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The Zero Base Budgeting

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THE ZERO-BASE BUDGETING PROCESS

by

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CHAPTER I

INTRODUCTION

The use of budgets has become an integral part of the planning process for both the private and the public sectors of the economy. Challenges such as the ability to allocate resources to areas with the greatest payoff or benefit, and the flexibility to adapt to changing economic conditions are crucial in the environment of business and government. Consequently, the need for an effective budgeting procedure is important to nearly every economic institution.

There are many similar definitions for the term budget. Horngren defined a budget as, "A quantitative expression of a plan of action and an aid to coordination and implementation."[1] Matz and Usry were not as verbose in their definition. They said, "A budget is simply a plan expressed in financial and other quantitative terms."[2] Pyle and White simplified the definition even more than Matz and Usry. They wrote, "A budget is a plan of future action

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[1]Charles T. Horngren, Cost Accounting: A Managerial Emphasis, 3rd ed. (Englewood Cliffs, N.J.: Prentice-Hall, 1972), p. 121.

[2]Adolph Matz and Milton F. Usry, Cost Accounting: Planning and Control, 6th ed. (Cincinnati: South-Western Publishing Co., 1976), p. 472.

expressed in monetary terms."[3] The key point included in each definition is that a budget is a plan. The definitions in the textbooks for planning are also similar. Horngren wrote, "We define planning as the selection of objectives and their means of attainment. Therefore, planning includes a delineation of goals and a choice of a decision model (decision method) for selecting means of achieving them."[4] Matz and Usry said, "Planning refers to the construction of an operating program, comprehensive enough to cover all phases of operations and detailed enough so that specific attention may be given to the program's fulfillment in controllable segments."[5] Peter A. Pyhrr put the planning and budgeting process in perspective in his book, Zero-Base Budgeting: A Practical Management Tool for Evaluating Expenses:

> Planning identifies the output desired. Budgeting identifies the input required. Planning is more general than budgeting. Planning establishes programs, sets goals and objectives, and makes basic policy decisions for the organization as a whole. Budgeting analyzes in detail the many functions or activities that the organization must perform to implement each program, analyzes the alternatives within each activity to achieve the end product desired, and identifies the trade-offs between partial or complete achievement of the established goals and the associated costs.[6]

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[3]William W. Pyle and John A. White, Fundamental Accounting Principles, 7th ed. (Homewood, Ill.: Richard D. Irwin, 1975), p. 737.

[4]Horngren, Cost Accounting, p. 5.

[5]Matz and Usry, Cost Accounting, p. 1.

[6]Peter A. Pyhrr, Zero-Base Budgeting: A Practical Management Tool for Evaluating Expenses (New York: John Wiley & Sons, 1973), p. 2.

Many different budgeting systems are used in government and industry today. According to Paul J. Stonich, a renowned systems designer, the most prevalent system used is incremental budgeting.[7] Stonich's description of incremental budgeting is that it ". . . takes the existing budget as given and analyzes the additions or subtractions from that base."[8] Logan M. Cheek, a former consultant with McKinsey and Company, described the logic behind the traditional planning and budgeting techniques, shown in Illustration 1. He observed:

> In simplest terms, it calls for three steps:
>
> 1. Last year's spending level (or the trend of recent years) is extrapolated into next year.
> 2. The trended level is incremented for wage and salary increases in the cost of purchased materials and services.
> 3. That spending level is further incremented for new projects and programs. Such requests often represent 50 to 100 percent increases over the incremented trend.[9]

Cheek noted that if all cost centers followed the incremental approach, the consolidation of all spending requests will present management with a difficult initial issue: affordability.[10] In addition, certain assumptions were made by the

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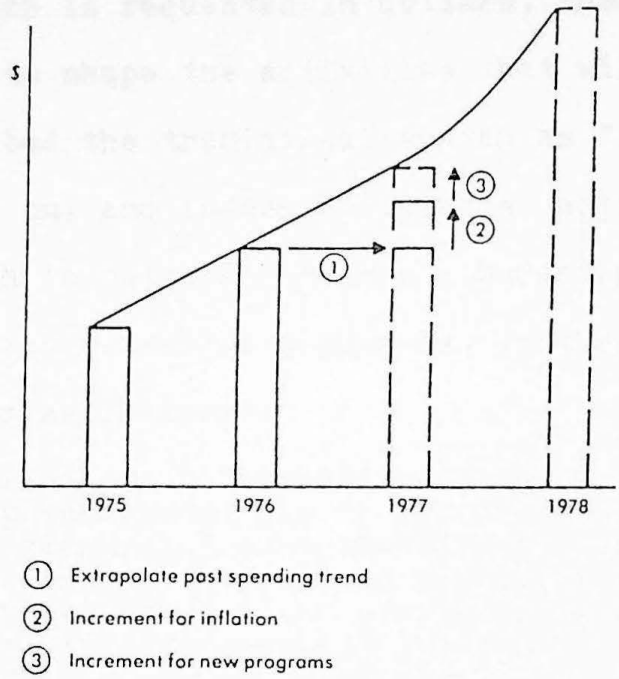
[7]Paul J. Stonich, Zero-Base Planning and Budgeting: Improved Cost Control and Resource Allocation (Homewood, Ill.: Dow Jones-Irwin, 1977), p. 2.

[8]Ibid.

[9]Logan M. Cheek, Zero-Base Budgeting Comes of Age: What It Is and What It Takes to Make It Work (New York: AMACOM, 1977), p. 2.

[10]Ibid., p. 3.

Illustration 1. Traditional Techniques Focus on Incrementing Past Spending Levels



SOURCE: Logan M. Cheek, Zero-Base Budgeting Comes of Age (New York: AMACOM, 1977), p. 3.

extrapolation of the prior year's spending level which may not be true. For example, typical assumptions about the prior year are that the activities:

* Were essential to achieving the ongoing objectives, strategies, and mission of the organization.
* Must be continued during the coming year and are more urgent than newly requested programs.
* Are now being performed in the best, most cost-effective manner.[11]

Unless all of the assumptions made are true, it is likely that the budget request that is submitted based on the extrapolation will be grossly inflated.

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[11] Ibid.

A problem with the incremental approach that both Stonich and Cheek observed is that although top management knows how much is requested in dollars, there is little opportunity to shape the activities that will be undertaken. Cheek described the traditional system as ". . . an approach that focuses on, and indeed encourages, activity rather than results, both in putting together a budget and implementing it."[12] Stonich described a weakness in the traditional budgeting system as follows:

> Rarely are there intermediate steps in the process in which top management has an opportunity to review budgets from the standpoint of activities performed.
>
> As a result, the dollars aspect of the budget is often revised to meet the profit goals of general management, but little attention is paid to the activities aspect.[13]

Because of weaknesses inherent in the incremental budgeting approach, management of corporations searched for new methods to aid in budgeting. One method that was attempted and has enjoyed a measure of success and popularity is the zero-base approach to budgeting. The zero-base budgeting technique and the term "zero-base" was introduced and popularized in 1970 by Peter A. Pyhrr.[14] In the preface to his book, Pyhrr described his involvement in the budgeting process in 1968 with the Staff and Research divisions at

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[12]Ibid., pp. 4-5.

[13]Stonich, Zero-Base Planning and Budgeting, p. 3.

[14]Bruce R. Neumann, James D. Suver, and Ray L. Brown, "Accountants' Role in Zero Base Budgeting," The CPA Journal 48 (January 1978):23.

Texas Instruments. His involvement in the review of the budgeting process identified three problem areas at Texas Instruments which Pyhrr also believed are common problems throughout industry and government:

1. Some goals and objectives had not been established, or stated goals and objectives as understood and anticipated by top management were not realistic in light of the final amount of money budgeted.

