mature firm. However, adequate planning in the profit management stages will facilitate later expansion stages.

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