

Dr. Srinivasan Palamalai
Dr. Yagnamurthy Raja

FINANCE AND ACCOUNTING FOR SMALL BUSINESS



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SMALL BUSINESS**

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CHAPTER 1

FUNDAMENTAL OF BUDGETING FOR OPERATIONS

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ABSTRACT:

Budgeting for operations is a fundamental aspect of financial management in organizations. This abstract explores the concept of budgeting for operations, its objectives, and its importance in achieving organizational goals. It discusses the process of budgeting, including the identification of operational needs, estimation of costs, and allocation of resources. Additionally, it highlights the role of budgeting in planning, controlling, and evaluating operational activities, as well as the challenges and best practices associated with effective budgeting for operations. Budgeting for operations involves the planning and allocation of financial resources to support day-to-day activities and ensure the smooth functioning of an organization. The primary objective is to align operational expenses with revenue projections, control costs, and optimize resource allocation. It enables organizations to set specific targets, allocate resources efficiently, and monitor performance against established benchmarks.

KEYWORDS:

Cost control, Expenses, Financial planning, Forecasting, Income, Operational efficiency, Profit margins.

INTRODUCTION

Plans, operations, and control activities all fall within the purview of operational budgets. You should participate in operational budgeting and planning in addition to long-range planning to increase your chances of success. A comprehensive set of marketing, product, capital, and financial plans, such as those mentioned in this, are necessary for the planning process to be completed.

A budget for operating purposes or its definition

An anticipated and, ideally, realistic numerical image of revenue and spending goals for a time period is an operational budget. Operating budgets are typically created month by month for a whole year. Some individuals create operational budgets for five years with various reporting intervals. These budgets are often created on a monthly basis for the first two years, on a quarterly basis for the next two years, and on an annual or semiannual basis for the final year. However, for most usage, a one-year budget that is extended quarterly so that it once again anticipates a full year will be sufficient [1]–[3]. As with any plan, it is possible to compare the actual performance that results with the operational budget in order to identify "off-target" performance trends and focus on problem areas. The operational budget functions as a planning tool and a management tool in this manner. When constructing the operational budget, consider every aspect of the company. Additional performance measurements and controls are made feasible by taking into account all operational expenses. The expenses paid to enhance preparatory detail will be positively correlated with the attainment of cost savings via improved control.

Since operational budgets may be used to provide performance metrics, there is a natural temptation for individuals to "adjust" the budgeting process. It is important to think about the possible consequences: Sales managers can overestimate the market, which would make the cash allocations and costs predicted for that level of production and sales less reliable. Some production managers may "pad" a budget to provide a premium or safety cushion. This pad can detract from a product's appeal in a crowded market or in competitive sales circumstances. Because a fair budget based on a reasonable plan fosters reasonable performance, the goal should be to make the budget as realistic and precise as feasible.

Budget ineffectiveness warning signs

The following are some indicators that the budget or budget process is not operating at its best:

Budget neglect on the part of management or supervisors. Control requires responsibility and assessment since a budget is, or can be used as, a measuring instrument. Without review, it is difficult to take effective remedial action, which results in a loss of control. Determine if the issue is with the management or the budget if management is not utilizing the budget as a control tool. The firm's management, at all levels, not participating fully. Budgets that are mandated by top management without participation from the accounting department may have a detrimental impact on employee and lower management mentality. It's their budget; let's see if they can make it! may become the mentality substantial differences between budgetary goals and projected performance that have not been adjusted. Large budget discrepancies might point to one of these flaws:

1. faulty estimations
2. A lack of quick remedial action and subpar feedback
3. ineffective budget maintenance management practices

The absence of individuals who actively develop the budgets from participating in the day-to-day operations of the company. It is difficult to keep up a functioning knowledge of the present operational condition without a good understanding of the dynamics of the business's operations. The stability of processes is often closely correlated with the quantity or frequency of engagement with operational departments. The more often individuals who develop the budget should view and experience the operational environment, the more variable the business's operations will be [4]–[6]. First-line managers and supervisors are unaware of how their budgets were created or what is included in them. In such circumstances, department managers are unaware of how performance is assessed, how well they are meeting expectations, where they could be succeeding, and where they may be running into unforeseen challenges. All budgets are effective planning instruments and may perform a crucial control role. These systems must be employed in addition to the budgeting process in order to be used for control:

Feedback system. The act of creating the budget does not result in the installation of the programs needed to carry it out. To focus on areas where challenges can arise in achieving the company goal, a feedback loop is essential. Feedback on performance relative to budget should be generated via periodic budget reports. These reports ought to result in action. You lose the chance to make the necessary modifications if the budget and associated performance versus budget reports do not draw attention to problem areas.

frequency of feedback. The feedback loop necessitates ongoing comparisons of performance against budget projections. Feedback must be routine, anticipated, and continuously reported for it to be effective. Comparisons work best when they are performed often, consistently,

and promptly. Budget performance trend analysis serves as a useful early warning system. The advantages of the budget reporting procedure must, of course, exceed the disadvantages. However, one area where you should see significant savings is in the continuing assessment process.

DISCUSSION

Improvements to the Budgeting System

By creating a strong budgeting procedure that is carefully followed by the management team throughout the year, several of the budgeting issues mentioned in the previous paragraph may be removed or at least reduced. This discusses a straightforward budgeting process that may help to guarantee that the yearly budget is created with enough time and in the right sequence. Later, we also make a note of the monthly timetable that must be adhered to in order for the management team to assess the budget vs real outcomes comparison. These are just procedural issues, however, and the management team must remain dedicated to upholding the budget's requirements, which will mostly fall within the purview of the senior management team.

The budget process that follows serves as a blueprint for the sequential actions a business should take to make sure that all budgetary components are finished in the right sequence and approved by individuals who will be accountable for the outcomes. The procedure's dates assume that businesses operate on a calendar year-end; for those businesses that don't, just adjust the dates to reflect their different year-ends.

1. An update on costs. Send an annualized list of each department's costs, based on actual spending up through October of the current year, to each department by mid-November. Each department's employees should be included, along with their current salaries. Ask for this information to be returned 10 days from now, along with any anticipated changes in costs.
2. Update on revenue. Give the sales manager a list of the company's revenue by month and business unit as of mid-November for the period from January to October of the current year. Ask for a return date for this data that is 10 days away [7]–[9].
3. An update on capital expenditures. Send a document to all department heads by the middle of November asking for details on the amount and timing of capital expenditures for the forthcoming fiscal year. Ask for a return date for this data that is 10 days away.
4. Update on automation. Send a form to the manager of automation by the middle of November asking for estimates of the magnitude and timing of workforce reductions resulting from automation activities in the future year. Ask for a return date for this data that is 10 days away. The timing of capital expenditures and anticipated manpower reductions should be tightly correlated.
5. Refresh the financial model. By the end of November, the following six tasks need to be finished:

As information is received from the different managers, it is updated with the amounts previously specified in the budget. This can include altering "hard coded" monetary values or flex budget percentages. To ensure that you follow up with the personnel who have not returned the required information, maintain a record of who has returned the information. Make that the budgeted factory overhead page's indirect overhead allocation percentages are still correct. Check that the amounts stated at the top of the staffing budget for the Federal Insurance Contributions Act, State Unemployment Tax, Federal Unemployment Tax, medical

costs, and workers' compensation are still correct. The personnel budget should be updated as necessary to include new average pay rates that are based on the expected pay levels set by department managers. Run an annual depreciation report, add the anticipated depreciation for new capital purchases, and add this sum to the budget. Based on anticipated borrowings until the end of the year, update the loan detail budget.

6. Analyze the budget. Print out the budget, and mark any costs or income that differs noticeably from the annualized s for the current year. Discuss the contested issues with the managers who are in charge of them.

