# CAPITAL BUDGETING AND CORPORATE PLANNING

## (A CASE STUDY OF AKEBID HOLDINGS, IBADAN)

BY

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# DEDICATION

This Project is solely dedicated to the Almighty Allah whose mercies have been my source of inspiration to attain greater height in life.

Also dedicated to my parents and children for their supports always.

# CERTIFICATION

This Project work has been read and approved by the undersigned, as meeting the requirements of the Department of Maths/Computer Science, Federal University of Technology, Minna.

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# ABSTRACT

Capital budgeting decision are faced by managers in all types of organisations, including profit-making and non-profit making organisations.

Indeed, capital budgeting decision is a decision that must be made carefully because the future and growth of any organisation depends solely on such vital decision.

This project focus more on the clear conception of how to evaluate investment proposals and how top managers and executives could update their knowledge about how to improve their vast ability in making investment decisions.

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# CHAPTER ONE

## INTRODUCTION

### 1.1 STATEMENT OF THE PROBLEM

The role of corporate planning in capital budgeting cannot be under estimated because the sums involved are relatively large. Any bad decision made may have very serious consequences in the life of any company .

To begin with certain key term in this project such as capital budgeting and corporate planning need be defined.

I.M Pandey says that the investment decision of the firm are commonly known as the capital budgeting or capital expenditure, decision. I.M Pandey supports the above statement by saying that, "Capital budgeting decision may be defined as the firm's decision to invest its current funds most efficiently in long-term activities in anticipation of an expected flour of future benefits over a year."

Obviously, efficient allocation at capital is one of the most important function of financial managers.

I.M Pandey, Financial Management:- (Vikes Publishing House Pub. Ltd., 1985 Edition) Page 65 Modern times. This function involves the firm's decision to commit its funds in long-term assets and of considerable significance since they tend to influence the company's wealth, determine its size, set the pace and direction of the growth and effects its business risk. Generally, long-term activities affect the company's operation beyond the one year period. It should be noted that the company's capital budgeting decisions include addition disposition, modification and

replacement of long -term or fixed assets.

Investment decision may be tactical or strategic. At tactical investment decision generally involves a relatively small amount of founds and does not constitute a major departure from what the firm has been doing in the past.

While strategic investment decisions involves large sums of money and may also result in a major departure from what the company's expected profits and in the risk to which this profits will be subjected. These changes and risk to which shareholders and creditors to revise their evaluation of the company, and future success of a business manager's are generally aware of this, is indicated by he requirement that important investment decision must be approved by the chief operating Executives or the board of Directors. Capital budgeting is a main profitable investment proposals, investigating Engineers and marketing considerations to predict the consequences of accepting the investment and making Economic analysis to determine the profit potential of each investment proposal.

Introducing a new product is a kind of decision which is covered under the capital budgeting decision. For instance, the research and development department of a company has shown that a new product can be manufactured. The introduction of the product will require an initial outlay of ₦100,00.00.

Keeping in view the demand expectation and operating expenses of the product, it is anticipated that the company will make an annual net profit of ₦10,000.00 for 8 years. The decision to introduce this product will depend upon its profitability.

Corporate planning can be defined as improving the setting of objectives, organizing the work, people and system to enable those objectives to be attained motivated through the planning

process and through the plans, measuring performance and so controlling progress of the plan and developing people through better decision making, clearer objectives, more involvement and awareness of progress.

B.W Denning defines planning as " A formal, systematic, managerial process, organised by responsibility time and information, to ensure that operational planning, project planning and strategic planning are carried out regularly to enable the management to direct and control the future of the enterprise".

Irving also expressed hi opinion about corporate planning as " The formal process of developing objectives. B.W Denning. Corporate planning selected concepts. (Mc Graw-Hill. 1971) for the corporation and its component parts Evolving alternative strategies to achieve these objective, and doing this against a background of a systematic appraisal of internal strengths and weakness and external Environmental changes."

Corporate planning unites all parts of the organisation into one complete management approach. It is future oriented and designed to fulfil the various states of management and giving greater concern for the future.

## 1.2 PURPOSE OF THE STUDY

This project is aimed at highlighting the need to incorporate capital budgeting in corporate planning in manufacturing organisations, Although the writer will limits herself to some selected companies such as Christilities group of companies (Nig) Limited, Guinness [Nig] Limited and West African Portland Cement Company limited all in Lagos. Part of the aim of this write-up is also to find how the selected companies classify their investments.

P. Irving, Corporate Planning in practice not yet published, the factors that are taken into consideration before selecting between alternative investment will be found out.

This study will also examines the techniques of investment appraisal adopted by each company.

Finally make some recommendations to the problems observed in the cause of the research work.

## 1.3 SCOPE OF THE STUDY

This study is an attempt to examined the need to incorporate capital budgeting in corporate planning with capital budgeting is corporate planning definition will be made and capital budgeting under capital rationing will be discussed. It should be clear that important of capital budgeting decision in both manufacturing and non-manufacturing organisations cannot be under estimated because is one of the most important decision areas.

In this project, the writer will discuss the capital subject process and planning, this project will also cover the need for corporate planning. Also this "Write-up" will cover some of the investment appraisal techniques. Attempt will also be made to highlight the effect of not incorporating budgeting in overall corporate plan.

## 1.4 SIGNIFICANCE OF THE STUDY

It is my hope that the completion of this study will present to the public generally, especially those that may be completely unfamiliar with the technical literature on capital budgeting , a clear conception of how to evaluate investment proposal.

It is also hoped that the manufacturing organisation will be of the need to incorporate capital budgeting in corporate planning.

Finally, it is hoped that this project will be very useful as a source of information, research and assistance in matters concerning capital budgeting and corporate planning in manufacturing organisations.

## 1.5 METHODOLOGY

The researcher used two principal methods in collecting data for the project. Firstly questionnaire was drawn and given to responsible officials in the selected companies where vital information was gathered.

The second method which the writer employed was by making references from textbooks, course notes and journals.

# CHAPTER TWO

## 2.1 CAPITAL BUDGETING UNDER CAPITAL RATIONING

The term " Capital Budgeting" has been defined , capital budgeting as a process of providing information which will assist the making of decisions concerning the investment of capital funds"

Capital rationing occurs anytime there is a budget constraints on the amount of fund that can be invested during -

(a) Specific period of time, such as a year, such constraints are prevalent in a number of companies, especially in those that have a policy of financing all capital expenditures internally.

In order to optimize its investment policy, a company should accept all profitable projects. The profitability of the projects can be measured by any of the discounted cash flow techniques. For instance, if the company uses the internally Rate Return method (IRR), then its investment policy will be optimized only. R.B Brockington, Financial Management [Eastleigh, Hants. D.P publications, 1983] page 110 when project are accepted till the point the marginal cost of capital equals, marginal rate of return.