2. Some operating decisions had not been made that affected the amount of money required.

3. Budget dollars were not strictly allocated in accordance with changing responsibilities and work loads.[15]

At the end of the review at Texas Instruments, Pyhrr concluded:

> We wanted some type of budgeting procedure that would force us to identify and analyze what we were going to do in total, set goals and objectives, make the necessary operating decisions, and evaluate changing responsibilities and work loads--not after the budgeting process, but during it, as an integral part of the process.[16]

The budgeting methodology that is called zero-base budgeting was developed by Pyhrr at Texas Instruments. The zero-base process was used to prepare the 1970 budget for the Staff and Research divisions, and was expanded throughout all the divisions of Texas Instruments for the 1971 budget. After the implementation Pyhrr wrote an article describing the process for the November/December 1970 issue of the Harvard Business Review. Jimmy Carter, then the newly

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[15]Pyhrr, Zero-Base Budgeting, pp. ix-x.

[16]Ibid., p. x.

elected Governor of Georgia, read the article and persuaded Pyhrr to join him and install the zero-base budgeting process in the State of Georgia for Fiscal Year 1973. Since then the zero-base process has been adopted by many corporations and some governmental agencies.[17]

Logan Cheek traced the recent history of the zero-base budgeting concept. Illustration 2, adopted from Cheek's book, shows the history of the use of zero-base budgeting and indicates that an estimated 300-400 organizations are now using the zero-base approach to budgeting.

The purpose of this paper is to examine the zero-base budgeting process. Chapter II will include a definition of zero-base budgeting and a detailed explanation of the process. Chapter III will be a discussion of the implementation of the zero-base process, including the role that top management must play. Chapter IV will examine some applications of zero-base budgeting to planning problems. A summary of the zero-base budgeting concept will be given in Chapter V.

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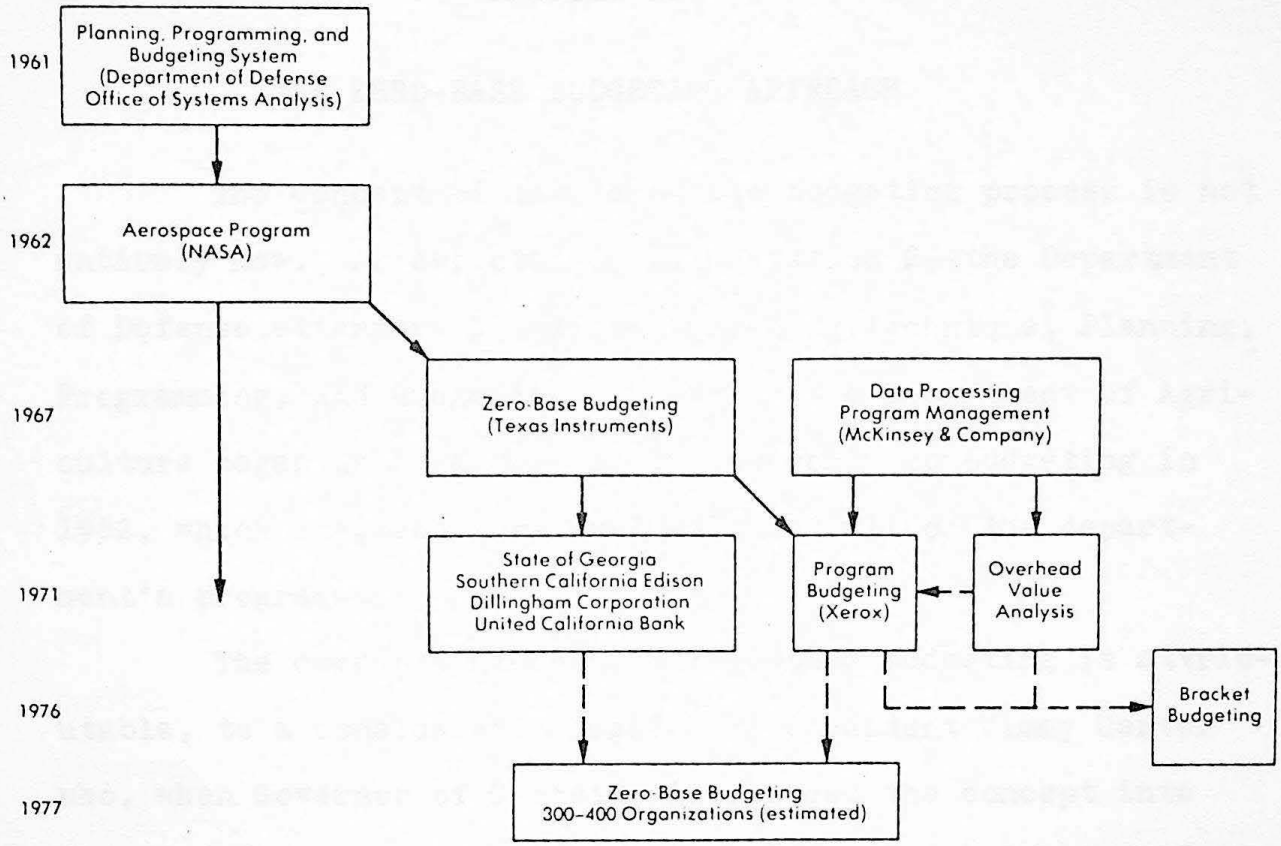
[17]Ibid., p. xi.

Illustration 2. A Brief History of Zero-Base Budgeting



SOURCE: Logan M. Cheek, Zero-Base Budgeting Comes of Age (New York: AMACOM, 1977), p. 9.

CHAPTER II

THE ZERO-BASE BUDGETING APPRCACH

The concept of the zero-base budgeting process is not entirely new. As depicted in Illustration 2, the Department of Defense attempted a similar budgeting technique, Planning, Programming, and Budgeting, in 1961. The Department of Agriculture began using a "ground up" approach to budgeting in 1962, which included a re-evaluation of all of the department's programs.[1]

The current interest in zero-base budgeting is attributable, to a considerable degree, to President Jimmy Carter who, when Governor of Georgia, introduced the concept into the State's budget, and mandated that the Federal budget for fiscal 1979 employ the method.[2] To this writer's knowledge, the mandate has not been followed, and the Federal budget for fiscal 1979 was not prepared using zero-base budgeting.

The purpose of this chapter is to define zero-base budgeting and explain the zero-base budgeting process. Definitions from four sources will be presented: Stonich, Pyhrr, Reckers and Stagliano, and Peat, Marwick, Mitchell &

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[1]Neumann, Suver, and Brown, "Accountants' Role in Zero Base Budgeting," p. 23.

[2]Peat, Marwick, Mitchell & Co., "Does ZBB Really Work?" World 11 (Summer 1977):3.

Co. A description of "decision packages" will be given, and a discussion concerning the ranking of decision packages will be presented.

Zero-Base Budgeting Defined

Paul Stonich defined zero-base planning and budgeting as follows: "It is a comprehensive, analytically structured process that allows management to make allocation decisions about nondirect costs."[3] Stonich noted that the zero-base approach pulls together techniques that are already used in planning and control, such as: incremental analysis, alternative analysis, cost/benefit analysis, performance measurement, and line-item budgeting. According to Stonich, these techniques are integrated by zero base within a systematic framework.[4]

In the preface of his book, Peter Pyhrr described the zero-base process in the following manner:

> The process requires each manager to justify his entire budget request in detail, and puts the burden of proof on him to justify why he should spend any money. Each manager must prepare a "decision package" for each activity or operation, and this package includes an analysis of cost, purpose, alternative courses of action, measures of performance, consequences of not performing the activity, and benefits.[5]

Pyhrr outlined in the first chapter of his book what he called the two basic steps of zero-base budgeting:

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[3]Stonich, Zero-Base Planning and Budgeting, p. 2.

[4]Ibid.

[5]Pyhrr, Zero-Base Budgeting, p. xi.

1. Developing "decision packages." This step involves analyzing and describing each discrete activity--current as well as new, in one or more decision packages.