7. Make a budget revision. The budget should be updated, printed again, and discussed with the president. Include any extra modifications. You may need to manually transfer funds from the cash line to the debt line in order to indicate the reduction of debt if the cash balance is too high.

8. Give the management team a budget that is bound.

9. Update the database for accounting. Input the future year's budget s into the accounting program. All duties must be finished by the middle of December.

There must be a feedback loop that relays budget variance data to the department managers once the budget has been prepared. The optimum feedback loop is to finish a budget to actual variance report that is organized by the name of the accountable manager as soon as the financial statements are finished each month. As requested, the controller should check this report with all of the managers and return with specific details on each variance. The concerned managers and senior management should then get together as soon as possible to discuss variance issues and what each manager plans to do to fix them. The following month's meeting will begin with an evaluation of how well the managers have performed in achieving the objectives to which they are committed. The top managers should put these commitments in writing and send them back to the managers in memo form. The prompt distribution of correct financial statements is a crucial component of this system's functionality since it gives department managers more time to react to bad variance information [10].

Accounting for accountability

Accounting for responsibility entails organizing processes and reporting to emphasize the accountability of certain individuals. Accountability is given to the departments or functions that are in charge of carrying out the performance-related duties. The idea of specific responsibility is essential to management control. At least three objectives are covered by accounting: financial reporting, cost reporting for goods and services, and performance evaluation reporting. The performance measuring function, the third function of accounting, and the operational function of the firm are interconnected. The demand for more complex performance measuring tools has grown as a result of the fact that many firms increasingly evaluate and manage people based on goals.

The person must have the authority required to carry out the duty they are expected to do in a management-by-objectives system. A person cannot and should not be expected to fulfill the obligations imposed without the required authorization. Only when the performance reporting system is connected to the anticipated level of performance is a person within this level of responsibility eligible for evaluation. This budget articulation of anticipated performance serves as the key to a person's actual performance.

Responsibility accounting should monitor anticipated performance throughout the whole organizational structure of the firm, not only at the lowest management level. The system may include key indicators to measure performance and initiate responses to unexpected outcomes. As a result, management at all levels is only asked to step in when it's required to address issues or poor performance. The management-by-exception approach gives managers a lot of extra time to organize and prepare other crucial company processes. In contrast to financial accounting, which merely groups like expenses, responsibility accounting divides the company into discrete responsibility areas. To compare outcomes to goals set for the segment prior to the conclusion of a plan/budget period, a measuring procedure is developed. These objectives make up the operational goals for each company division and are included in the operating budget.

Responsibility accounting has to be customized for every organization in order to be successful. To align with the designated responsibility centers, the accounting system must be modified. The income and spending categories must be created to correspond with the activities or services that management deems crucial to track and assess. For instance, a machine may consume a lot of power, and excessive usage may be a symptom of a potential issue with the process. The management would want to track power use and show the cost as a line item that can be compared to average consumption rates by machine or department.

The responsibility accounting system also aggregates the performance data from the various centers into gradually aggregated collective reports in order to identify bigger areas of responsibility. There is still a ton of specific information that can be analyzed underneath these classifications.

Construction of Responsibility Centers

The size of a responsibility center varies. It may range in size from a single activity or equipment to the full company. After all, the company is the chief executive officer's primary area of responsibility. The firm is often divided into several centers or parts that, when arranged in successful levels or groups, resemble a pyramid. The business's hierarchy of power and responsibility is represented by the pyramiding. Different responsibility centers might be developed for different goals. The centers or segments' characteristics may also change.

A cost center has been formed if a person is exclusively accountable for the expenses associated with a process or activity. Line operations and staff functions are both examples of cost centers. A cost center places a focus on manufacturing items or offering particular services together with other physical performance indicators. Since the center doesn't make the final product, there is often no direct revenue production measurement by that center.

A unit in another is accountable for the earnings contribution it generates. Profit center is a fitting moniker for this responsibility center. Because a profit center has to produce an entire product or service to contribute to the profit, they are often bigger units than cost centers. A profit center should be created based on specified management standards for revenues and expenditures. It is possible to create other divisions, such as investment and income centers. For instance, revenue centers are divisions of the larger profit centers tasked with generating money. The usual example is the sales department. A profit center with the additional duty of raising and making the necessary investments to generate the profit is known as an investment center. The adoption of some rate-of-return test as an impartial indicator of the center's success is required for this next investment phase. A crucial component of the responsibility reporting system, the proper development of cost centers, profit centers, and the like must be done carefully and precisely.

Developing Costs

The buildup of expenses is a key element of responsibility accounting. The three basic categories of expenses that are often encountered are fixed, variable, and semivariable, according to accountants. Certain levels of management may incur certain expenditures within certain classes at their discretion, whilst other levels of management may not incur certain costs. There are situations when expenses are related to many centers and must be divided among them. When responsible management has taken a proactive role in deciding how to allocate expenditures and maintaining the reporting system, the most efficient system is likely to be the end result.

Cost escalation is complicated by the issue of transfer pricing. The extra expenses and intracompany movements of raw materials, work-in-progress, completed items, and rendered services determine a cost center's performance in manufacturing enterprises. It may not be possible to use a market price as an objective measure of performance or it may be too unclear due to swings. To determine transfer costs across departments, some kind of compromise is often needed. A constant cost is one that doesn't immediately change as a result of volume. Some expenses, like loan interest, are really fixed. Depreciation expenditure and other commonly recognized fixed expenses may change in certain situations. Total fixed costs are often shown as step functions over a wide variety of activities since they are incurred in increments as production or the number of services rises.

This aspect of fixed expenses shouldn't pose any major challenges. Graphs like that may be used to determine the amount of fixed expenses because output or sales are anticipated for a budget period. Unfortunately, fixed expenditures are not often constantly and critically assessed to establish reasonableness because of their seeming unchanging nature. Like all expenses, individual fixed costs should be examined more regularly the higher their quantity. For instance, insurance payments may not change much from year to year and may even be paid in whole during prosperous times. The correlation between a fixed cost's size and the frequency at which it has to be evaluated. You should consider things like the cost of reconsideration when setting the time frames for "rarely" through "often" while making such an evaluation for yourself. Reevaluating insurance coverage may be a difficult endeavor that calls for a large commitment of time and money. However, if you obtain considerable savings as a consequence of renegotiating the insurance policy and prices, the rewards might be just as big.

The mechanism used to divide fixed costs across various goods and services is another issue with fixed costs. An arbitrary assignment of fixed costs often results in an exaggerated profit or loss statement for each product. In the absence of this, nonprofit items are sometimes supported by an "average fixed cost" allocation, which could not fully reflect the expenses related to the product. Without accurate pricing information, it is difficult to make informed judgments. You should make an effort to correctly distribute fixed expenses by creating an operational budget. Your accountant should have a fair idea of the expenses' scope and which goods or services are having an impact on the total. You should also find out how different activity levels affect the expenses you pay for various goods and services.

You should identify the factors that contribute to the occurrence of fixed expenses as well as the factors that affect their level while studying them. This study will assist in determining which good or service should bear the cost and how that allocation should be made. This will be a very challenging task for some fixed expenses. Some administrative expenses can just be impossible to associate with any specific product or service. It can take many allocations across your costing hierarchy to ultimately reach a "product-attribute" status.