In other words, project to be accepted would be one whose interest rate of return is equal to the cost of raising the additional funds to finance it. It should be noted that projects whose rates are lower than marginal cost of capital are noprofitablele and therefore should be objected.

The objectives of capital rationing is to select the combination of investment proposals that provides the highest net present value subject to the budget constraints for the period.

Capital rationing arises due to:

(a) External factor or

(b) Internal constraintimposeded by management.

**External Capital Rationing:** This occurs as a result of imperfections of capital markets. This imperfection arises by deficiencies in market information, by addition that prevent the free flow of capital between companies and by a difference between the interest rate of which the Company can obtained capital in the market. (That is the borrowing rate) and the interest rate it could earn by lending its own capital to others in market (That is , the lending rate). Where there is external capital rationing, it may be useful for top management to predict the appropriate cut off rate that will apply in future years. It means that investment planning in various parts of the organisation can be coordinated in terms of the best available estimate of future cash need and requirements for the company as a whole.

**Internal Capital Rationing:** Internal capital rationing is caused by self--imposed restriction by management. The rationale for such restrictions is sometimes difficult to find.

There are two kinds of internal capital rationing. The first one is when a company sets a cut-off rate for investments that is higher than the firm's cost of money. The second type is a situation where the company decides to limit the total amount funds committed to internal investment in a given year to some fixed sum.

For examples, under the first type of internal capital rationing, assuming a company requires that investment must have a positives present value at 20%, even though the company's

cost of money is only 15%.

Under this situation, it the same art-off rate is maintained from year to year, the cut off rate in future years will be known, and the firm can evaluate all investments as if the cost money were 20%.

Mange may impose various types of restrictions. For instance, management may decide to obtain additional capital by incurring debt, also it may fix an arbitrary limit to the amount of funds to be invested by the divisional managers. It is important to note that whatever may be the type of internal capital rationing. Generally, under the situation of capital rationing, a company would not be able to accept all profit investment projects. To select some investment projects should be made. The selection process under capital rationing will, thus, involve two steps.

(I) Ranking projects according to some measure of profit ability and

(ii) Selecting project in the descending order of profitability until the funds exhausted.

## 2.2 CLASSIFICATION OF INVESTMENT

Any useful scheme of controlling investment must be based on a classification of types of investments. It should be noted that different kinds of investments raise different problems are of different relative importance to the company, and will require different person to evaluate their significance.

Harold Bierman, Jr. and Seymour Smith classified investment under the following categories:

(a) The kinds of scarce resources used by the investment: This mean whether or not the investment requires important amount of cash at floor spaces of the time of key personnel

(and personnel may also be classified as sales production research, top management, legal staff etc.)

(b) The amount of each of the resources that is required: For example, with respect to the amount of immediate cash outlays required. Harold Bierman, Jr. and Seymour Smith the capital Budgeting Decision. (New York: Macmillian Publishing Co. Inc. UNC)page 9.

(C) The form in which the Benefits are received: Thus investment may generate greater cash, reduce the risk associated with poor business condition, reduce the accident rate, improve employee morale, or culminate a community nuisance such excessive smoke or noise.

(d) Whether the incremental benefits are the result of lower cost or increased sales or whether they merely prevent a decline in sales or market share.

(e) The industry classification of the investments.

(f) The functional activity to which the investment are most closely related: For instance an oil company may classify investment according to the following activities: Exploration, production, transportation, refining or marketing.

**DEPARTMENT AND INDEPENDENT INVESTMENTS**

In evaluating the investment proposals presented to management, it is important to be aware of the possible inter-relationships between pairs of investment proposals. The first investment proposal will be said be economically independent of the second if the cash flows expected from the first investment would be the same regardless of whether the second investment were accepted or reflected. Generally speaking, if the cash flows associated with the first investment are affected by the decision to accept or reject the second investment, the first

investment is said to be economically dependent on the second.

**ECONOMICALLY INDEPENDENT INVESTMENTS**

Before investment E can be economically independent of investment D, two conditions must be satisfied. Firstly, it must be technically possible to undertake investment E whether or not investment D is accepted. Secondly, the net benefits expected from the first investment must be affected by the acceptance or reflection of the second.

**ECONOMICALLY DEPARTMENT INVESTMENTS**

If the benefits expected from the first investment will increase by the decision to undertake the second investment, the second investment is regarded as a complement of the first.

On the other hand, if the decision on undertake the second investment will decrease benefits expected from the first, the second investment is said to be a substitute for the first. So where the potential benefits to be denied from first investment will completely disappear it the second investment is accepted, or where it is technically impossible to undertake the first - when the second has been accepted, under these conditions, the two investments are said to mutually exclusive.

## 2.3 BUDGET PROCESS AND PLANNING

The budget of company is part of the cost control means as well as an important tool for planning. It should be clear that the capital budget for the coming - period can affect the cash budget and will be affected in turn by sales forecasts, hence the capital budget might be

incorporated into the budgeting process.

a. David Quirin and Richard D. Irwin, suggested the steps in the capital budgeting process.

I. **Project Generation**: Investment proposals of various types may originate at different levels within a compound. The investment proposals may fall into one of the following categories.

(a) Proposals to add new product to the product lines

(b) Proposals to expand capacity in existing product line.

© Proposals designed to reduce costs in the output of existing products without altering the scale of operations.

Investment proposals of any types can originate from top management level to the level workers. The proposals for adding a new product may imanate from the marketing department or from the plant manager who thinks of a better wall of utilising idle capacity. Also suggestions for replacing an old machine or improving the production techniques may arise at the factory level. For the company's funds to be fully and efficiently employed enough investment proposals should be generally a systematic procedure for generating proposal must be evolved. It should be noted that a healthy firm is one in which there is a continuous flows of profitable investment proposals.

(ii) **Project Evaluation**: This involves two steps:

(a) Estimation of benefits and cost, the benefits and costs must be measured in term of cash flows.

(b) Selection of an appropriate criteria or judge the desire ability of the projects.

Since the future is uncertain, the estimation of cash flow is a formidable task. The risk associated with the project should be properly handle and should be taken to consideration in the decision process.

Projects evaluation should be performed by a group of experts which has no motive to fulfil. The members of the production department are generally interested in having the most recent type of equipments even if productivity does not increase similarly, the marketing manager may be two optimistic and may give incorrect estimates of benefits of a new product. It is therefore necessary to ensure that projects are scouting by an impartial group, and that objectivity is maintained in the evaluation process.

(iii) **Project selection:** There is no standard administrative procedure laid down for approving the investment proposal. The screening and selection procedures would differ from company to company.

As already discussed, the capital budgeting decision are of considerable significance for several reason hence, the final approval of the projects may be the role responsibility of the top management. It is importance to note that project are screened at multiple levels. Sometimes top management may delegate authority (budget committee) to approve obtain type of investment proposals. Top management may do so be limiting the amount of cash outlay, possibly the selection criteria and holding the lower level management accountable for the results.