2. Ranking "decision packages." This step involves evaluating and ranking these packages in order of importance through cost/benefit analysis or subjective evaluation.[6]

In an article in Management Accounting, Philip Reckers and A. J. Stagliano gave this definition for zero-base budgeting:

> Fundamentally, zero-base budgeting is little more than an integration and formalization of such underlying financial planning techniques as management team development, incremental cost-benefit analysis, and project accountability through compulsory and systematic reviews.
>
> Operationally, the program centers around the creation and evaluation of "decision packages." These documents are the building blocks of the budget; they are self-contained, detailed descriptions of activity-level funding requests.[7]

The final definition to be presented is taken from an article on zero-base budgeting in a Peat, Marwick, Mitchell & Co. publication, World:

> Simply stated, ZBB requires the management of each department of an organization to identify and explain each one of its activities which can be analyzed and about which discretionary decisions can be made in the form of a "decision package" which are then ranked in order of priority. Current activities are given the same identity and scrutiny as planned activities. Therefore, all activities must be fully justified rather than just new ones or incremental changes to existing ones. Every department thus offers senior management a set of decision packages covering its full range of

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[6] Ibid., p. 5.

[7] Philip M. J. Reckers and A. J. Stagliano, "Zero-Base Budgeting," Management Accounting 59 (November 1977): 18.

> activities with the priorities clearly indicated and the weak spots bared for the budget cutter's axe.[8]

The four definitions presented contained the same basic ideas about zero-base budgeting. The budget is developed by analyzing small units, or activities, of a department or organization. The analysis of the activity is called a "decision package"[9] and each discrete activity must be included in a decision package, presented in detail, and justified. Once the decision packages are prepared, they must be ranked in an order of priority. This process is normally completed by each department, and the departments are then combined so that an overall budget for the company or organization can be prepared.

The preceding discussion has presented a definition of zero-base budgeting. The following section will explain the nature of decision packages, including how they are developed and ranked.

The Decision Package

The development and subsequent ranking of the decision packages are the very essence of the zero-base budgeting process. The concept of the decision package is generally considered to denote a discrete activity that can be analyzed

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[8] Peat, Marwick, Mitchell & Co., "Does ZBB Really Work?" p. 3.

[9] Although other terms, such as "decision units," are sometimes used by some authors, this paper will use the term "decision package." A complete description of the term will be given later in this chapter.

and evaluated. For example, Pyhrr described the concept of decision packages in the following manner: "A decision package is a document that identifies and describes a specific activity in such a manner that management can (1) evaluate it and rank it against other activities competing for limited resources, and (2) decide whether to approve or disapprove it."[10] The description by Peat, Marwick, Mitchell & Co. viewed the decision package in a more general light. They said:

> A decision package is a device to allow all of the managers in a unit to document, in a common form, the activities in their area for presentation to higher management in terms of the necessity of the service being provided, the alternative methods that might provide the service and the different kinds of services that might be possible. Decision packages can relate to a department or a sub-function of a department; they can relate to a program or a portion of a program; or they can involve a combination or consolidation such as occur frequently in data processing activities.[11]

Although a decision package may relate to an entire department as suggested by Peat, Marwick, Mitchell & Co., there are often several discrete activities contained in the organizational unit or department.[12]

Pyhrr defined the decision package as follows:

> A decision package identifies a discrete activity, function, or operation in a definitive manner for management evaluation and comparison with other activities. This identification includes:

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[10]Pyhrr, Zero-Base Budgeting, p. 6.

[11]Peat, Marwick, Mitchell & Co., "Does ZBB Really Work?" p. 5.

[12]Pyhrr, Zero-Base Budgeting, p. 12.

* Purpose (or goals and objectives)
* Consequence of not performing the activity
* Measures of performance
* Alternative courses of action
* Costs and benefits.[13]

Although other authors may suggest various "models" for the decision package, it should include, at a minimum, the elements listed above. The Peat, Marwick, Mitchell & Co. article presented five points nearly identical to those outlined by Pyhrr. Their comment on the five elements was "These considerations are the meat of ZBB and, regardless of what else the decision packages might contain, these five characteristics should be present."[14] Any other information that would be useful in evaluating the project could also be included in the decision package. For example, the inclusion of ratios, trends and relative relationships with other activities may be helpful in the evaluation of the decision packages.[15]

From the description given for the decision package, one can see that the preparation of the decision packages will require a great deal of thought on the part of the manager preparing them. The design of the decision package model may play an important part in organizing the necessary information. Although there are numerous models in use, all of them attempt

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[13]Ibid., p. 6.

[14]Peat, Marwick, Mitchell & Co., "Does ZBB Really Work?" p. 5.

[15]Ibid.

to include the considerations outlined above in the model format. The decision package format suggested by Pyhrr is presented in Illustration 3. His model allows for the inclusion of adequate detail, while retaining an ease of readability.

A perspective on the nature of decision packages has been presented above. The sections that follow will deal with the developing of the decision package and the ranking of decision packages.

Developing the Decision Package

The development of decision packages is a difficult procedure the first time zero-base budgeting is used. A crucial decision that must be made is the determination of the level at which decision packages should be prepared. The importance of this was stressed by Peat, Marwick, Mitchell & Co.:

> If the decision package is prepared at too high a level, there will be little or no meaningful analysis. If it's prepared at too low a level, the volume of paper generated will overwhelm the process.[16]

A logical starting point in structuring the zero-base budgeting system would be the development of overall planning assumptions for the year. According to Pyhrr, "It is extremely helpful if upper management issues a formal set of planning assumptions to aid each manager in determining next

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[16] Ibid.

Illustration 3. Decision Package

Decision Package

(1) Package Name	(2) Division	(3) Department	(4) Cost Center	(5) Rank
Product X Planning (1 of 3)	Circuits	DTL Planning	205	2

(6) Statement of Purpose

Provide minimum level of planning effort for Product X, with an estimated 5.8 million production units, to provide production and shipping schedules for the line foreman.

(7) Description of Actions (Operations)

Maintain updated production and shipping schedules for two weeks in advance (currently maintaining schedules four weeks in advance).

Provide finished goods inventory level reports daily and in process inventory reports every other day (currently being done daily).

Maintain perpetual inventory system (computerized) on raw materials to maintain a two week supply on hand and a two week supply on order.

Two accounting clerks, two planners.

(8) Achievements/Benefits

Activity required for minimum maintenance of planning function to deliver products on schedule. Overtime and clerical effort reduced due to perpetual inventory system. Professional replaced with clerk for a savings of $6,000.

(9) Consequences of not Approving Package

Elimination of planners would force line foremen to do their own planning (zero incremental cost for foremen); but excessive inventories, inefficient production runs, and delayed shipments would result in excessive sales loss.

(10) Quantitative Package Measures	1971	1972	1973	(11) Resources Required ($ in Thousands)	1971	1972	1973	% 73/72
$ million NSB/planner	3.75	3.60	5.25	GROSS $	45	60	45	75%
Average inventory $ million NSB	10%	12%	12%	NET $	45	60	45	75%
Package cost/NSB	.30%	.33%	.21%	PEOPLE: HOURLY	1	1	2	200%
Package cost/GPM	.90%	1.1%	.75%	SALARY	3	4	2	50%

Manager John Adams Prepared By John Adams Date 7/10/72 Page 1 of 2

Illustration 3--Continued

Decision Package

(1) Package Name	(2) Division	(3) Department	(4) Cost Center	(5) Rank
Product X Planning (1 of 3)	Circuits	DTL Planning	205	2

(12) Alternatives (Different Levels of Effort) and Cost

- Package 2 of 3 (cost $15K): Add back long range planner. Increase forward planning of production and shipping schedules from two to four weeks, update in process inventory reports daily, assist marketing manager with special problem customers.
- Package 3 of 3 (cost $15K): Add operations research analyst to evaluate optimal length of production runs versus optimal inventory level by color and size of product.

(13) Alternatives (Different Ways of Performing the Same Function, Activity, or Operation)

1. Combine production planning for products X, Y, and Z: Save two planners at $15,000 each (total of 12 planners for combined departments). Foremen of each product line fear lack of specialized service; peak workloads on all product lines coincide—creating an excessive burden on one supervisor to effectively manage; product departments are located in separate buildings and physical proximity of planning is desired.
2. Production planning performed by line foremen: (see consequences of not approving this package).