You may decide on a rate at which to allocate these charges against work hours and classify such costs as variable expenses. Such fixed expenses are split by an estimate or forecast of the expected direct work hours and are distributed proportionally to arrive at this burden or overhead rate. Although additional fixed costs may need to be assigned to goods with significant capital or permanent investments, this technique may unjustly unfairly attribute costs to labor-intensive goods. Furthermore, by underestimating predicted direct work hours, this assignment may fail to meet fixed expenditures. Or, a more probable scenario, a fixed cost over recovery might take place. When allocating these charges, you should be reasonable. Use a direct hour allocation if it is practical. It is appropriate to do so if fixed expenses can be linked to a specific product or service. A cost must fulfill two specific requirements in order to be correctly categorized as variable:

1. Prior to the start of an activity, no expenses should be made.
2. There should be a direct correlation between the cost and the degree of activity.

A sales commission is an example of a cost that is solely changeable. The amount of commission fluctuates in direct proportion to the volume of sales as sales rise or fall.

There may be a straight-line connection between the cost and the amount of output, or the cost rate may rise as the output level rises. This growing cost connection will show up as a curved graph when plotted.

Although variable costs often follow this pattern,

The straight-line connection is the more frequent scenario. There is often a curvilinear connection when setup expenses are dispersed across production, but it is not the same situation. The setup cost allocation spreads a fixed cost across a range of output units, with the cost per unit of output dropping as the duration of the production run rises. In the preceding illustration, the cost per unit rises as more units are produced. Direct labor expenses, scrap costs, packing costs, and shipping charges are often categorized as variable costs. Direct labor costs and other expenses, however, could not be completely flexible. The divisibility assumption is used, for instance, to support the hypothesis that direct labor directly changes with the quantity of units produced. However, work cannot be divided indefinitely. If a worker can create 1,600 units in an eight-hour shift but only 1,200 are needed, he or she has been used to a level of 75 percent, unless the worker may be employed in another business. Either this idle work may be put to good use elsewhere, or 25% of this effort is allocated to fewer units produced. Even if they are not completely divisible, direct labor and direct materials are often classified as variable expenses for budgeting reasons.

These may be utilized for budgeting if you've set labor requirements for your activities. You may start aiming expenses by gathering data and creating labor guidelines. Setting specific labor-hour goals during the planning phase is challenging. The forecasts may be skewed if just historical data is used, and the learning curve's impact on efficiency and previous inefficiencies won't be taken into account. For planning reasons, keep in mind that when these fixed and variable costs are allocated on a per-unit basis, their graphs look inverted. Variable costs are constant and fixed per unit when they are allocated on a per-unit basis. When fixed expenses are allocated on a per-unit basis, they shift in response to changes in output levels.

Various Costs. Mixed costs exhibit the characteristics of both fixed and variable expenses. Many expensive things fit within this category. Some individuals consider mixed expenses to be fixed costs. If you do this, you must allocate the cost above the assumed or anticipated

amount of production. This might recoup that fixed cost component more or less. If a consistent bias toward underrecovery of the fixed component of one mixed cost exists, underrecovery of the fixed component of every mixed cost, allocated on the basis of that misestimated output level, may exist. Some people may argue that this is unimportant because the over- or underrecovery will be insignificant. You might run into major issues if you utilize this skewed facts to decide on capital investments, marketing and pricing strategies, or expansion or contraction. It might be challenging to distinguish between a mixed cost's fixed and variable components. Fortunately, previous data can often be used to determine this allocation. As an example, statistics regarding the use of power in one department for the past six months were tallied. The Y intercept is 5,000 kWh when this usage is plotted with the units generated on the X axis and the kilowatt hours spent on the Y axis. This shows that even with no output, the department still uses 5,000 kWh of power per month, which is the fixed cost.

Past Information. The company can be maintaining previous inefficiencies if historical data is used to make predictions about the future. The finest or perhaps the only data that is available, however, can be historical data. When using historical data, make certain that:

1. Historical evidence presents the past truthfully. It is necessary to look into the circumstances surrounding data collection as well as what information is and is not included in the data.
2. Historical information is pertinent to the predictions being made by the company. It becomes more challenging to project the future using historical data when current conditions differ from past conditions.
3. Utilizing the data promotes performance that outperforms prior results.
4. Inflation's effects are appropriately taken into account.
5. Another useful tip for using historical data is to avoid using data that is older than 12 months during times of high inflation or deflation.
6. Always maintain objectivity. Don't invalidate data that appears to be out of the norm outright in order to bias the data. Unusual numbers could have an explanation.
7. Be original; avoid being restricted by conventional wisdom. It's possible that some of the connections between costs and activities don't seem clear-cut and quantifiable. It's possible that nonstandard or delayed billings are to blame for this.
8. For data that tends to be nonlinear or dispersed, think about and give moving averages a try.
9. Extrapolation can be used to forecast data for expected production or service levels in the future.
10. Never extend the use of tools beyond what common sense suggests is necessary.

CONCLUSION

In conclusion, operational budgeting is a crucial step in financial management since it enables businesses to plan, allocate resources, manage expenditures, and assess performance. By matching operational costs with revenue estimates and maximizing resource allocation, it helps the business reach its objectives. Even in the face of obstacles, businesses may improve their budgeting procedures by adhering to best practices and persistently responding to shifting operational requirements and market circumstances. Budgeting for operations effectively requires careful consideration of many different aspects and difficulties. These might include fluctuating market circumstances, shifting operational requirements, uncertainty around revenue estimates, and resource limitations. Best practices that businesses should follow include including important stakeholders in the budgeting process, using

historical data and industry standards, reviewing budgets often, and being flexible to make necessary budget adjustments.

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CHAPTER 2

PROJECTING REVENUES IN FINANCIAL PLANNING

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ABSTRACT:

Projecting revenues is a critical aspect of financial planning and decision-making for businesses across industries.

This abstract explores the concept of projecting revenues, highlighting its significance in strategic planning, budgeting, and performance evaluation. The process involves estimating future sales or income based on various factors such as historical data, market trends, customer behavior, and industry analysis. Accurate revenue projections enable organizations to set realistic targets, allocate resources effectively, and make informed decisions regarding pricing strategies, production levels, marketing campaigns, and overall business growth. However, projecting revenues is a complex task that requires careful analysis and consideration of multiple variables. Factors such as seasonality, economic conditions, competition, technological advancements, and regulatory changes can significantly impact revenue forecasts.

KEYWORDS:

Customer Demand, Financial Forecasting, Market Analysis, Pricing Strategy, Revenue Drivers, Revenue Forecasting.

INTRODUCTION

Businesses sometimes ask for a profit's prediction for the whole company to compare to the operational budgets. The operational budget should be compared to this income projection. A sales prediction serves as the foundation for all revenue estimates. Many businesses initially create this sales projection before beginning the operational budget process. Lead and lag periods are added to the sales estimate in order to generate departmental timetables. The operational budget is then established using the departmental scheduling of tasks. For instance, Fruit Crate Manufacturing Co., Inc., predicts these sales and has a maximum production capacity of 1,000 crates per week: Since all orders are sent on the first of every month, budgeting is done using the exploded production schedule.

With the use of this operational schedule, the business may schedule its supplies, personnel, and equipment and create an expenditure budget. Budgets should include, for instance, two weeks for sawing and one week for drying in May, three weeks for sawing, eight weeks for drying, and two weeks for assembly in June, and so on [1]–[3].

The receipt of funds is advanced in time while production and associated expenditures are delayed. Fruit Crate Manufacturing Co., Inc. will ship on July 1 after incurring costs in May and June but won't anticipate payment until July 10 or August 1 if the company has a 2/10, N/30 payment schedule. To make sure that there is enough money on hand to cover anticipated activities, the timing of cash flows, the revenue element, and the spending of the plan must be synchronized. For this instance, the cash flow is negative for at least 2.5 months.

Tracking and upkeep of the budget

This has so far placed a focus on defining responsibility and creating a budget and accounting system that complies with a responsibility allocation. The fundamental tenet of this system is that individuals who will be held to account by it comprehend how it operates and concur that the goals may be achieved via their efforts.