(iv) **Project Execution**: After the final selection of investment proposals, the funds are appropriated for capital expenditure. The top management or the project execution committee

must ensure that funds are spent in accordance with appropriations made in the capital budget. Funds for the purpose of project execution should be spent only after seeking formal permission from the financial controller. From effective control, it is necessary to prepare monthly budget reports to show clearly the total amount appropriated, amount spent and amount approved but not spent. Systematic procedures should be developed to review the performance of projects during their life and after completion.

It should be noted that capital budgeting process is one of the most important decision arise. The expenditure involved are very large, affect the company's operation on long term basis and are generally irreversible. Therefore, capital expenditure decisions are among the class of decision which are best reserved for consideration by the highest level management. This implies that the substantial part at this process should be handled by the top management, and when some part of it are delegated, a system of effective control by the top management must be evolved.

### 2.4a CAPITAL BUDGETING UNDER UNCERTAINTY

An investment is uncertain it more than one set of cash flows can result from accepting the investment, and the decision maker does not know at the time of making the decision which set at cash flows will occurs. It is possible for a company to follow sources of action that will decrease to some extend the day are of uncertainty connected with its operations. Increasing the information obtained, prior to make a decision is one method of decreasing uncertainty - for instance, a though job of market research may make the outcome of an investment in a new product much less uncertain that if the product were launched without the market research.

Charles T. Horngren suggested that the ways to allow for uncertainty include the rise of.

(a) High minimum desired rate of rate

(b) Short expected useful lines

(c) Pessimistic predictions of annual cash flows

(d) Simultaneous comparisons of optimistic, pessimistic, and debt - ques. productions; and

(e) Sensitivity analysis.

Sensitivity analysis can be defined as a "what if" techniques that measures how the expected values in a decision model will be affected by charges in the date.

## 2.4b CAPITAL BUDGETING AND INFLATION

The term "inflation" has been defined by various authors Williams Samuelson defined it as a time of generally rising prices for goods and factors of production, while Peter Donald and S.O. Olajide defined it as "a situation in which the prices of goods are all continuously rising at he same time".

The purpose of this heading is to often some suggestions about how to consider inflation in an effective manner. It should be noted that when inflation is possible, future cash flow may differ not only in their timing but in their purchasing power. In addition, selection an appropriate discount rate in the presence of inflation any risks is more complex.

The consumer price index is a common use index for measuring inflation. This index is designed to measure the average price of the goods consumed by an average sized middle - income urban family. It should be made clear that almost all business organisations will have important components of their numerous or expenses whose movement has not closely tied to the average

price level consumer goods, under these circumstances careful consideration of the prices of specific goods and services of particular importance to the decision makers is required.

In evaluating capital budgeting decisions managers must consider not only the possible effects of inflation, but also the affect of long - run trends in the relative prices of products and of important categories of expenditures. This is important because the prices of many of the most important goods and services purchased by firms are not directly included in the commonly used price indices (e.g consumer price index). For instance labour wages and salary payments are a major expense items for almost every business, yet wage rates are not directly included in price indices used to measure the rate of inflation.

As income growth with inflation, an increasing portion is taxed, with the result that lay cash flows do not keep up with inflation.

Example:

Assuming there is an investment proposal costing ₦24,000.00 under the assumption that no inflation is expected, depreciation is on straight line method over from years also tax rate is 15%. The following cash flows are expected to occur:

| **Year** | **Cash Savings** | **Depreciation** | **Taxes** | **Cash Flow after Tax** |
|---|---|---|---|---|
| | ₦ | ₦ | ₦ | |
| 1 | 10,000 | 6,000 | 2,000 | 8,000 |
| 2 | 10,000 | 6,000 | 2,000 | 8,000 |
| 3 | 10,000 | 6,000 | 2,000 | 8,000 |
| 4 | 10,000 | 6,000 | 2,000 | 8,000 |

Depreciation is deducted from cash savings to obtain taxable income on which taxes of 50% are based. If there is no inflation, depreciation changes represent the "cost" of replacing the investment as it were out.

Now let us consider a situation where the rate of inflation is 7% per annum and cash savings are expected to grow at this overall rate of inflation, therefore, the after - tax cash flows become

| **Year** | **Cash Savings** | **Depreciation** | **Taxes** | **Cash Flow after Tax** |
|---|---|---|---|---|
| | ₦ | ₦ | ₦ | |
| 1 | 10,700 | 6,000 | 2,350 | 8,350 |
| 2 | 11,449 | 6,000 | 2,725 | 8,724 |
| 3 | 12,250 | 6,000 | 3,125 | 9,125 |
| 4 | 13,108 | 6,000 | 3,554 | 9,554 |

## 2.5 THE NEED FOR CORPORATE PLANNING

Irving defines corporate planning "as the process of translating strategy into detailed operational plans and seeing that these plans are carried out", The corporate appraisal should be the first step in the process of preparing long range plans and should provide the basic platform from which corporate objectives are established.

Corporate appraisal should be looked as a process of establishing corporate strategy and identifying not just discoursing "opportunities". Corporate appraisal should do this by selecting synergy in all its decisions.

Synergy is defined as the process achieved by the effect of putting two parts together and having a greater advantage than the sum of their individual parts. It should also be future oriented. No organisation however profitable, can afford to neglect opportunity for cost reduction and profit improvement. This is so because appraisal has to do with the future and represent a positive way of removing a weakness and avoiding perpetuation of an unsatisfactory situation. Present operations are normally studied in a future oriented manner and classified under such headings as: "Satisfactory", "weakness", "strength", "opportunity", "innocent", and so on. This is the most used approach and even though this is first step, it must not be been as once and for all exercise.

It is importance to understand that corporate appraisal should not be seen as being completely from the studies of the environment since self analysis is usually based against environment trends, there are some factors to be considered in appraisal. The following factors were given by David Itusley:

1. Trends of Results: The historical pattern of performance is the first place to work at such trends as profit, losses, capital employed, assets, liabilities and so on. The analysis should be broken down by subsidiary companies, departments or areas of performance such historical examination determines if a company's position is worse of better. It is not early at this point to see where there are poor performances to be corrected.
2. Manufacturing activity: There is frequently on general assumption in companies that its production processes are efficient. The question to be answered is whether they can be more efficient or is it possible to achieve the same end product by cheaper alternatives. This is the points in time when the company should examine make-or-by situations for its components, and should look at the prices of outside service in comparison with its own

costs. In addition the appraisal should include the raw materials , standard set for the purchase and efficiency of the company as buyers.

3. Financial Resources: Assessing liquid resources are probable cash flow position, once's liabilities inventories and a fixed assets should all be assessed with a view to making the organisaiton of potential future financial giant.

4. Corporate Capability: Just like individuals some organisations have areas in which for no concrete reasons are very grow in some are effective in distribution others customers's service and so on. Knowing where this alone lies will help an organisation rise it to an advantage.