(14) DETAIL COSTING

#	ACCOUNT	1972	1973
	WAGES	5.5	10.2
	SALARIES	38.8	21.0
	BENEFITS	5.1	3.2
211	MAINTENANCE		
215	MATL./SUPPLIES	2.3	2.0
217	DEPRECIATION	.7	.5
401	TRAVEL		
415	FEES		
501	TELEPHONE	1.2	1.0
502	RENT/OCCUPANCY	2.5	2.5
503	UTILITIES	.5	.5
710	Computer	3.0	3.0
	ALL OTHER	.5	.5
	GROSS $	60.1	45.0
	NET $	60.1	45.0

(15) QUARTERLY DISTRIBUTION

	1	2	3	4
GROSS	10	11	12	12
NET	10	11	12	12
HRLY	1	2	2	2
SAL	2	2	2	2

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SOURCE: Peter A. Pyhrr, Zero-Base Budgeting (New York: John Wiley & Sons, 1973), pp. 206-209.

year's requirements."[17] Such assumptions might include: general guidelines as to realistic expenditure levels for the coming budget year,[18] assumptions about inflation rates and salary increases for the coming year,[19] planned changes from the current method of operation, such as centralization and decentralization of activities, additional scope of operations, and so forth.[20] Pyhrr cited four reasons why a set of planning assumptions are needed:

1. It forces top level managers to do some detailed planning and goal setting for the coming budget period early in the budget cycle.
2. It provides all managers with a uniform basis for viewing the coming year and estimating requirements.
3. It provides a focal point for reviewing and revising planning assumptions, which in turn requires the revision of decision packages affected by those assumptions. The number of revisions in assumptions can be controlled to reduce both confusion and the cycling of budget inputs in rapidly changing environments.
4. It allows managers to readily identify the actual expenditure variances during the operating year that are created by inaccurate assumptions provided during the budgeting process.[21]

After some kind of general planning assumptions are developed, the level for determining decision packages must be determined. Cheek suggested that "Top management should

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[17]Pyhrr, Zero-Base Budgeting, p. 12.

[18]Ibid., p. 14.

[19]Stonich, Zero-Base Planning and Budgeting, p. 20.

[20]Pyhrr, Zero-Base Budgeting, p. 14.

[21]Ibid.

set a minimum organization level from which decision packages are to be developed."[22] Cheek indicated that although it could be substantially larger, "Normally, this would be a section level operation of no less than five to seven people."[23] Stonich held the following view:

> Decision units need to be established at an organizational level high enough so that the person responsible for the operation of the unit (the decision unit manager) has effective control over the budget dollars. The advantage to both top management and the decision unit manager is that his or her plan is presented not only in terms of dollars to be spent, but also of the activities to be performed.
>
> It is desirable for decision units to be roughly similar in size in terms of both personnel and dollars. Proper analysis cannot be performed on very large decision units because they tend to include a multiplicity of activities, thus complicating the incremental analysis which takes place later.
>
> A unit that is too small is not easily analyzed either, because it is difficult to develop practical lower or higher levels of service. Also, if units are very small, the result is a larger number of them which causes the total analysis to be unwieldy.[24]

Pyhrr offered the most concrete suggestions for deciding where packages could be developed:

> There are four basic considerations to determining a meaningful organization level at which decision packages should be developed:
>
> 1. Size of operation.
> 2. Available alternatives.
> 3. Organizational level at which meaningful decisions can be made.

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[22]Cheek, Zero-Base Budgeting Comes of Age, p. 23.

[23]Ibid.

[24]Stonich, Zero-Base Planning and Budgeting, pp. 20-21.

4. Time constraints (accomplishments that can reasonably be expected in the time available).[25]

Regarding the "size of operation" consideration, Pyhrr concluded, "decision packages from larger organizations (dollars and/or people) tend to approach 'discrete activities' more than do smaller organizations--even if the smaller organization has the same set of 'discrete activities'--because of the realistic alternatives available."[26] The "available alternatives" consideration would be affected by circumstances such as legal contracts or commitments, or labor contracts that inhibit management's freedom of action. In government, agencies may be restricted by outside controls, such as federal agencies restricting state and local governments.[27] Pyhrr indicated that the organization chart would probably be the best indicator of the organization level at which decision packages should be made. However, the manager should not be precluded from breaking a cost center into several functions and preparing a package for each function.[28] The "time constraint" consideration is important because an undertaking will be limited by what can realistically be accomplished in the time available. Pyhrr concluded:

> For organizations not accustomed to financial analysis and decision making at lower organization levels, time may become the limiting factor in determining the

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[25]Pyhrr, Zero-Base Budgeting, p. 46.

[26]Ibid., p. 48.

[27]Ibid., pp. 48-49.

[28]Ibid., p. 49.

organizational level at which packages are prepared--because of the time required to develop and rank large numbers of packages.[29]

Once the organization level for developing the decision package has been determined, the manager must concentrate on formulating the decision packages for the activities under his control. This can be a difficult process, but not an impossible one. According to Pyhrr, "The key to zero-base budgeting lies in the identification and evaluation of alternatives for each activity."[30] Pyhrr described two types of alternatives that should be considered when developing decision packages:

1. Different ways of performing the same function. This analysis identifies alternative ways of performing a function. The best alternative is chosen and the others are discarded.
2. Different levels of effort of performing the function. This analysis identifies alternative levels of effort and spending to perform a specific function. A minimum level of effort should be established, and additional levels of effort identified as separate decision packages.[31]

The decision package presented in Illustration 3 contained five major sections:

* General information
* Description of purpose
* Costs

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[29]Ibid., p. 50.

[30]Ibid., p. 6.

[31]Ibid., pp. 6-7.

* Benefits

* Alternatives.

It is recognized that the format of the decision package may be designed differently by every systems designer. However, the information listed above will be included in the decision package in some manner. The general information and description of purpose sections are standard communication devices that are necessary regardless of what type of budgeting is being used. Similarly, a cost section of some kind would be required for preparing any kind of budget under any budgeting system. The benefits section may be the most difficult item to explain because of the subjective evaluations required.[32] The benefits section in Illustration 3 includes both the "Achievements/Benefits" and the "Quantitative Package Measures" sections. Pyhrr pointed out that the qualitative section (Achievements/Benefits) may be difficult to narrate because it often relates to the package as a whole. However, he suggested that rather than duplicating or summarizing the narrative from other sections of the package, the description of benefits should identify the results from performing the package and also identify how the package achieves the stated purpose or goals.[33]

The alternatives section may be something that many managers are not accustomed to doing on a formal basis.

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[32] Ibid., p. 76.

[33] Ibid.

Cheek noted that although the principle of identifying and evaluating alternatives is simple, this aspect of preparing the decision package ". . . prompts the most questions and attendant confusion."[34] The first type of alternative focuses on different ways of performing the same function. Typically, the different ways of doing the same thing are mutually exclusive, and although several ways may be evaluated, only one can be selected. Cheek emphasized this point with the following example:

> If I am responsible for providing computer services, I may do it through a central facility or through a facilities management contract or through decentralized mini computers or through timesharing terminals or through an outside service bureau. But I will not normally approve and fund two or more of these alternative approaches.[35]

The advantage of the requirement to present different ways of performing an activity is that it ". . . forces managers to consider different methods and allows top management to review these alternatives."[36] Cheek called the process of considering and evaluating alternatives ". . . a key building block to fostering innovation."[37]

The other kind of alternative has its focus on the different levels of effort for performing the function. According to Cheek:

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[34]Cheek, Zero-Base Budgeting Comes of Age, pp. 41-45.

[35]Ibid., p. 45.

[36]Pyhrr, Zero-Base Budgeting, p. 76.

[37]Cheek, Zero-Base Budgeting Comes of Age, p. 45.

> Such levels are additive from a minimum level that can stand alone through as many increments as are practical. Any or all of the several levels may in fact be approved.[38]

Pyhrr recommended listing on each package a brief description of the other levels of effort proposed so that an individual looking at one package can understand the relationship of that package to the total activity.[39]

Each department manager might have his own method of actually putting the package together in the format described. However, a concise, logical, "cookbook" set of procedures could help toward making the zero-base budgeting procedure successful.

When decision packages have been formulated for all the levels in the organization, the process of ranking the packages must begin.