Integrating your aims, goals, and techniques with the management level concerned should be the initial necessity. Having each management take part in setting and maintaining the objectives and goals is one way to achieve integration. The standard of reasonableness ought to be used. That is, in order to encourage compliance, there must be a realistic chance of achieving the goal. The inability to distinguish between controllable and uncontrolled expenditures or expenses is a factor that often makes it difficult to create an efficient budget and achieve goals. Costs that can be controlled should be targeted and recognized. A budget based on responsibility may include components of uncontrolled expenses, which might have a demotivating effect. Practically, a manager has some level of influence over all income and spending elements. However, costs like property taxes may have an impact on profitability but are beyond of the operations manager's control. Within the firm's divisions, things like administrative overhead distribution are uncontrolled. As a general rule, these things need to be delegated and recorded separately to avoid pointing out the manager's accountability.

Variance analysis and reporting make up the budget tracking plan's last component. The most popular method of reporting variance is to compare monthly actuals to monthly projections together with year-to-date comparisons. There is often room in the report for an explanation of the deviation from the budget. The report may be produced in a variety of ways, including by operation or group, by product, by labor, and by material. By account category, such as repair supplies or insurance, actual expenditures are compared to budgeted costs. This format is useful for identifying patterns in certain expense categories, but it cannot be used to pinpoint which managers are in charge of particular expenditures. An example of a report that contains this data. The expenditure line items in this example are the same, but we've now included a column with the names of the managers who are in charge of each expense. Additionally, we have organized the material according to the managers' names. This sorting serves two objectives:

1. It separates the report into pages for each manager so that they can each readily categorize the spending that they are accountable for.
2. By categorizing the report by manager, you may highlight variances for each individual, allowing top managers to see which managers are doing the greatest job of maintaining their expenses within predetermined targets, which can be useful for determining the amount of manager incentives. The analysis demonstrates that R. Olbermann, whose cumulative variance performance is 5% below budget, is the only manager who continuously fails to achieve real costs that are lower than the budget [4]–[6].

The management team does not have time to investigate what may be hundreds of different accounts when it examines revenue and spending variations. Instead, it just has enough time to examine a part of the greatest differences. As a result, the accounting team may produce a condensed version that only includes the line items for which variations are more than a certain dollar amount or percentage for the month or year to date. The remaining accounts might still be included in the variance report as an amendment. With this little format modification, management's attention will be drawn to the few significant variances that need the greatest rectification. This method of reporting regularly identifies variances from the budget and provides an explanation of the reasons and circumstances behind them. Thus, it

accomplishes a budget's second and third goals, which are to keep track of spending and focus attention.

DISCUSSION

The System of Interlocking Budgets

A well-designed budget starts with both the revenue budget and the research and development budget, and it is a sophisticated network of spreadsheets that tracks the actions of almost every department inside a corporation. The revenues that the business anticipates generating for each subsequent reporting period are included in the revenue budget. Sales staff members who are in charge of forecasting sales volumes for currently available items in their present areas provide some of these predictions. Sales and marketing staff members will work together to estimate the sales of new items that have not yet been introduced as well as the sales of current products in new markets. They will base their predictions on previous sales of comparable products. A company-wide budget that is aimed toward a sales level that is very unlikely to be attained might come from imposing a revenue budget from the top management level without consulting the sales team.

A revenue budget requires the previous consideration of many factors. A general market share goal, for instance, can influence multiple other budgeted items since a larger market share may need lower unit costs or higher credit costs. Another problem is the sales team's pay plan since changing the commission rates for certain goods or areas may strongly incentivize sales staff members to modify how they approach sales, which might affect projected sales numbers. Another factor to take into account is the sales territories that will be accessed throughout the budget period. Areas with large target populations may result in high sales per hour of sales effort, but the opposite will be true if fewer target populations are found in the unexplored areas. Reviewing the price points that will be given during the budget period is also essential, particularly in light of expected competition pricing tactics.

The budget may not succeed owing to competing efforts if there is a goal to grow unit pricing as well as market share. The conditions of the sale are another important consideration. They may be widened along with cheap credit in order to draw in more marginal consumers, or they can be tightened in order to lower credit costs and concentrate corporate resources on a select group of important clients. One other thing to note is that the budget has to account for any modifications to the kind of customers to whom sales will be made. The revenue budget should account for a gradual ramp-up needed for sales staff members to complete the new customers' sales cycles if a completely new kind of client will be introduced to the range of sales objectives throughout the budget period.

The sales staff members should compare the budgeted sales level per person to the actual sales level that has been experienced recently to determine whether the business currently has the capacity to make the budgeted sales after all of these factors have been combined to create a preliminary revenue budget. If not, the revenue budget has to be increased to account for the time needed to recruit and train new salespeople. To evaluate whether historical data supports the sales levels mentioned in the new budget, a similar cross-check may be done for the amount of sales projected per client [7]–[9].

The R&D budget is another budget inside the system of budgets that starts other initiatives. In contrast to the majority of other budgets, this one is a discretionary budget based on the business's plan to develop new or enhanced products. A department's personnel and capital budget will be largely unconnected to the activity carried out by the rest of the corporation because of the choice to support a particular level of project-related activities in this area.

However, because funding restrictions can necessitate management to remove certain projects from this area, there may be a feedback loop between this budget and the cash budget. If so, the management team must collaborate with the R&D manager to choose the right balance of initiatives that will still get funding and have both short- and long-term payoffs.

The sales projections in the revenue budget have a major influence on the production budget. The inventory budget's assumptions about inventory levels, however, also influence it. The materials management supervisor's predictions for the necessary inventory levels for the forthcoming budget period are included in the inventory budget. For instance, a new objective can be to increase completed products inventory turns from 10 to 15. In this case, fewer goods will need to be produced throughout the budget period since part of the products needed by the revenue budget may be bled off from the current completed goods inventory stock. Alternately, if enhancing customer service is a top priority, it could be required to have more completed items on hand, which would need more manufacturing than is actually necessary within the revenue budget. This idea may be used to work-in-process inventory as well, where installing more sophisticated production planning tools like manufacturing resource planning or just-in-time can be utilized to lower the amount of necessary stock. The inventory budget should explicitly outline each of these presumptions so that the management team is aware of the systemic adjustments that will be needed to achieve changed inventory turnover levels.

The production budget is used to determine the unit number of necessary items that must be produced in order to satisfy revenue objectives for each budget period based on this information from the inventory budget. This incorporates a variety of interconnected elements, including the availability of enough capacity to meet production demands. The capacity at the bottleneck operation should be of special importance. Budgeting adequate money is crucial to guarantee that a business has the necessary tools to reach its set output targets. The human resources department should be engaged about its capabilities to bring in the appropriate staff in time to improve the bottleneck capacity in a timely way if the bottleneck operation includes skilled labor rather than equipment.

The buying, direct labor, and overhead budgets should serve as the primary budgets for the expenditure categories that are included in the production budget. Although these expenditures may easily be included into the production budget, it is advisable to spell them out separately in more detail in separate budgets since they often constitute such a significant portion of business expenses. Below are details on these budgets [10].

The bill of materials, which is made up of the items that are anticipated to be produced throughout the budget period, is the primary driver of the buying budget. If these bills are not accurate, the purchase budget may include materially false information. A strategy for managing material costs should also be in place. This might include using long-term contracts or focused purchase from a select few suppliers. A best-case and worst-case costing scenario should be introduced to the budget in cases where materials are extremely susceptible to market forces, make up a significant portion of the overall product costs, and have a history of experiencing abrupt price fluctuations. This will allow managers to assess the effects of costing concerns in this area. There should be a history of expenditures in these areas that can be extrapolated based on predicted purchase quantities, so it is beneficial to budget for them as well.