5. Systems: This is a general look and the activities in the organisation via system, for example systems of decision making, inventory control procedures and method of evaluation capital expenditure projects.

This will contribute information to forming the corporate identity.

## 2.6 ORGANIZING FOR STRATEGIC PLANNING

R.N. Anthony defined strategic planning of strategic planning is the process of deceiving on the objectives of the organisation or changes in these objectives, on the resources used to attain these objectives and on the policies that are to govern the acquisition us and disposition of these resources.

Management is interested in strategic planning they exist in a rapidly changing environment. In the past, management was required to understand the environment in which a company existed and to also take action that may name some effect in setting the environment to

the benefit at the organisation. The changes are more rapid today and management are having difficulty in understanding the environment much less impacting them, past planning may be accomplished on the firm in many works such as.

1. Committees: Strategic planning by committees involves the use of representatives from various line non staff units in the organisation to accomplish planning. Each member brings their particular expertise representing the various part of organisation. A chairman may be appoint by top management, but responsibility for the planning rests on the committee itself. Usually since members are from various section of the corporation, the committee view is a corporate are a major drain back is that there is no one corporate responsible for the result of the strategic planning.

2. Line or Business Unit Management: The essence of strategic planning is to determine where the company wants to be in the future. To get thee, certain analysis must be made of the company, its product and its environments. All there information will be interpreted into an effective plan for the organisation.

   There is no better person than line management to do this work, since they must ensure that assumptions upon which the plans are built are reasonable and the plans and execute, but a weakness to have staff plan and then expect line management to make it happen. It line management has responsibility to doing the plan its control then the planning process will quickly get creditability and realism lacking previously.

3. Task Force: Many organisation use the task force approach competent personal are selected and for a period of time to do strategic planning after which they go back and resume their previous responsibilities.

# CHAPTER THREE

## 3.1 STEPS IN CORPORATE PLANNING AND PITFALLS IN CORPORATE

### PLANNING

Corporate planning process according to James Whittaker involves the following:

1. **Select the Goal**: Setting the goal of the organisation is the most criteria step because goals selected take up a large amount of the organisation's resources. For this reason strategic goals are usually set by upper level or top manager after a number of possible goals have been carefully considered such goals can include desired sales volume, developing a new product or service or even an abstract goal like becoming more involved in the community. Goals so selected will be based on detail corporate analysis and environmental x-ray and also the purpose or mission at the corporation.

2. **Analyse the** Environment: This is the consideration of the problems and opportunities the environment presents. This is crucial because whatever the goals establish they will be affected by factors outside the organisation. For instance, it would be unrealistic to plan for rapid expansion in a period of economic stagnation. An analysis of the environment lets planners know how feasible and attainable their goals are.

3. **Select the best alternatives:** While manager may develop a number of alternative they think will become part of the corporate plan not all of them will be feasible since not all will be necessary. Alternative that help close the gap are those managements

should be most interested in. Alternatives so selected become part of the revised corporate plan.

4. **Implement the Corporate plan.:** Once the final corporate plan has been formulated, its broad goals must be translated into the detailed day to day operations of the organisation. The total plan may not be made clear that plans are useless until put into effect, implementation is the process.

5. **Measure and control the progress of the plan:** The process of controlling is a critical part of any plan. Managers need to check the progress of their plan so as to remedy where necessary or change unrealistic original plan.

## 3.2 INVESTMENT APPRAISAL TECHNIQUES

Since the importance of the capital budgeting decision is since the importance of the capital budgeting decision is very great, a sound appraisal method should be adopted to measure the economic worth of each investment project.

Pandet supported the above statement by saying that "the investment evaluation criteria to be use should at ;east posses the following characteristics:

1. It should provide smears of distinguishing between acceptable and unacceptable projects.
2. It should provide a ranking of project in order of their desirability.
3. It should also solve the problem of choosing among alternative projects.

4. It should be a criterion which is applicable to any conceivable investment project.

5. It should recognize the fact that bigger benefits are preferable to later benefits.

Various types of investment criteria are in use, these can be categorized into two groups, namely:

a. Traditional criteria, this consists of:

   (I) Pay back period

   (ii) Accounting rate of return

b. Discounted Cash Flow (DCF) criteria: under this we name the following:

   (I) Net present value

   (ii) Internal rate of return

   (iii) Profitability index.

1. **PAYBACK PERIOD:** The payback method of appraisal is based upon measuring the time it takes to group the original expenditure. Projects should be selected from those with the shortest payback period.

   The major drawback of this method is that it takes no account of any cash flows which arises after the payback period.

2. **ACCOUNTING RATE OF RETURN:** (ARR). This method is the ration of the average cash flow to either initial or average investment in the project.

   The above figures are imaginary.

$$\text{ARR} = \frac{\text{average net cash inflow x 100}}{\text{Investment.}}$$

The project will be accepted if the ARR is more than an exogenous rate. The exogenous rate could either be :Industrial rate or cost of capital.

3. **NET PRESENT** VALUE: The net present value is one of the discounted cash flow techniques, it takes into account the time value of money. This method assumes some minimum desired rate of return. All expected future cash flows are discounted to the present, using this minimum desired rate. If the result is positive, the project is desirable, and vice versa. When choosing amount several investments, the one with the largest net present value is most desirable.

Example.

Calculate the net present value for project which initially was N25,000.00 and generates year end cash inflows of N7,000.00, N8,000.00, N7,000.00, N6,000.00 and N5,000.00 is one through five years. The require rate of return is assumed to be 10%.

Solution

| **Year** | **Cash Inflows** | **Discounting factor at 10%** | **Present Value of cash** |
|---|---|---|---|
| 1 | 7,000 | 0.909 | 8,181 |
| 2. | 8,000 | 0.326 | 6,608 |
| 3. | 7,000 | 0.751 | 5,257 |
| 4. | 6,000 | 0.683 | 4,098 |
| 5. | 5,000 | 0.620 | 3,100 |
| | | | 25,000 |

| | |
|---|---|
| Less investment outlay | 25,000 |
| Net present value | 2,244 |

**ADVANTAGES OF NET PRESENT VALUE**

(a) It recognize the value of money

b. It considers all cash flow over the entire life of the project in its calculations.

c. It is consistent with the objective of maximizing the welfare of the owners.

**DISADVANTAGES:**

1. It is difficult to use
2. It may mislead when dealing with alternative projects or limited funds under the condition of unequal lives.
3. It may give unsatisfactory answer when the project is being compared involve different amount of investment, because the project with high net present value may not be desirable if it also acquires a large investment.

# CHAPTER FOUR

## ANALYSIS OF DATA

Statistical and descriptive method are based to interpret the data collected, so that they can be easily understood. The data is based on the four questionnaire completed and returned by the officials of the selected companies.