Ranking the Decision Packages

The ranking of decision packages gives management a technique for allocating its limited resources. Management's concern should focus around the questions of how much to spend and where to spend. The basic idea of ranking should be a relatively simple process of listing all decision packages in the order of decreasing importance. Management could then identify the benefits at specified levels of expenditure and study the consequences of not

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[38]Ibid.

[39]Pyhrr, Zero-Base Budgeting, p. 77.

approving additional decision packages that are ranked below the specified expenditure level.[40] However, in practice, this process may not be quite that simple. For example, if there is a large volume of decision packages, there may be a need for a consolidation of packages at various levels before top management reviews the entire budget. Another consideration is that some aspects of the budget are required for the company. An example of a required element would be the accounting function of the company. While there may be several decision packages for different possible levels of activity for the accounting function, some minimum level must be funded. Pyhrr outlined the following suggestions to overcome some of these problems:

1. Do not concentrate on ranking high priority or "requirement" packages that are well within the expenditure guidelines (other than to ensure that all alternatives, cost reduction opportunities, and operating improvements have been explored and incorporated as appropriate) but concentrate instead on discretionary functions and levels of effort.

2. Do not spend too much time worrying over whether package 4, for example, is more important than package 5, but instead only assure themselves that packages 4 and 5 are more important than package 15, and package 15 is more important than package 25, and so on.[41]

Since a minimum level of funding for certain budget areas may be a necessity, the zero-base budgeting process does not always start from zero. Consequently, critics of

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[40] Ibid., p. 15.

[41] Ibid., p. 18.

the system may call it "60% base budgeting." Peat, Marwick, Mitchell & Co. addressed this idea and said:

> There is a certain level of activity that a department has to maintain to be viable, and this level is the cutoff, the first rank of consolidation. If management decides that the first level of ranking will cut off at the 60% level, those activities that represent 60% of the budget for the prior year will go into the consolidation unevaluated.[42]

The funding of legal requirements that have to be met is another area that does not fit perfectly in the ranking system. The legal requirements would be mandated and the package would carry a priority or a high ranking under any circumstance.

The initial ranking of packages should be performed at the organization level of origin. Those packages would then be submitted to the manager at the next higher organization level, where they would be consolidated into one overall ranking. The process can be repeated all the way up the corporate structure. However, following this plan may result in the volume problem previously mentioned. Pyhrr suggested two possible solutions to this problem:

1. Concentrating management's review on lower priority or discretionary packages around which the funding levels or cutoff will be determined.
2. Limiting the number of consolidation levels to which the packages will be merged.[43]

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[42]Peat, Marwick, Mitchell & Co., "Does ZBB Really Work?" p. 6.

[43]Pyhrr, Zero-Base Budgeting, p. 82.

The cutoff level could be expressed in terms of a percentage of current budget or in absolute dollars. Only the packages that are not included in the cutoff level would be reviewed in detail and ranked.[44] Pyhrr suggested that limiting the number of consolidation levels could be achieved by using the natural groupings of organizational units, such as divisions, departments or product centers.[45]

The final ranking problem that must be addressed is the question of who should do the ranking. It is generally agreed that the initial ranking should be done at the organizational level where the packages are developed. As the packages are consolidated and passed up through the organization, the ranking job will normally become too much of a burden for one individual. Cheek suggested a committee be used:

> As the ranking process moves upward through larger organizations, the needed expertise may require a larger committee. Obviously, as the number of packages increases, no single manager can be intimately familiar with all of them. The committee can be staffed at the discretion of the department's top man but normally includes the key managers in each subunit as the process moves from the bottom to the top of the organization.[46]

There are various ranking approaches that can be used. Cheek indicated that four types are the most widely used: the single-standard approach, the voting system, the

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[44] Ibid.

[45] Ibid., p. 87.

[46] Cheek, Zero-Base Budgeting Comes of Age, p. 59.

major-category system and the multiple-standard approach.[47] The single-standard approach requires that all programs are evaluated by one criterion. The criterion may be return on investment, absolute dollar savings, net present value, discounted cash flow, or cost benefit ratios.[48] The voting system is particularly appropriate for organizations that rank by committee and have a large number of packages. The committee must meet, discuss each package and vote on a fixed scale, with either the average or the total points determining the ranking.[49] The major-category system is a variation of the voting approach where decision packages are grouped into major "buckets" or categories. For example, major categories could include all efforts required by law, and all efforts that pay for themselves in the first year. Ranking is done by voting on the category in total or a portion of the category.[50] The multiple-standard approach requires that several issues must be considered when ranking. For example, legal requirements, cost-effectiveness, and management acceptance could be issues in the ranking process. The effects of all of the issues, or standards, would be considered when ranking.[51] The objective under any of

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[47] Ibid., p. 61.

[48] Ibid.

[49] Ibid., pp. 63-64.

[50] Ibid., pp. 65-67.

[51] Ibid., pp. 67-69.

these is the same--ranking the packages for a funding decision.

Once all packages have been ranked, the final consolidated rankings will be reviewed by top management to establish the funding levels for each department in the organization. If the managers at various levels have done the job of ranking their packages properly, top management should have a detailed identification of the content and requirements of the packages. Therefore, they should be able to evaluate the effectiveness of each department at various funding levels for producing the desired goals and objectives of the entire organization.[52]

This chapter has discussed the nature of zero-base budgeting and defined decision packages. Chapter III will address the issue of implementing the zero-base approach in an organization.

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[52]Pyhrr, Zero-Base Budgeting, p. 96.

CHAPTER III

IMPLEMENTATION OF ZERO-BASE BUDGETING

The working mechanisms of a zero-base budgeting system were described in Chapter II. The formulation of the decision packages and the subsequent ranking of the packages are integral parts of a zero-base budget. However, any system, even if perfectly designed, can be rendered useless if the people involved do not work with the system. Whenever something new is proposed to a group of people, there is a tendency to fight the proposed change and stay with the old, familiar method. The implementation of a zero-base budgeting system generally involves a drastic change in the manner in which a budget is put together, and there may be problems that must be addressed if the system is to be allowed a chance to succeed.

According to Pyhrr, there are three general requirements that are necessary for the successful implementation of a zero-base budgeting system: (1) support from top management, (2) effective design of the system to meet the needs of the user organizations, and (3) effective management of the system.[1] The management of a system is an important consideration for any budgeting plan and is not unique to a

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[1]Pyhrr, Zero-Base Budgeting, p. 25.

zero-base application. Design of a system to meet user needs is also an important element in most systems. Pyhrr emphasized the importance of top management's role when he stated, "The one factor that can effectively kill the implementation of zero-base budgeting is lack of support from top management--because managers experience all the fears and problems of implementation before the benefits are realized."[2] The implementation problems that Pyhrr thought should be expected when zero-base budgeting is introduced can be divided into three categories:

1. Fears and administrative problems.
2. Decision package formulation problems.
3. Ranking process problems.[3]

Some of the problems relating to decision package formulation and ranking were discussed in Chapter II and will not be reiterated here. These kinds of problems can normally be resolved during the process and, therefore, do not necessarily threaten the implementation of a zero-base system. Fears and administrative problems, however, may serve to create severe stumbling blocks that could seriously threaten the successful implementation of a zero-base budgeting system for an organization.

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[2]Ibid.

[3]Ibid., p. 26.

Common fears and administrative problems that might be anticipated when the zero-base budgeting process is first implemented are the following:

1. Managers are often apprehensive of any process that forces decision making and requires detailed scrutiny of their functions for all to see.

2. Administration and communication of the zero-base budgeting process may become critical problems because more managers become involved in this process than in most budgeting and planning procedures, and these problems are further compounded in large organizations.

3. Formalized policy and planning assumptions are often nonexistent, inadequate, or not communicated properly to lower level managers who will be preparing the decision packages.

4. First-year time requirements may exceed the time spent in the prior year's planning and budgeting that used other procedures.[4]

Top management must be on the alert to recognize the onset of these kinds of problems, and be ready to take remedial actions immediately so that the implementation of the system can be continued.