Budgeting for direct labor as a wholly variable expense is a mistake that should not be made. The daily production volume has a tendency to be fairly constant, and the ongoing operation

of production machinery and manual product assembly needs a certain number of direct labor workers. Therefore, given specific production volume constraints, direct labor should be included in the budget as a fixed cost of production. The labor routings, which are papers that specify the precise kind and amount of staffing required to make a product, should also be used to guide the budget's description of staffing levels by kind of direct labor position. The labor routing produces a projected level of staffing per direct labor position when multiplied by the unit volumes found in the production budget. The human resources department, which is in charge of filling the posts, will find this information to be of the utmost use.

Any contractually required adjustments to hourly rates, which may be itemized in a collective bargaining agreement, should also be taken into account in the direct labor budget. Such an agreement could also involve layoff limitations, which should be taken into account in the budget if they prevent labor levels from declining proportionately to anticipated production level reductions. Therefore, having a union contract might lead to a direct labor budget that is far more complicated than it would be otherwise.

Since it takes time for new workers to learn their jobs, any significant increases in the budgeted level of direct labor persons are likely to cause some temporary losses in labor efficiency. If so, the budget should account for a low starting efficiency level that will lead to higher initial direct labor expenses, with a ramp-up to higher levels over time.

Expense budget. Since the overhead budget consists largely of static costs that won't change much over time, it can be easy to create if there are no significant changes in production volume from the previous year. Machine upkeep, utilities, supervisory pay, wages for the people in charge of materials management, production scheduling, and quality assurance, facilities upkeep, and depreciation costs are all included in this category. The most likely budgetary changes under the status quo will be made to machinery or facilities upkeep, both of which depend on the state and level of use of company property.

You should carefully review this budget if the anticipated level of production volume is expected to change significantly or if new production lines are going to be added, as these changes may have a cascading effect on other areas of the overhead budget. The number of overhead-related employees that must be reduced or increased when capacity levels reach particular critical points, such as the addition or elimination of additional work shifts, is of particular concern. When a facility is operating very nearly at full capacity, which requires a tremendous amount of ongoing effort to maintain, costs also have a tendency to rise significantly.

The cost-of-goods-sold budget can then be created by adding together the budgets for direct labor, overhead, and purchases. The total revenue should be included in this budget as a single line item so that all manufacturing expenses can be subtracted from it to produce a gross profit margin on the same page. This budget is frequently referred to as management determines whether its budgeting assumptions are producing an accurate gross margin result. This is also a good place to itemize any production-related statistics, such as the average hourly cost of direct labor, inventory turnover rates, and the amount of revenue per production person, since it is a summary-level budget for the production side of the budgeting process.

We've looked at the budgets that follow the revenue budget after going through the production budget so far. However, other costs that have nothing to do with production are categorized in a different set of budgets. The first is the budget for the sales department, which covers the costs of travel, entertainment, and sales training that the sales staff members must pay for in order to meet the revenue budget. The amount of budgeted headcount needed

to reach the sales goal in this budget is especially concerning. To make sure there is enough money available for enough salespeople, it is crucial to compare the actual sales per salesperson from the most recent completed year of operations to the same calculation in the budget. Many businesses make the mistaken assumption that their current sales team can work valiantly to drastically outperform their previous year's sales efforts. Additionally, the budget needs to allow for enough time for new salespeople to receive the necessary training and build a solid customer contact network in order to generate a substantial flow of income for the business. This learning curve may only last a few days in some industries, but it may last for the better part of a year if in-depth technical knowledge is needed to close a deal. If the latter is the case, it is likely that hiring and keeping skilled salespeople is what makes a business successful, making the sales department budget one of the most crucial components of the overall budget.

The marketing budget and the revenue budget are closely related since they both include the money needed to launch new items, correctly package them, promote for them, test new products, etc. Making ensuring the marketing budget has enough money to cover any increases in sales identified in the revenue budget is a crucial concern in this situation. If you are seeking to establish a new brand, release a new product, or distribute an old product in a new market, you may need to significantly boost your expenditure. For a while, these expenses might easily outweigh any accompanying income.

The general and administrative budget, which includes the cost of the corporate management staff as well as the accounting, finance, and human resources people, is another non-production budget that is crucial to the survival of the company. Since this is a cost center, the natural tendency is to keep expenses as low as possible. However, a large investment in technology is necessary to reduce the amount of human labor that is often needed to execute transactions; as a result, there has to be some planning in the capital budget for this sector.

The human resources department must staff itself depending on the number of hires or layoffs predicted elsewhere in the organization, therefore there is a feedback loop between the staffing and direct labor expenditures and the general and administrative budget. Similar to how the budget for the accounting department would vary if the number of income significantly changes, this department's operations are heavily influenced by the volume of sales transactions. As a result, the general and administrative budget often need many revisions in reaction to changes in many other budgetary areas.

The overall headcount for each job throughout the course of the whole budget period should be reported in a separate personnel budget, even if salaries and compensation should be included in each department's budget. So that they may schedule their recruiting activities most effectively, the human resources staff members can determine when certain jobs must be filled. The person in charge of the facilities budget may use this budget to calculate the timing and quantity of square footage needed for office space, which is useful information for them as well. The personnel budget often shares many of the same assumptions as the other departmental budgets, as opposed to being a separate budget. The salary spend on other budgets will automatically update if the headcount information on this budget changes. The average pay rates, overtime percentages, and average benefit expenses for all jobs may also be kept there. The human resources department can more readily update budget information by centralizing this expense data. Since salaries often account for the largest amount of a company's expenditures, this budget is frequently used.

The facilities budget is dependent on the anticipated level of activity in several of the previously mentioned budgets. It is one of the last budgets to be finished because of this. This

budget and the capital budget are closely related since the facilities budget will need to cover increased maintenance costs as a result of spending on extra facilities. This budget often includes spending line items for utilities, cleaning services, building insurance, maintenance, repairs, and the salary of the maintenance staff engaged in this function. Estimating the need for any forthcoming major facility repairs is essential when creating this budget since these costs may significantly increase the overall planned expenditure.

The capital budget is another budget that receives input from almost every department inside a firm. This budget should either include a full listing of the same information or a brief listing of all major fixed asset categories for which purchases are expected; the latter option is only advised if there are relatively few goods that need to be bought. Since the capital budget may call for spending amounts significantly in excess of those typically seen via daily cash flows, it is crucial for determining the financing needs of a corporation. In order for capital goods to be completely installed and operational before the project's projected beginning activity date, it is also required to arrange their procurement sufficiently far in advance of linked initiatives. For instance, since it can take months to set up a printing press, a budget shouldn't itemize income for that press's usage in the same month that it is planned to be acquired.

A series of financial statements reflecting the effect of the forthcoming budget on the organization is the final result of all the budgets just discussed. Since the income statement and cash flow statement are the strongest indicators of the company's financial health throughout the budget period, these statements should at the very least contain them. The cash flow statement already includes the information that the balance sheet has to report on since cash is one of its main reporting metrics. All of the other budgets should be closely connected to these reports so that any changes to the budgets will be reflected in the financial statements right away. To achieve a good financial outcome, the management team will carefully study these accounts and make several adjustments to the budgets.

The corresponding operational and financial ratios should be stored in the budget-linked financial statements so that the management team may analyze them and make necessary budget revisions to bring the ratios into compliance with any benchmarking or industry standards that may have been established as objectives. Revenue and income per person, inventory turnover rates, and gross margin percentages are common metrics in this field. A minimum current ratio or debt-to-equity ratio may be stipulated in loan agreements as minimal financial performance outcomes that lenders must meet. These lenders may find this kind of information to be helpful.