The divisions of the statistical chart are possible answers, respondents and percentage showing the responses to the possible answers. Explanations follows immediately to explain what the data are actually saying. The total of the four respondents on the table present 100%. Three respondents 75%, two represents 50% while one respondent represent 25%.

## DURATION OF THE COMPANY

| POSSIBLE ANSWERS | | RESPONDENTS % |
|---|---|---|
| Less than 5 years | | - |
| 5-10 years | | - |
| 10-20 years | 1 | 25% |
| over 20 years | 3 | 75% |
| Total | 4 | 100% |

Source: Questionnaire.

The above table shows that the companies to which the questionnaire were distributed had been existence for a long time. 75% of the companies have been established for 20 years, while 25% have been in operation between 10 to 20 years.

This accurate information can be colleted from the companies as regards capital budgeting decisions:

**DOES YOUR COMPANY PREPARE ANY CAPITAL BUDGET?**

| Possible Answers | | Respondents % |
|---|---|---|
| Yes | 4 | 100 |
| No | - | - |
| Total | 4 | 100% |

Source: Questionnaire

100% of the respondents (all of them) prepare capital budget.

The nations given to support this are:

1. Budgeting enables managers to thinks ahead.
2. Budgeting provides definite expectations that are the best framework for judging subsequent performance, it also enables employers to know what is expected of them and motivate them to accomplish the budgeted objectives.
3. Budgeting communication or informs members of the organisation about the goals and methods selected by top management in attaining the decision goals.
4. Budgeting aids manager in coordinating their efforts, so that the objectives of the organisation as a whole harmonize with the objectives of its departments.

TABLE 4 **RESPONSIBILITY FOR CAPITAL BUDGETING DECISION**

| Possible Answers | Respondents % |
|---|---|

| | | |
|---|---|---|
| Departmental Heads | 1 | 25% |
| Board of Directors | 2 | 50% |
| Any other person | 1 | 25% |
| Total | 4 | 100% |

Source: Questionnaire

Table 4 shows those responsible for making capital budgeting decision to the selected organisation visited by the researcher. 50% of the respondents favoured board of directors, while 25% favoured department heads and the remaining 25% favoured any other person - The budget committee.

Thus capital budgeting decisions can be said to be sole responsibility of Board of Directors.

TABLE 5: **DURATION OF BUDGET**

| Possible Answers | | Respondents % |
|---|---|---|
| Less than 1 year | - | - |
| One year | 4 | 100% |
| More than one year | - | - |
| Total | 4 | 100% |

Source: Questionnaire

The duration of the budget adopted by the companies shown on this table. The table shows that 100% of the respondents favoured one year duration.

The reason given to support this is that it is very difficult to forecast the future because of the uncertainties in the future. They therefore argued that for a realistic budget to be achieved,

the duration should not be more than 12 months.

TABLE 6: **ITEM OFTEN IS THE BUDGET REVIEWED**

| Possible Answers | | Respondents % |
|---|---|---|
| Monthly | - | - |
| Quarterly | 2 | 50% |
| Bi-annually | 2 | 50% |
| Total | 4 | 100% |

Source: Questionnaire

From the table above, it can be seen that 50% of the respondents supported that budget is reviewed quarterly while 50% also supported that it is reviewed Bi-annually.

Hence budget can be reviewed either once in a year or quarterly depending on the policy adopted by the company.

TABLE 7: **WHETHER THE BUDGET IS INCORPORATED INTO THE CORPORATED GOAL**

| Possible Answers | | Respondents % |
|---|---|---|
| Yes | 4 | 100% |
| No | - | - |
| Total | 4 | 100% |

Source: Questionnaire

As shown on this table, 100% of the respondents incorporate budget into the corporate plan

of their companies. The reason given to support this view is that capitalbudgetingg decisions are of considerable significance to the firm as the future success and growth of the firm depends heavily on them.

Hence, any capitalbudgetingg decision to be undertaken should be deviate from the corporate goal of the company.

TABLE 8: **CLASSIFICATION OF INVESTMENTS**

| Possible Answers | | Respondents % |
|---|---|---|
| Short term and long term | 3 | 75% |
| Any other | 1 | 25% |
| Total | 4 | 100% |

Source: Questionnaire

The classification of investments is shown on this table. 75% of the respondents agreed that they classify their investments as short term and long term while 25% respondents classify their investment base on the amount of resources that is required from the information collected from the completed questionnaire and from the discussions and held with the officials of the sited companies, it was observed that short term investments are those whose return - comes within a short period of time. The return is the case for long term investment.

TABLE 9: **TECHNIQUE OF INVESTMENT APPRAISAL**

| Possible Answers | | Respondents % |
|---|---|---|
| Management Policy | 2 | 50% |
| Wet present value | 2 | 5% |

| | | | |
|---|---|---|---|
| | Internal rate of return | - | - |
| | Payback method | - | - |
| | Total | 4 | 100% |

Source: Questionnaire

As shown on this table, 50% of the respondents use management policy to appraise their investment. 50% however adopt net present value as techniques of investment appraisal. The reasons given to support this view is that, "net present value" method takes into account in the time value of money and also takes the futures into consideration.

# CHAPTER FIVE

## 4.1 OBSERVATIONS

During the research work, the following observations were made:

4.1.1 In most of the selected companies where the research was carried out, it was found out that the board of directors is responsible for making capital budgeting decisions. But in two of the selected companies, departmental heads are responsible for such decisions.

Table 4 on the analysis of data section is an evidence for this.

4.1.2 It is observed that factors which affect capital investment decision include:

(I) The net amount of the investment required expression as the total cash outlay needed to support the project during its entire life.

(ii) The net returns on the investment expressed as the future expected net cash flows. This may be actual cash flows, or cash savings.

4.1.3 Some companies delay the evaluation and implementation of profit improvement capital expenditure.

4.1.4 It is also observed that the authorization system create too much "red tape" and too many bureaucratic delays. This longer chain of approved Leeds to subsidiaries of companies to wait several months before answers come back from the centre.

Hence the job of evaluation is done twice, which is wasteful - once by the subsidiary and once by the present company.

## 4.2 RECOMMENDATIONS

**4.2.1** To those companies where departmental heads are responsible for making capital budgeting decisions. It is recommended that they should give this responsibility to their board of directors. Since capital budgeting decision is not a decision that can be made alone by any of the departmental heads because of the heavy amount involved.

**4.2.2** It is recommended that except where personnel problems are involved or the amount of capital is very large, the introduction of a profit improvement capital expenditure should not be delayed.

**4.2.3** Projects evaluation system should include a routine which ensures that all projects go through a number of retired stages, and that the right people are brought into the project out the - right time for investigation co-ordination, approval and implementation.

**4.2.4** It is also recommended that companies should ensure that their quantitative appraisal techniques have meaning and they should be based on a careful and objective study of the project.