The zero-base budgeting requirement for decision making and establishing priorities may be a threatening experience for managers who have learned to survive by maintaining a low profile. The zero-base process will identify exactly what and how well each activity under a manager is doing, and managers often will not enjoy this type of close scrutiny by others in the organization. Top management must

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[4]Ibid.

recognize that this problem exists and work to help the manager affected overcome the apprehension that has arisen.[5]

There may be administrative and communication problems because more managers in the organization become involved in the process. Managers who are technicians may never have been involved in the budget process prior to implementing zero-base budgeting. Therefore, these people may need additional background information about the budgeting process in general before they would be comfortable with their role in the zero-base process.[6]

The problem of inadequate or nonexistent policy and planning assumptions can actually be considered a benefit because the identification of the lack of planning assumptions will show top management that planning assumptions are indeed necessary. Identifying this need and providing guidelines for the planning process will benefit both the organization as a whole, and the individual managers in the organization.[7]

The problem of exceeding the prior year's time spent in planning and budgeting is normally only true for the first year of the zero-base budgeting process. The first year may require additional time because the managers are required to look at both current activities and proposed new

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[5]Ibid.

[6]Ibid., p. 27.

[7]Ibid.

activities, and carefully document and justify the decision package for both. After the first year, however, managers will be experienced in analyzing their operations and should be able to efficiently prepare the decision packages for the budget.[8]

The importance of the role of top management for the successful implementation of zero-base budgeting cannot be overlooked. In this environment, top management can be said to consist of the organization's chief executive, his key lieutenants, the controller and selected individuals on the budget staff who will administer the process.[9] Cheek noted the importance of top management when he said, "In a nutshell, successful zero-base budgeting requires the commitment and involvement of an executive cadre possessed by a will to manage."[10] Commitment is intended to mean more than a memorandum from the chief executive to implement zero-base budgeting. The commitment in this situation is a solid determination to implement and change for the better, with the acceptance of all the risks implied for the organization, its people and their careers.[11]

Involvement by top management will require that key executives frequently take personal stands on important and

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[8]Ibid., p. 29.

[9]Cheek, Zero-Base Budgeting Comes of Age, p. 147.

[10]Ibid., p. 148.

[11]Ibid.

controversial problems. The managerial staff can play an important and invaluable role in ensuring the analytical integrity of the decision packages, but top management must make the final decisions.[12]

Cheek outlined several steps that top management can take to facilitate the implementation of the zero-base budgeting process. Top management must provide leadership. Although this mandate may seem logical and important in any organization, Cheek stressed its importance: "Forceful leadership by a tenacious and determined top executive team is absolutely essential for successful zero-base budgeting."[13] It should also be noted that the support of middle management will be required.

Cheek noted that top management should elicit and solicit ideas from all sources. Subordinates will normally create the decision packages and suggest alternatives. By maximizing the sources of input, including input from outsiders if necessary, management will be increasing the number of alternative ways of pursuing courses of action, highlighting the strengths and weaknesses of those formally proposed, and bringing to light relevant information that will help decide which packages are best pursued.[14]

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[12]Ibid., p. 149.

[13]Ibid., p. 150.

[14]Ibid., p. 152.

Cheek also emphasized the importance of making the organization's value system known and providing rewards. The advantage of a strong and clear signal from the top on goals, objectives and approaches is that managers can conduct a focused assessment of alternative courses of action and formulate realistic decision packages without worry or confusion. The managers involved will appreciate the overall picture and know what the business is all about and what is expected of them.[15]

Cheek summarized his idea that a successful zero-base budgeting effort requires commitment and involvement of top management very succinctly:

> They must fully recognize and appreciate the need for the process and the changes it will inevitably require. They must be prepared to spend considerable time and effort with their lieutenants and in executive conference on honing and approving the final plan. Although they will not be required to work out the details of every decision package and its alternatives, they must be willing to lay out clean and consistent business objectives and strategies to those who are, work with them in thinking them out, and maintain a close relationship with the people in the controller's staff who will administer the process. In turn, the success of the administrative team will hinge on developing an effective rapport with the people at the top, as well as on their skills in eliciting the cooperation of the rank-and-file management cadre. In the final analysis, developing the attitude that everyone in the organization is in the same boat is top management's most important strategy for successful zero-base budgeting.[16]

Successfully implementing zero-base budgeting can result in significant benefits to the organization. In the

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[15]Ibid., p. 153.

[16]Ibid., p. 154.

traditional budgeting process, financial or fiscal people and top level operating managers participate in the decision making and formulation of the budget. Zero-base budgeting requires the participation of managers at all levels of the organization.[17] According to Pyhrr, this involvement of the various management levels provides an important benefit to the organization: "The major benefits of zero-base budgeting result from the harnessing of the thoughts and talents of managers throughout each organization."[18]

Pyhrr identified three categories of benefits that an organization can realize from zero base budgeting:

1. Improved plans and budgets.
2. Follow-on benefits (realized during the operating year).
3. Developing the management team.[19]

According to Pyhrr, improved plans and budgets are the most immediate benefits gained from zero-base budgeting, and are probably the prime reason for instituting the process.[20] Planning and budgeting using the zero-base system are improved because of a variety of reasons including, but not limited to, the following:

1. Identification, evaluation, and justification of all activities proposed--rather than just the increases or decreases from the current operating level--

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[17]Pyhrr, Zero-Base Budgeting, p. 32.

[18]Ibid.

[19]Ibid.

[20]Ibid.

promote a more effective allocation of resources because managers have evaluated the need for each function and have considered different ways of--and levels of effort for--performing each activity.

2. Top management has great flexibility in reallocating resources and allowing greater budget shifts among organizations because of consolidated rankings of activities and organizations.

3. Combining planning and goal setting, budgeting, and operational decision making into one process requiring detailed scrutiny of every activity results in an integrated approach for the total organization in its quest for the most effective allocation of resources.

4. Duplication of effort among organizational units will be identified, which can result in elimination or centralization of these functions.

5. Lack of effective planning, and poor coordination among interrelated activities in different organizations, is readily identified, which can result in correction of these conditions.

6. Revisions in assumptions during the budget cycle do not require complete revision of all budgeting efforts. Instead, managers can identify which packages are affected by these changes and can then selectively revise these specific packages.

7. Managers at all organizational levels have the same basic information and analyses provided by the decision packages and rankings. Having assured themselves that the proper analyses have been made by the various activities, top level managers should be able to concentrate more on reviewing the priorities proposed by each organization and establishing priorities among organizations and less on their own independent fact finding and analysis.

8. Identification to top management of the workloads and costs imposed by general policies, procedures, information requirements, legal requirements, and so forth, helps top management take action to remove or alleviate the constraints imposed upon the operating managers.[21]

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[21]Ibid., pp. 32-34.

In addition to the benefits of improved plans and budgets, the use of zero-base budgeting can provide follow-on benefits. These benefits are realized after the budgeting cycle is completed and the organization has entered into the operating year for which it has just completed its zero-base budgeting. Pyhrr identified several follow-on benefits that managers can realize:

1. Managers have a tendency to continue to evaluate in detail their operations, efficiency, and cost effectiveness--not only during the budget cycle, but during the operating year as well.

2. Managers can be measured against the goals, performance, and benefits to which they committed themselves, as identified in the decision packages and in their budgets.

3. The ranked list of approved decision packages can be used during the operating year as a starting point to pinpoint activities to be reduced or expanded if allowable expenditure levels change. To reduce costs, managers can continue up the ranked list of packages (from the point where the budget cutoff was established) until they have identified enough packages to delete to provide the savings required.

4. Activities that are poorly operated and managed are readily identified throughout the zero-base budgeting process and any follow-up reviews, and top management can take whatever action is necessary to eliminate these problems.[22]

The final benefit that Pyhrr identified was the development of the management team. Pyhrr considered zero-base budgeting to be an educational process that can promote the development of the management team. This can be accomplished because the identification and evaluation of the activities required by the decision package ranking process

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[22]Ibid., pp. 34-35.

can become an ingrained thought process, whereby managers evaluate their planning, operations, efficiency, and cost effectiveness on a continuous basis.[23] In addition, managers may serve on committees that rank multiorganization decision packages, which helps to produce an understanding of other activities and problems. Working together can help develop a feeling of commitment to the organization, rather than each manager being interested only in his/her immediate sphere of responsibility.[24]

Chapter III has discussed some implementation problems that may be encountered when a zero-base budgeting system is first attempted for an organization. It was pointed out that top management must play an important role in making the implementation of the system successful. Finally, some benefits that may be derived from the implementation of zero-base budgeting were described. The next chapter will identify some areas where zero-base budgeting may be applied in an organization's planning and budgeting procedure.