The cash projection is crucial because it informs business management of the viability of the planned budget model. The model has to be altered if cash estimates lead to significant cash demands that can't be covered by any available funding. The cash forecast's assumptions should be based only on historical data rather than the preferences of management. With regard to cash receipts from accounts receivable, this restriction is crucial. It is very improbable that it will be accomplished within the budget period if the model's assumptions are adjusted to reflect an advanced rate of cash receipts that surpasses anything the organization has ever seen. To guarantee that cash flows stay positive, it is preferable to change other aspects of the budget and utilize established collection times as assumptions.

The discussion of available funding options is the last document in the budgetary system. Although it will include a single line item that is produced from the cash projection and lists the financing requirements for each period of the budget, this is not precisely a budget. In every other way, it is just a discussion of possible funding options, which may be extremely

different. Alternative strategies might include a combination of debt, supplier financing, preferred stock, common stock, or another, more creative strategy. A discussion of the costs associated with each kind of financing, as well as the company's capacity to do so, should be included in the paper. The budget may need to be completely restructured in order to prevent the negative cash flow that necessitates the financing, managers may discover that there are so few financing options available, or that the cost of borrowing is so expensive. In order to account for the cost of securing the funds and any associated interest expenses, input from this document may also be required into the planned financial statements.

Want for Budget revision

Budgets that are flexible or changeable should be maintained so that objectives are accurate and reflect variations from anticipated expenses. If budgets are modified for each and every little change in operating expenses, they may lose their usefulness as a measuring and controlling tool. There is no general formula for when to make a budget adjustment. Budgets should be modified to account for shifts in the product mix, significant shifts in cost levels, and scheduling changes that significantly influence cost relationships.

Budget performance at the departmental level reflects real departmental cost behavior, and budget increases or decreases immediately translate into higher profitability. Based on responsibility accounting, the budget becomes the profit and loss projection for each department. Deferred maintenance is one area where potential issues might go unnoticed. Periodic maintenance is often pushed off to "keep the wheels turning" when increasing productivity or profit are being prioritized. This might be shortsighted and lead to delayed payments in the event of problems.

CONCLUSION

A tool that may be included into overall operations is the operational budget. It may provide a clue as to how long it takes between manufacturing cash outlays and sales revenues. This delay may be estimated in the budget, allowing you to make plans for carrying or obtaining extra funds for anticipated times.

The operational plan and associated budget identify opportunities for capital expenditures or the need to reduce capital investments, just like any effective planning instrument. You will plan sales teams, marketing goals, advertising expenditures, sales quotas, credit policies, and many other aspects as components of operational budgeting and planning since sales estimates are what determine budget.

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CHAPTER 3

INVESTING IN LONG-TERM ASSETS AND CAPITAL BUDGETING

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ABSTRACT:

Investing in long-term assets and capital budgeting plays a crucial role in the strategic financial management of organizations. This abstract provides an overview of the concept of investing in long-term assets and the process of capital budgeting. It highlights the significance of these activities in facilitating growth, maximizing profitability, and ensuring the long-term sustainability of businesses. Investing in long-term assets involves allocating financial resources towards acquiring and maintaining assets that generate returns over an extended period. These assets can include property, plants, equipment, technology infrastructure, and other tangible or intangible resources. The decision-making process of capital budgeting involves evaluating potential investment opportunities, estimating their expected cash flows, assessing risks, and determining their viability and alignment with organizational goals.

KEYWORDS:

Capital allocation, Capital budgeting, Cash flow analysis, Discounted cash flow (DCF), Expected return, Fixed assets, Investment appraisal.

INTRODUCTION

Decisions regarding cost capital investments should be split into two phases: the investment choice and the finance decision. Prior to acquiring any facilities, machinery, or other capital assets, you should determine what you want to accomplish with them. The next step is to select where and how to get the funds. This will solely take into account the financing choices and investment choices. Planning for a financial resource outlay and a return from the projected flow of future cash benefits is the definition of capital budgeting. The following factors must be taken into account while making this decision:

1. Costs anticipated and their timeliness
2. The stream of expected advantages
3. The duration of time those monies will be used

The danger included in achieving such advantages

Each of these components has unique qualities connected to the management philosophy of a corporation. Tools have been created that leverage the management-generated data to aid with question-answering and the rational selection of the best business possibilities for the allocation of limited investment funds. In doing so, we see the capital budgeting process as a cycle rather than as a stand-alone activity. We start with a concept for a new product and work our way up to its discontinuation and onto the next generation [1]–[3].

Definitions

We need to be aware of a few words before trying to explain the capital budgeting process. In this, typical financial words are used, including:

Value today. The worth of an object now for a sum you anticipate receiving or paying at some point in the future is known as its present value. For instance, if you can achieve a return of 12 percent on your investment and you anticipate receiving \$100 in a year, your stream of income has a present value of \$89.29 because, with the same investment made now, \$100 will be earned in a year. Annuity. receiving or making a succession of equal payments at the conclusion of several set intervals. An ordinary annuity is a payment of \$100 on December 31 of each year for ten years.

Payback interval. You may find out how long it will take to receive your money back using the payback period. It is the length of time required for net cash inflows to completely amortize an initial investment. In straightforward payback calculations, interest or the time worth of money are often ignored. The discounted payback term, a more suitable method of payback computation, does take time value into account. When calculating the discounted repayment period, the present value of the incoming funds is taken into account.

1. current value net. the difference between the present value of cash inflows and outflows. This cash flow is not abnormally after taxes.
2. Index of current value. the initial investment divided by the net present value.
3. Return on internal investment. The discount rate makes the NPV calculation result in a value of zero. Sometimes, this is referred to as the real rate of return.

Overview and Use of Capital Budgeting

Budgets are a common tool that have been around for a while. The most typical tend to be operating budgets. Operating budgets are often among the first budgets tried, but seldom being utilized to their full capacity. These budgets' data are not difficult to get, and most managers will at least partially believe in their value. Budgets for operations are considered [4]–[6].

In terms of creation and application, cash budgets are not much different from operational budgets. When creating a cash budget, emphasis is placed on receiving and spending cash. Cash budgets, on the other hand, are sometimes only available to a small number of employees in a company and are frequently not formalized until cash shortages or the expensive expense of keeping cash reserves make it necessary. It's common to overlook the inefficiencies of having too much cash during times of better financial circumstances. As a consequence, cash budgets can go unused during prosperous times.

However, many businesspeople do not like capital budgeting. This is caused in part by how hard it is to create an overall budget. Estimates of cash flows must be projected farther into the future, and new terminologies like internal rate of return and weighted average cost of capital infiltrate the language. Many businesses have learnt to operate without a formal capital budget, so the calculations that go along with this terminology are sometimes unclear. However, when correctly used, a capital budgeting process may aid in lowering the likelihood of making a poor choice.

A valuable tool for making decisions is the capital budget. It's likely that accountants, some of your employees, and some managers have received the training necessary to do the calculations required to determine present values, internal rates of return, and payback periods. These calculations may be completed using the forms supplied in the appendix to this document and are reasonably straightforward. Most computations may be easily performed on a few cheap calculators. The crucial task is to collect the data required to improve the business's understanding and utility of the capital budgeting process.

Cycles of Life

Like humans, projects and products have life cycles. The same phases are experienced by all of them: conception, birth, development, maturity, decline, and eventually death. Every step requires a certain level of focus. Beyond only being applicable to new companies, capital budgeting techniques may also be used for new projects or products. It may be utilized to think about replacing current product lines and even cost savings in current lines in the present or in the future.

DISCUSSION

Project Life Cycle Sequence for Capital Budgeting

A capital budgeting strategy involves four fundamental sets of actions: proposal formulation or solicitation, review, execution, and follow-up. We'll look at each in more depth.