## 4.3 CONCLUSION

The need to incorporated capital budgeting in corporate in corporate planning is very important, since the future success of a business depends on the investment decisions made today. That business managers are generally aware of this indicated by the requirement that important investment decisions must be approved by the chief operating executive or the board of directors.

It should be noted that in-spite of this facts, the procedures used to all management make investment decisions are often inadequate and misleading. Few manufacturing concerns who sign a long-term contract for supplies of an important raw material without carefully investigating. The various source of supply and considering the relative advantages of each items of Rice, service and quality.

In the analysis of capital investment proposals, the first problem is to reduce the area of uncertainty before a decision is made. Also it is necessary to ensure that all known facts are correctly assessed and quantities. Both known and uncertain facts are estimated in cash terms, and the method of capital investment appraisal focus on cash flows.

It is also found out their preparing the capital expenditure - plan is part of the long - range planning process. The quality of managerial decisions committing the firms resources to rein investments is probably the most significant factor affecting the level of future profitability. Its has been discussed earlier on.

Lastly, major development and investment projects are the ones which require the closest and most detailed evaluation before capital is committed.

# REFERENCES


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```
SET TALK OFF
SET DATE BRIT
SET STATUS OFF
SET PRINT OFF
SET CLOCK ON
CLEA
SELECT 3
CLOSE ALL
USE NPC DATA
AN =' '
?
@20,15 SAY 'PRINT REPORT NOW Y/N: 'GET AN PICT 'X';
VALID AN$ 'Yy' OR AN$ 'nN'
READ
IF AN$ 'Yy'
REPORT FORM PROTEXT TO PRINT
WAIT
ENDIF
REPORT FORM PROTEXT
WAIT
REPORT FORM PROTEXT
WAIT
CLEAR
DO NPCRPT
PROCEDURE NAME REVENUE PRG


SET TALK OFF
SET DATE BRIT
SET STAT OFF
SELECT 2
IF USED ('REVENUE')
SELECT REVENUE
ELSE
SELECT 0
USE REVENUE
ENDIF
CLEAR
ANS ='N'
B1 = '1997
B2 = 44500
B3 = 300000
B4 = 145000
B5 =16.62
B6 = 82.50
DO YRLY_REV
RETURN
PROCEDURE YRLY_REV
DO WHILE .T.
@1,5 TO 22,77 COLO R/BG+
@3,25 DAY 'YRLY REVENUE'
@4,25 SAY  '--------------------'
```

Structure for database: A:\NPCDATA.DBF
Number of data records: 0
Date of last update : 06/01/98

| Field | Field Name | Type | Width | Dec | Index |
|---|---|---|---|---|---|
| 1 | SECTOR | Character | 35 | | N |
| 2 | CODE | Character | 6 | | N |
| 3 | BDATE | Date | 8 | | N |
| 4 | TITLE | Character | 50 | | N |
| 5 | LOCATION | Character | 20 | | N |
| 6 | SPONSOR | Character | 35 | | N |
| 7 | BENEFIT | Character | 35 | | N |
| 8 | ES_TOT_CST | Numeric | 19 | 2 | N |
| 9 | NAME | Character | 30 | | N |
| 10 | ADRESS | Character | 35 | | N |
| 11 | YSTARTED | Date | 8 | | N |
| 12 | EXP_DATE | Numeric | 19 | 2 | N |
| 13 | PER_COMP | Character | 3 | | N |
| 14 | OUT_PAY | Numeric | 19 | 2 | N |
| 15 | EXP_COM_DA | Date | 8 | | N |
| 16 | YEARLY_ALL | Numeric | 8 | | N |
| 17 | QTLY_ALL | Numeric | 19 | 2 | N |
| 18 | QTLY_EXP | Numeric | 19 | 2 | N |
| 19 | OBJECTIVE | Memo | 10 | | N |
| 20 | CONSTRAINT | Memo | 10 | | N |
| 21 | OBSERVATN | Memo | 10 | | N |
| 22 | ACHIEVE | Memo | 10 | | N |
| * Total ** | | | 417 | | |

Structure for database: A:\ALLOCATE.DBF
Number of data records: 0
Date of last update : 06/01/98

| Field | Field Name | Type | Width | Dec | Index |
|---|---|---|---|---|---|
| 1 | ADATE | Date | 8 | | N |
| 2 | SECTOR | Character | 35 | | N |
| 3 | TITLE | Character | 50 | | N |
| 4 | PERC_ALLOC | Numeric | 5 | 2 | N |
| 5 | CODE | Character | 6 | | N |
| 6 | CLASS | Character | 1 | | N |
| 7 | AMOUNT | Numeric | 15 | 2 | N |
| ** Total ** | | | 121 | | |

Structure for database: A:\REVENUE.DBF
Number of data records: 0
Date of last update : 06/01/98

| Field | Field Name | Type | Width | Dec | Index |
|---|---|---|---|---|---|
| 1 | BYEAR | Numeric | 4 | | N |
| 2 | BARREL_DAY | Numeric | 8 | | N |
| 3 | DOMESTIC | Numeric | 8 | | N |
| 4 | EXPORTED | Numeric | 8 | | N |
| 5 | CRO_PRICE | Numeric | 6 | 2 | N |
| 6 | YRLY_INC | Numeric | 16 | 2 | N |
| 7 | EXC_RATE | Numeric | 6 | 2 | N |
| 8 | ECONOMIC | Numeric | 16 | 2 | N |
| 9 | SOCIAL | Numeric | 16 | 2 | N |
| 10 | SECURITY | Numeric | 16 | 2 | N |
| 11 | ADMIN | Numeric | 16 | 2 | N |
| 12 | MANUFACT | Numeric | 16 | 2 | N |
| 13 | AGRIC | Numeric | 16 | 2 | N |
| ** Total ** | | | 153 | | |

```
*************************************
*  MAIN PROGRAM MENU  ***************
*************************************


  **PROGRAM NAME:NPC.PRG.
  set date to british
 set talk off
set status off
clea
set colo to w/gr+
mn=0
set border to panel
set colo to gr+/bg
define popup npc from 4,10 to 20,66 message 'NATIONAL PLANNING
COMMISION'
define bar 1 of npc prompt 'NATIONAL PLANNING COMMISION'SKIP
define bar 1 of npc prompt 'CAPITAL BUDGETING AND CORPORATE
PLANNING'SKIP
define bar 3 of npc prompt '\-'skip
define bar 4 of npc prompt 'project allocation' message 'select
this menu;
 to allocate a new project'
define bar 6 of npc prompt 'add/crate new records'message 'select
this option;
to add new records into project monitoring projects files'
define bar 8  of npc prompt 'Browse/Modify projects files';
message 'list and modify projects files'
define bar 10 of npc prompt 'Report'message 'sele this option to
view or;
print report'
define bar 12 of npc prompt 'EXIT' message 'exit npc program'
define bar 13 of npc prompt '\-'skip
on selection popup npc do main
set colo to w+/b
activate popup npc
return
```