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[23]Ibid., p. 35.

[24]Ibid., pp. 35-36.

CHAPTER IV

APPLICATIONS OF ZERO-BASE BUDGETING

Zero-base budgeting is a planning tool and budgeting philosophy with a flexible set of procedures that will have to be tailored to fit the needs of the user. Although all zero-base systems are somewhat alike, the system adopted in one company may be very different than the system in another company. This observation is not unusual, and the same thing could be said about traditional budgeting systems in various companies. The focus of this chapter will be on the application areas in an organization where zero-base budgeting could be utilized.

One of the first decisions that an organization must make when planning the zero-base process is whether the system should be installed across the entire organization, or whether a trial run should be attempted in one or more departments. Cheek pointed out that this issue is a valid one if the impetus for getting involved with zero-base comes from the rank and file or from the financial staff. However, it is probably not a major issue if the initiative for zero-base budgeting has come directly from the chief executive who wants the system implemented yesterday.[1] If a trial or

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[1]Cheek, Zero-Base Budgeting Comes of Age, p. 27.

pilot test approach is taken, the mechanics would involve setting up and training a team with multifunctional membership and initiating a feasibility test on a small department.[2] After evaluating the results on the small department, the team members would then chair and train new teams that would evaluate their own departments. Cheek indicated that the advantages of this approach include: (1) a quick feasibility test on a department, (2) a low failure risk, (3) rapid resolution of "bugs" in the plan, and (4) rapid training of departmental teams.[3] The major disadvantage is that implementation of the system would take longer than under a "go for broke" plan with the entire organization involved.[4]

If the decision to implement zero-base comes from the chief executive, there still may be some resistance from a few key detractors. Cheek noted that prompt action must be taken in these circumstances: "Such problem cases should not be allowed to fester; they should be identified well in advance of announcing the new approach, and a specific action plan worked out on how to handle each of them."[5]

Pyhrr outlined several factors that management should consider when deciding whether to start zero-base on a trial basis or across the organization. Top management policy will

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[2]Ibid., pp. 27-29.

[3]Ibid.

[4]Ibid.

[5]Ibid., p. 36.

be an important consideration. Pyhrr stated, "Top management may want to play it safe and install the process on a trial basis to see how well it works and learn how to effectively administer and use it."[6] Another element would be the size and location, or locations, of the organization. Pyhrr recognized that it is more difficult and more time-consuming to install and administer a new process in a large or a geographically decentralized organization.[7] Another consideration that is somewhat obvious, and yet important for planning, is a reasonable assessment of the capabilities of the managers involved. Pyhrr's observation was, "If managers are accustomed to financial analysis and justification of expenditures and do not need substantial assistance in analyzing their activities, zero-base budgeting can be expanded over a larger organization because these managers will have less difficulty in analyzing their operations and developing decision packages."[8]

Pyhrr noted that because of these and possibly other considerations, and because of the uncertainty in trying any new process, management may decide to try zero-base on a trial basis before trying to implement it in the entire organization. However, Pyhrr stated there are also problems

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[6]Pyhrr, Zero-Base Budgeting, p. 117.

[7]Ibid.

[8]Ibid.

to be considered if zero-base budgeting is installed on a trial basis only:

* Many managers are willing to try zero-base budgeting if everyone else does but will not otherwise volunteer to stick their necks out, possibly get their budgets cut, and spend time justifying current operations.

* Zero-base budgeting often produces budget reductions in current operations. Will a budget reduction hasten or hamper the expansion of the process into other operations?

* Managers can only learn the process effectively by doing it on their own operations, and unless there are some procedural changes made because of the first year's trial implementation each organization will go through the same learning curve problems regardless of the experience gained by the managers in another department or division.9

Pyhrr and Cheek reached basically the same conclusion: the various considerations, the potential problems, and the possible solutions must first be thoroughly examined; then each organization must make its own decision about installing zero-base on a trial basis or across the entire organization. Ultimately, in theory at least, the zero-base process will reach across the applicable parts of the organization. An identification of the functional areas applicable for zero-base budgeting follows.

The name implies that the process of zero-base budgeting requires beginning the budgeting procedure from a base of zero and building up, rather than beginning with the base of the prior budget period. That is the concept, but not necessarily the discipline of the process. Arthur F.

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[9]Ibid., pp. 117-118.

Brueningsen described this discipline in an article in Management Accounting:

> Begin with where you are and establish a business-as-usual budget for next year--the same way, and the same things you would do if you weren't concerned about constraints or total justification. Then start by asking, "What would happen if I didn't do this particular function at all?", and measure the impact of doing away with it completely. When you've done that, you have, in effect, backed into a cost/benefit analysis. Instead of justifying where you go from zero up, you start from where you are and evaluate what would happen if you went down. This comes out to be the truest form of cost/benefit analysis, for that function, in that place.[10]

A logical question at this point might be, can zero-base budgeting replace the entire budgeting system? The answer would be no for business organizations, and yes for governmental organizations. Some explanations for this situation were given by the experts. Stonich wrote:

> The zero-base approach cannot be used for the entire corporate budget. It is applicable to operations and programs over which management has some discretion. In industry, the process can be used to develop administrative and general support, marketing, research, engineering, manufacturing support, and capital budgets. It cannot be used for direct labor, direct material, and some direct overhead. These costs are usually budgeted through standard costing procedures. In government, the process can be used to develop the entire budget.[11]

Peat, Marwick, Mitchell & Co. viewed zero-base budgeting as a part of a larger management system. Their description was:

> It is not a total management system nor is it, in and of itself, a management process. It will not correct bad

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[10]Arthur F. Brueningsen, "SCAT--A Process of Alternatives," Management Accounting 58 (November 1976):56.

[11]Stonich, Zero-Base Planning and Budgeting, p. 2.

> planning nor poor execution although it might make the flaws a little more obvious. Furthermore, although it could, it is not normally a total replacement for any of the familiar budgeting processes. Rather, ZBB serves to supplement and strengthen the planning and budgeting processes. . . . ZBB is not a stand-alone system. In fact, one might think of it more as an attachment than a tool, but it is a very powerful attachment indeed. Anything that forces a manager to analyze, document, cost and rank his various activities has to be useful.[12]

The Peat, Marwick, Mitchell & Co. reference was the only one to even suggest that zero-base budgeting could be a total replacement for a budgeting process. However, they suggested subsequently that zero-base budgeting should not be used for all facets of the budgeting procedure. Their recommendations on where to use zero-base budgeting was the following:

> ZBB is generally not of value in the areas of cost of sales, labor, material, factory overhead or any of the costs that are unit or production driven. ZBB is aimed primarily at manufacturing services and at departmental, divisional or corporate overhead. Its value is in those areas that are people-intensive, capital investment heavy, where projects of ten do not get the detailed scrutiny that they get on the production line, and where the techniques for measurement have historically been less precise and less effective.
>
> Governmental activities which are generally people-intensive are . . . major targets for ZBB. Other people-intensive functions such as education, insurance, health care, and banking appear to also have a high ZBB potential.[13]

Pyhrr echoed his colleagues in the assessment of where zero-base budgeting should be used. He indicated that since the process consists of identifying decision packages and ranking them through a cost/benefit analysis,

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[12]Peat, Marwick, Mitchell & Co., "Does ZBB Really Work?" pp. 3-4.

[13]Ibid., p. 4.