Generation 1 or the solicitation of proposals. The appraisal of your present position is the first stage in the proposal creation process. When determining status, several variables should be taken into account. Regarding the availability of managerial talent, technical skill, financial and market situations, labor supply sources, and markets for your product, it is very crucial to pay attention to your position.

Consider the following scenario: You produce heavy cast-iron cylinders, and "the market" is in the southeast sunbelt states. The price of shipping the goods to the final consumer is also a crucial consideration. There are at least two alternate natives available: Locate the factory close to the point of consumption or buy production facilities near low-cost transportation hubs like rail or water.

Redesigning the product can be an additional choice. Consider, for instance, that you discover you can make the cylinders out of aluminum by installing a tooled steel sleeve in place of the cast-iron cylinder. The product now needs distinct raw ingredients, distinct handling and processing, distinct packing, and distinct delivery. Your marketing strategies could be altered by the new product, and this can lead to a request for capital expenditures [7]–[9].

2. Standard company planning inquiries like "What do we do best?" and "Where are we going?" should be addressed. This need assessing your company strategy. The goals created as a consequence of these inquiries could identify possible initiatives needing capital outlays.

Depending on their size and importance, capital expenditure decisions may be made at different levels within the business. Whatever level of management you have created, there should be consistent application of the rules for making decisions.

3. Cost-cutting initiatives might provide a wealth of projects for capital budgeting. Since cost reduction projects have obvious cost justifications, they often involve less risk than any other kind of endeavor. Because the initiatives are designed to increase the cost effectiveness of current projects, potential payback times and returns on investments may be determined easily. Because a significant portion of these ideas are often made by line workers, if such programs are implemented, they may assist in fostering a sense of participation among employees in the decision-making process.

4. Customer and staff suggestions are often low-risk sources for higher revenue. Customers often interact with marketing or sales staff. They should be able to identify the demands that aren't being satisfied in the market today. Often, you may take advantage of these chances with no added expense. You may avoid competition and successfully increase your market presence by addressing unmet market demands head-on. You may choose to use one or both

of these strategies to promote fresh concepts and business opportunities: Embrace self-interest as a motivator for entrepreneurship. Programs that reward salespeople and other workers financially are quite successful in sparking innovation that will lead to growth. Regularly assess consumer demands to identify future growth opportunities.

5. Competitors are often a valuable source of ideas that might boost development. Allowing rival companies to develop specific new items might sometimes be advantageous. These items are often removed from your consideration if you let them take the risks because of their lack of profitability or outright product failure. Naturally, this provides the rival a lead start on profitable endeavors.

6. Product matrix research may sometimes reveal market gaps.

7. New ideas are often created through your own R&D efforts or might be purchased from independent research and development companies.

8. Publications, seminars, trade exhibits, and conferences are excellent places to find new ideas. In this instance, you are only using other people's minds rather than paying for the creation of ideas.

9. Vertical expansion, such as acting as your own supplier or marketer, is an option. A source of prospective profit is supplying oneself with goods, services, or raw resources. It might also be lucrative to set up your own distribution network outlets. To ensure a source of supply and lower the risk associated with fuel price fluctuations, certain utilities, for instance, have expanded into industries like coal extraction and transportation. Vertical integration gives companies access to more revenue-generating sources of uncontrolled profit in this manner. Gas appliances are sold by several natural gas utilities. Being "the gas company" provides them with a platform from which to promote the products. Customers have faith that a gas provider would know which gas appliances are the finest [10].

10. You could seek to expand horizontally by acquiring rival businesses or diversifying your product line.

11. You can employ modern technology more widely. Ask yourself, "What can we do with what we know or what we do best?" on a regular basis. How well adapted is the present technology to new processes or innovative products? Here, there is a chance to develop concepts that will spur development while taking little risks. Future technological undertakings often involve less risk than those involving new and untried technologies if you have mastered the effective use of your current technology.

12. Increase the functionality of your current equipment. The use of existing equipment may not be optimal. Utilizing current capital resources more effectively and with less risk requires subcontracting and selling time on equipment or process capabilities. Utilizing the fixed-cost basis more effectively boosts productivity and generates more cash flows simultaneously.

Assessment of Proposals

You must consistently compare competing ideas once they have been created to decide which ones warrant further consideration. The assessment procedure consists of essentially four parts.

1. A qualitative analysis is the first and most important step: Is this suggestion in line with the company's long-term goals? If not, more thought is not required. If so, more research is recommended. Things that don't match the path you're committed to take might waste a lot of time, energy, and money.

2. Describe the assessment procedure. Establish a procedure that will be followed uniformly for all proposals.
 1. For each proposal, calculate expenses precisely and uniformly.
 2. Consistently estimate the advantages.
 3. Apply the same time restrictions.
 4. Calculate the net benefits with the same approach.
3. Identify the sources of your knowledge. You must assess the authenticity and dependability of the information's source while acquiring it. For instance:
4. Implement the procedure. The procedure must be installed correctly, and everyone who will be impacted by it must be able to utilize it.
 1. Create forms for capital acquisition evaluation that may be utilized by the whole business.
 2. To all those who will be impacted, explain the forms and the assessment techniques.
 3. Consistently analyze ideas using the system.
 4. Give candidates quick explanations for why their proposals were or were not approved.
 5. the carrying out of a proposal

Effective project management at the implementation stage requires a clear chain of command. Define responsibilities first. To guarantee responsibility and control, you must know who will be in charge at each step of the proposal's implementation. It is crucial to take into account the time and talent of the participants and match their skills to the requirements and duties of each key role in the implementation process. Few factors influence a product's failure or success more than the compatibility or lack thereof of key employees at pivotal stages of project execution.

Establish checkpoints by defining goals and objectives for milestones at later stages of the process, then review your choices often before moving on to the next expensive step and whenever progress can be measured against predetermined criteria. If it seems that the project is going over budget or not providing the benefits anticipated, you may decide to terminate it before it is fully implemented. The budget may need to be adjusted. This concept could appear radical. The only thing that has to be done to alter a budget, however, is to take better data into account when it enters the system. Budget adjustments must not turn into a self-fulfilling prophesy. Since budgets are planning tools, comparing actual performance to predicted performance can often reveal how successfully or unsuccessfully your project is moving along. It is helpful to update bud-gets for improved control in order to raise the project's decision-making standards. It is necessary to have frequent informational input while using budgets for control. Another crucial component of the implementation phase is the creation of reports. The quantity of reporting depends on how much reporting costs compared to the danger of ignorance. You can maintain a sufficient level of project control by generating reports on a regular basis.

Follow-up

Neglect at the end of a project may cause unneeded delays, increased risk, and higher costs for the regular end of a product's life cycle. In the subsequent stage, you should assess how successfully the initial project's underlying assumptions have been satisfied, go through the assessment procedures that were in place, and then assess the project's actual execution. At this stage, a project's overall assessment will demonstrate how well it was planned, how

accurately the budget projected reality, and the essential areas where system reform can help future proposals be evaluated more effectively. There is no question that all initiatives will ultimately enter the decline phase. It may be time- and money-saving to anticipate when this will happen and prepare the proper responses for when it occurs. Predicting the project's discontinuance or regular termination dates is a crucial component of the follow-up process. This makes it possible for substitute project proposals to be presented on time. Because capital budgeting is cyclical, you may continuously manage growth. As each project nears completion, the follow-up step naturally switches back to proposal creation.

Utilizing Forms, Generating Dollar Amounts, and the Capital Budgeting Model

Relation between Risk and Return

High-risk investments should be anticipated to provide high returns, whereas low-risk investments should yield lower rates of return. Investors must be attracted to both.