```
*************************************
*  MAIN PROGRAM MENU  ***************
*************************************


***program to create data entry form**
procedure npcdata
set date briti
set talk off
set status off
set clock on
set echo off
set print off
as=' '
more='y'
do while more$'Yy'
clea
store 0 to b7,b11,b13,b15,b16,b21
store space(35) to b1,b5
store space(45) to b8,b9
store space(50) to b6
store space(40) to addres1,addres2
b2=space(6)
b4=space(20)
b12='    '
store space(8) to b10,b14
store space(50) to b17,b18,b19,b20
date1=date()
mans_code=''
an='n'
do while an$='Nn'
clea
set border to single
@1,2 to 23,79 colo r+/b
@2,20 say 'PROJECT MONITORING DATA ENTRY FORM'
@3,20 say '==================================='
@4,5 say 'PROJECT CODE:'GET B2 PICT 'XXXXX'
READ
select 1
use
use allocate
locate for b2$code
if found()=.f.
clea
@8,10 to 12,45 panel colo r/gr+
@10,15 say 'PROJECT CODE DOES NOT EXIST!'
@13,1 say ' '
?
wait 'press any key to continue'
return
endif
```

```
@4,26 say 'enter sector:'get sector
b1=sector
@6,5 say 'title:' get title
b3=title
@8,5 SAY 'location:'get b4
@8,41 say 'sponsor:'get b5
*@8,5
@10,5 say 'estimated total cost:'get b7 pict '999,999,999,999.99'
@10,45 say 'allocation date:'get adata
adate1=adate
@12,5 say 'name of contractor:' get b8
@14,5 say 'adress of contractor:'get b9
@16,5 say 'year started:'get b10 pict 'xx/xx/xx'
@16,39 say 'expenditure to date:'get b11 pict
'999,999,999,999.99'
@17,5 say 'percentage completion:'get b12 pict '!!!%'
@17,40 say 'outstanding pay:'get b13 pict '999,999,999,999.99'
@19,5 say 'expected completion date:'get b14 pict 'xx/xx/xx'
@19,40 say 'yearly allocation:'get amount pict
'999,999,999,999.99'
amount1=amount
qa=amount/4
qa1=qa
@21,5 say  'quaterly expend.'get b16 pict '999,999,999,999.99'
@21,40 say 'quaterly alloca.'get qa pict '999,999,999,999.99'
@15,5 say 'project's objective'get b17
@22,5 say 'benefit of project:'get b6
@17,5 say 'constraints:'get b18
@18,5 say 'observations:' get b19
@19,5 say 'achievement:'get b20
@24,20 say'enter correct information properly'
@1,2 to 23,79 colo gr+/b
read
@24,1 clear to 24,77
@24,15 say 'are the above information correct y/n?:'get an pict
'x'
read
enddo
set colo to w/b
@24,1 clear to 24,79
@24,15 say 'add records into the the npcdata file y/n?:'get as
pict 'x'
read
if upper(as)='y'
select 2
use
use npcdata
append blank
replace sector with b1

replace code with b2
replace title with b3
replace location with b4
replace sponsor with b5
```

```
replace benefit with b6
replace es_tot_cst with b7
replace name with b8
replace address with b9
replace ystarted with ctod(b10)
replace exp_date with b11
replace per_comp with b12
replace out_pay with b13
replace exp_com_da with ctod(b14)
replace yearly_all with amount1
replace qtly_all with qa1
replace qtly_exp with b16
replace bdate with adate
@4,1 clear to 22,79
@1,2 to 23,79 doul cblo r/bg+
@6,15 say 'press ctrl+home key to open memo field'
@7,15 say '=============================='
@10,15 say 'objective:'get objective
@12,15 say 'constraint:'get constraint
@14,15 say 'observation:'get observatn
@16,15 say 'achievement:' get achieve
read
endif
@24,1 clear to 24,79
@24,15 say 'enter more information y/n?:'get more pict 'x'
read
if upper(more)='y'
loop
endif
enddo
close all
return
```

```
replace benefit with b6
replace es_tot_cst with b7
replace name with b8
replace address with b9
replace ystarted with ctod(b10)
replace exp_date with b11
replace per_comp with b12
replace out_pay with b13
replace exp_com_da with ctod(b14)
replace yearly_all with amount1
replace qtly_all with qa1
replace qtly_exp with b16
replace bdate with adate
@4,1 clear to 22,79
@1,2 to 23,79 doul colo r/bg+
@6,15 say 'press ctrl+home key to open memo field'
@7,15 say '======================================='
@10,15 say 'objective:'get objective
@12,15 say 'constraint:'get constraint
@14,15 say 'observation:'get observatn
@16,15 say 'achievement:' get achieve
read
endif
@24,1 clear to 24,79
@24,15 say 'enter more information y/n?:'get more pict 'x'
read
if upper(more)='y'
loop
endif
enddo
close all
return
```

```
set date to british
set talk off
set clock on
set status off
set echo off
do while .t.
close all
sele 1
use allocate
as=' '
more='y'
do while more$ 'Yy'
clea
store space(35) to b1
store space(50) to b2
store 0.0 to b3
store space(6) to b4
b5=' '
b8=space(8)
date1=date()
mans_code='    '
set colo to w+/b+
an='n'
clea
@3,25 say 'allocation of new projects'
@4,25 say "=========================="
set colo to gr+/b
@12,54 say 'allocation guide'
@13,54 say '================'
@14,54 say '1. economic=14%'
@15,54 say '2. social=10.5%'
@16,54 say '3. security=7%'
@17,54 say '4. general admin=3.5%'
@18,54 say '5.manufacturing=25%'
@19,54 say '6.agriculture=40%'
set border to single
*@10,52 to 20,29
set colo to w+/b
@23,12 say 'enter correct information properly'
@1,2 to 23,79 double
@5,5 say 'allocation date;'get b8 pict 'xx/xx/xx'
@7,5 say 'enter sector :'get b1
@9,5 say 'project title:'get b2
use
sele 3
use revenue
@11,5 say 'project classification:'get b5 pict 'x'
read
if b5$''
return
endif
do case
case b5='1'
```

```
@13,5 say 'percentage allocation(%):'get b3 pict '999.99' range
0,14
case b5='2'
@13,5 say 'percentage allocation(%):'get b3 pict '999.99' range
0,10.5
case b5='3'
@13,5 say 'percentage allocation(%):'get b3 pict '999.99' range
0,7
case b5='4'
@13,5 say 'percentage allocation(%):'get b3 pict '999.99' range
0,3.5
case b5='5'