". . . zero-base budgeting can be used on any activities, functions, or operations where a cost/benefit relationship can be identified--even if this evaluation is highly subjective."[14] Pyhrr noted that the budget areas that would be applicable for zero-base are the administrative, technical, and most commercial portions of the budget.[15] The reason zero-base is not considered applicable to direct labor and direct material was explained by Pyhrr as follows:

> Zero-base budgeting is not applicable to direct production and manufacturing costs because there is usually no benefit from increasing these expenditures--that is, there is no cost/benefit relationship. The budgeting effort for these direct costs is usually an engineering study with emphasis on minimizing unit costs, with the budget developed by multiplying units of output by standard unit costs.[16]

Pyhrr recognized that in a heavily manufacturing oriented organization zero-base budgeting may only apply to a fraction of the total budget. However, he maintained that the activities that are subject to zero-base budgeting techniques are usually those that are the most difficult to plan and control, and still offer management a great lever to affect profits.[17] Pyhrr concurred with Stonich and Peat, Marwick, Mitchell & Co. in the applicability of zero-base techniques in the governmental area. He said, "Zero-base budgeting can be readily adapted to all government activities and agencies

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[14] Pyhrr, Zero-Base Budgeting, p. 19.

[15] Ibid.

[16] Ibid.

[17] Ibid., p. 23.

since government is a service organization that supposedly provides some benefit for the tax dollars spent."[18]

Cheek portrayed zero-base budgeting as having its focus on staff rather than line operations. Cheek's perspective was the following:

> Budgeting for line operations is driven by unit volumes and standard costs and is derived by multiplying the two. Zero-base budgeting is intended primarily for staff functions such as the headquarters departments or the manufacturing or field sales staff.[19]

Illustration 4, adapted from Cheek's book, presents his perspective about the functional areas that could use zero-base budgeting. The illustration is also in conformity with the views of the other authors.

The zero-base budgeting process has been described and some applicable functional areas for its use have been identified. The final issue to address is the question of what should you do if you want to try zero-base budgeting. Benjamin L. Dady, the director of management control at Florida Power & Light Company, wrote about his experience implementing zero-base budgeting at his company in Management Accounting, and gave this concluding advice:

> Research the systems that are installed carefully. Read the literature on the subject and talk with others who have been through the battle. Then, whether you are using personnel within your company to install the system or using an outside consultant, tailor the system

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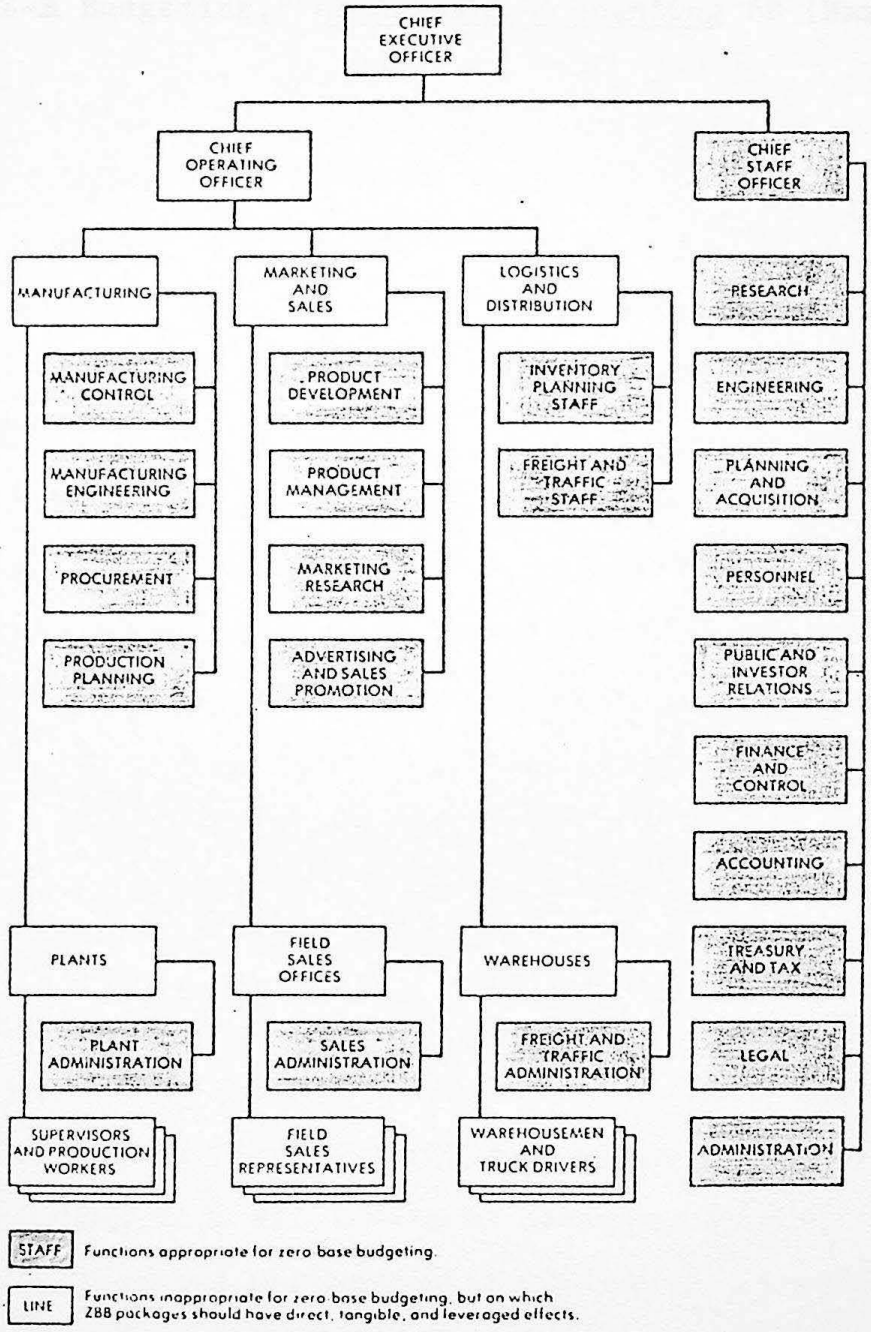
[18]Ibid., p. 24.

[19]Cheek, Zero-Base Budgeting Comes of Age, p. 23.

Illustration 4. Representative Functions Amenable to Zero-Base Budgeting



SOURCE: Logan M. Cheek, Zero-Base Budgeting Comes of Age (New York: AMACOM, 1977), p. 25.

to suit your own needs. Remember, it is not an item that can be bought off the shelf.[20]

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[20]Benjamin L. Dady, "How Florida Power & Light Installed Z-B Budgeting," Management Accounting 60 (March 1979):34.

CHAPTER V

SUMMARY

This paper has attempted to describe the zero-base budgeting process. Several weaknesses of the traditional budgeting approach were identified, and zero-base budgeting was suggested as a possible alternative to and improvement over the traditional approach.

Chapter II offered definitions of zero-base budgeting from leading authorities in the field. In essence, the process involves preparing a decision package for each discrete activity to be included in the proposed budget. The decision packages are then ranked in an order of priority and the budget for the organization is determined by funding those decision packages that most effectively meet the goals and objectives of the organization.

Whenever a major change occurs, or is proposed, there are always some people who will offer resistance or refuse to cooperate. For a zero-base system to be operative, full cooperation from all levels of management is necessary. Chapter III discussed the common implementation problems that may occur when attempting to install a zero-base budgeting system. Lack of complete support from top management was cited as the one problem that would effectively kill

implementing zero-base budgeting in an organization. Chapter III also identified a number of benefits that may result from implementing zero-base budgeting. Improved plans and budgets, and the development of the management team were the major benefits noted that would accrue to an organization. The theory of developing a management team is that the thought process involved in formulating and evaluating decision packages becomes an ingrained thought process where managers would evaluate the planning, operations, efficiency and cost effectiveness under their control.

Chapter IV presented some application areas for zero-base budgeting. It was noted that zero-base budgeting is not a total management system and could not be used in all areas of the budgeting process. Rather, zero-base budgeting was described as being a powerful analytical tool that could be used in developing budgets in areas where a cost/benefit relationship exists. Finally, a word of advice was suggested by a manager who had effectively implemented a zero-base system. He suggested that before attempting an installation, thorough research should be done and the proposed system should be individually tailored to fit the particular needs of the company.

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