@13,5 say 'percentage allocation(%):'get b3 pict '999.99' range
0,35
case b5='6'
@13,5 say 'percentage allocation(%):'get b3 pict '999.99' range
0,40
endcase
read
do case
case b5='1'
b6=(b3/14)*economic
eco=economic
sele 4
use
use allocate
go botto
pc='a00'
pc1=recno()
pc2=str(pc1,4)
pc3=pc+ltrim(pc2)
sum perc_allo to p1 for class='1'
rp=14-p1
sum amount to amt1 for class='1'
rmt=eco-amt1
case b5='2'
b6=(b3/10.5)*social
soc=social
sele 4
use
use allocate
go botto
pc='b00'
pc1=recno()
pc2=str(pc1,4)
pc3=pc+ltrim(pc2)
sum perc_allo to p2 for class='2'
rp=10.5-p2
sum amount to amt2 for class='2'
rmt=soc-amt2

case b5='3'
b6=(b3/7)*security
```

```
sec=security
sele 4
use
use allocate
go botto
pc='c00'
pc1=recno()
pc2=str(pc1,4)
pc3=pc+ltrim(pc2)
sum perc_allo to p3 for class='3'
rp=7-p3
sum amount to amt3 for class='3'
rmt=sec-amt3

case b5='4'
b6=(b3/3.5)*admin
adm=admin
sele 4
use
use allocate
go botto
pc='d00'
pc1=recno()
pc2=str(pc1,4)
pc3=pc+ltrim(pc2)
sum perc_allo to p4 for class='4'
rp=3.5-p4
sum amount to amt4 for class='4'
rmt=adm-amt4

case b5='5'
b6=(b3/25)*manufact
man=manufact
sele 4
use
use allocate
go botto
pc='e00'
pc1=recno()
pc2=str(pc1,4)
pc3=pc+ltrim(pc2)
sum perc_allo to p5 for class='5'
rp=25-p5
sum amount to amt5 for class='5'
rmt=man-amt5

case b5='6'
b6=(b3/40)*agric
agr=agric
sele 4
use
use allocate
go botto
pc='f00'
```

```
pc1=recno()
pc2=str(pc1,4)
pc3=pc+ltrim(pc2)
sum perc_allo to p6 for class='6'
rp=40-p6
sum amount to amt6 for class='6'
rmt=agr-amt6
endcase
@15,5 say 'remaining % allocation;'
@15,35 say rp pict '999.99'
@16,5 say 'project code'get pc3 pict 'xxxxxx'
@19,5 say 'amount allocated(#aira):'get b6 pict
'999,999,999,999.99'
@21,5 say 'remaining amount to be allocated :'
@21,40 say rmt pict '999,999,999,999.99'
read
@24,1 clea to 24,77
@24,15 say 'are the above informatiom correct y/n?:'get an pict
'x'
read
if upper(an)='n'
loop
endif
enddo
set colo to w/b
@24,1 clear to  24,79
@24,15 say 'add record into the new project file y/n?:'get as
read
if upper(as)='y'
append blank
replace sector with b1
replace title with b2
replace per_alloc with b3
replace code with pc3
replace class with b5
replace amount with b6
replace adate with ctod(b8)
endif
@24,1 clea to 24,79
@24,15 say 'enter more informatiom y/n?:'get more
if upper(more)='y'
loop
endif

enddo
use
set status on
set colo to w+/b
```

```
Y1 = B4 * B5 * 365
B7 = Y1 * B6
@6,12 SAY 'ENTER YEAR:' GET B! PICT 'XXXX'
@8,12 SAY 'BARREL OF CRUDE OIL'
@9,12 SAY 'PRODUCT PER DAY:' GET B2 PICT '99,999,999'
@11,12 SAY 'DOMESTIC CONSUMPTION:'GET B3 PICT '99,999,999'
@13,12 SAY 'QUANTITY EXPORTED:'GET B4 PICT '99,999,999'
@15, 12 SAY 'PRICE OF CRUDE OIL($)' GET B5 PICT '99,999,999'
@17,12 SAY 'EXCHANGE RATE (#AIRA):'GET B6 PICT '99,999,999'
VALID YR_VD()
@19,12 SAY 'YEARLY INCOME (#AIRA):' GET B7
PICT'999,999,999,999,99';
VALID YR_VD()
READ
DO SECTORS
MSG ='PRINT THIS REPORT Y/N:'
M_INP=' '
DO SAV_MSG
IF M_INP='N'
CLEA
EXIT
ELSE
@23,1 CLEAR TO 23,78
@24,10 SAY "MAKE SURE YOUR YOUR PRINTER IS READY"
SET DEVICE TO PRINT
DO SECTORS
EXIT
ENDIF
ENDDO
USE
SET DEVICE TO SCREEN
CLOSE ALL
RETURN

PROCEDURE SAVE1
APPEND BLANK
REPLACE BYEAR WITH B1
REPLACE BARREL_DAY  WITH B2
REPLACE DOMESTIC WITH B3
REPLACE EXPORTED WITH B4
REPLACE CRO_PRICE WITH B4
REPLACE EXC_RATE WITH B5
REPLACE YRLY_INC WITH B6
REPLACE ECONOMIC WITH (14/100)*B7
REPLACE SOCIAL WITH (10.5/100)*B7
REPLACE SECURITY WITH (7/100)*B7
REPLACE ADMIN WITH (3.5/100)*B7
REPLACE MANUFACT WITH (25/100)*B7
REPLACE AGRIC WITH (40/100)*B7
RETURN

PROCEDURE SECTORS
CLEAR
```

```
T1=(14/100)*B7
T2=(10.5/100)*B7
T3=(7/100)*B7
T4=(3.5/100)*B7
T5=(25/100)*B7
T6=(40/100)*B7
@2,15 SAY 'SECTORS ALLOCATION REPORT'
@3,15 SAY '========================='
@5,10 SAY '1.ECONOMIC SECTOR 14%'
@5,40 SAY T1 PICT '999,999,999,999,.99'
@7,10 SAY '2. SOCIAL SECTOR 10.5%:'
@7,40 SAY T2 PICT '999,999,999,999.99'

@9,10 SAY '3. SECURITY SECTOR 7%:
@9,40 SAY T2 PICT '999,999,999,999.99'

@11,10 SAY '4. GENERAL ADMIN SECTOR 3.5%:'
@11,40 SAY T2 PICT '999,999,999,999.99'

@13,10 SAY '5. MANUFACTURING SECTOR 25%:'
@13,40 SAY T2 PICT '999,999,999,999.99'

@15,10 SAY '6. AGRICUTURAL SECTOR 40%:'
@15,40 SAY T2 PICT '999,999,999,999.99'

@16,39 SAY '.........................'
@17,10 SAY 'TOTAL AMOUNT ALLOCATED:'
@17,40 SAY B7 PICT '999,999,999,999.99'
@18,39 SAY '========================='
@21,1 SAY ''
RETURN
WAIT


PROCEDURE LIST1

SET TALK OFF
SET PRINTER OFF
SET STAT OFF
CLEAR
DEFINE WINDOW BR_WIN;
FROM 2,6 TO 20,74
```