The needed return is the most crucial factor when determining a capital budgeting model. This may be ascertained by analytical approaches that provide a way to estimate risk or through subjective assessment. However, investors' perceptions of risk tend to dominate. You should be more concerned with the incremental cost of capital for the project than with the total cost of getting money when determining the cost of capital to be utilized for the generation of net present value calculations. When deciding whether a project is cost justified, you are concerned with the additional cost of capital the cost of financing this transaction. Nevertheless, because every additional financing choice will have an effect on it, it is also helpful to understand the company's total cost of capital. The following paragraph explains how to determine the cost of capital.

Various Cost of Capital factors¹

Debt, preferred stock, and ordinary stock are the three elements that make up the cost of capital. Debt is the most affordable of the three types of financing, followed by preferred stock and ordinary stock. Here, we demonstrate how to determine the price of each of these three capital expenses as well as how to add them together to obtain the weighted cost of capital. The fact that interest expenses are tax deductible is crucial when figuring up the cost of debt. Accordingly, the tax amount paid by the business is reduced by the tax rate times the interest cost. The following example illustrates this idea. In it, we suppose that a debt of \$1,000,000 has a basic interest rate of 9.5 percent and a corporation tax rate of 35 percent.

Estimates of Inflation and Cash Flow

Inflation should be expected and included when predicting cash flows. The price of the product and the accompanying expenses are often assumed to stay the same during the course of the project. Sometimes, unintentionally, this assumption is made, and future cash flows are merely predicted based on current pricing. The predicted cash flows from the product throughout the course of the project must account for anticipated inflation if it is represented in the necessary return criteria. Consider revising both the anticipated sales price and the anticipated expenditures by realistic inflation rates in order to accurately represent cash flows in subsequent periods.

You may assume that the decision matrix won't change if all ideas are assessed without taking inflation into account. This isn't always the case. Inflation will alter future cash flows relative to the year in which they occur by the inflation rate particular to that product or sector, just as it did for the development of internal rates of return. Therefore, the decision model may be biased by failing to account for the varying impacts on cash inflows and

outflows as a consequence of different rates of inflation. This is because it does not anticipate inflation and assign values for specific future time periods. The choice of project may not be the best one as a consequence.

Discretionary Cash Flow

We should start our discussion with the needed rate of return since discounted cash flow is the main topic of discussion. Many terms, such as hurdle rate, cost of capital, interest rate, and discount rate, are used to refer to this rate. The best option is usually the hurdle rate. It suggests a hurdle that the idea must pass in terms of the return on investment in order to be taken into consideration. The misconception that the cost of capital or interest, which is the cost of part of the capital, is the standard for evaluating an investment is what gives birth to the other terms. A weighted average cost of capital has been proposed; given the constrained sources of capital used by small enterprises, it may not be difficult to compute. However, neither the weighted average cost of capital nor the marginal cost of capital can be used in isolation. examine other elements that should be taken into consideration when choosing a needed return or hurdle rate, such as:

The risk of this plan in comparison to other proposals

1. Other possibilities
2. Return on other previously made investments
3. The borrowing cap for the business
4. Worksheet for Capital Budgeting Evaluation

The capital budgeting assessment worksheet lists the cash flows after they have been calculated from the capital budgeting cash flow worksheet. The capital budgeting assessment worksheet includes an illustrated 15-year present value at rates ranging from 10% to 40% at the bottom. It is preferable to maintain this alongside the capital budgeting worksheet so that doubts about the source of the data used in the computation won't arise when you later return to the worksheet. The assessment worksheet's usage is simple to understand. The cash flows are reported in column 2 and derived from the cash flow work-sheet. To calculate the present value of the revenue flow, the first trial percentage rate is indicated in column 3. The present value for the first trial interest rate is read straight into column 4. The matrix is used to fill in the numbers on the form. The cash flow from column 2 is multiplied by the present value factor from column 4 to create column 5. For a second trial percentage, use column 6. The procedure is done once again, and the present value rates for the second % chosen are listed in column 7. Once again, the cash flows from column 2 and, this time, the present value values in column 7, are multiplied to determine column 8. The present values of a single cash flow forecast may then be tested twice using two different discount rates. The cash flows for different projects may be compared using these spreadsheets. This document's appendix contains examples.

Making the Estimates Better

Unfortunately, things often turn out to be far worse than anticipated rather than just a little bit better. Due to the fact that there are more unpleasant than happy occurrences, the distribution of conceivable outcomes is thus likely to be biased to the left. The capacity for manufacturing also restricts the scope for development. Therefore, plant capacity may be the limiting issue on the right side. There is no continuous range of possible outcomes since capacity is often increased in large increments rather than one or two units at a time. Instead, manufacturing capacity increases gradually. Consider the issue of enhancing the estimates from the

perspective of fixed or restricted capacity instead of delving into the issue of examining new production quantities.

It is crucial to assess the information sources while attempting to determine what is behind the s. Engineers may have a tendency to underestimate project completion times and prices, as was previously mentioned. The potential for sales and sales may be overestimated by marketing and sales staff. How accurate are the predictions of the market, the state of the economy, and the anticipated future cash flows? It is often necessary to inquire about the source of the data, the person who created the statistics, the underlying assumptions, and the sources of the data utilized. It is useful to be aware of the data's origins, age, and generational process.

These resources are often used:

1. Government publications that provide helpful data on economic trends, consumer spending, and other market data
2. Publications from private companies like Chase Econometric, Dow Jones, and similar
3. Trade periodicals
4. Newspapers

Understanding the accessibility and dependability of certain information and data sources is often aided by experience in the field.

CONCLUSION

In conclusion, Capital budgeting and investing in long-term assets are essential elements of financial management that allow firms to make strategic investment choices. Businesses may optimize resource allocation, spur development, and improve financial performance by using the right assessment methodologies and risk analysis. Maintaining competitiveness and adjusting to changing business conditions need constant monitoring and assessment of long-term assets. the significance of doing thorough risk analysis when creating a capital budget. Organizations are able to analyze possible issues, reduce uncertainties, and make wise resource allocation choices by evaluating the risks involved with investment projects. Additionally, it emphasizes the need of ongoing monitoring and assessment of long-term assets to assure peak performance and accommodate changing market circumstances.

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CHAPTER 4

MAJOR TASK IN CAPITAL BUDGETING: ESTIMATING FUTURE CASH FLOWS

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ABSTRACT:

Estimating future cash flows is a fundamental and critical task in capital budgeting, which involves evaluating potential investment projects and making informed decisions regarding the allocation of financial resources. This abstract provides an overview of the significance of estimating future cash flows in the capital budgeting process and explores the methodologies and challenges associated with this task. Accurate estimation of future cash flows is essential for assessing the profitability and viability of investment projects. It involves predicting the expected inflows and outflows of cash over the project's lifespan, considering factors such as sales revenue, operating costs, taxes, working capital requirements, and salvage value. These projections enable organizations to evaluate the potential returns and risks associated with investment opportunities.

KEYWORDS:

Cost of Capital, Discount Rate, Forecasting Techniques, Growth Projections, Incremental Cash Flows, Inflation Adjustment.

INTRODUCTION

The ultimate plan and budget will actually only be as excellent as the estimations' accuracy. You should have effective procedures in place to gather the data required to make capital budgeting choices. For all investment offers, try to standardize this information as much as you can; otherwise, it will be difficult to compare bids fairly. Environmental protection and safety initiatives are among the most challenging capital budgeting issues to assess. Because the advantage to you is often primarily in the form of cost avoidance, it is difficult to estimate the net cash flows in such projects [1]–[3]. Because cash is essential to all of your actions, the predicted advantages of a certain project are described in terms of cash flows rather than income. You put money into an investment today with the expectation of getting a larger financial return later. Only cash receipts may be reinvested or distributed as dividends to investors. Therefore, the key factor in capital planning is cash rather than revenue.

Additional Considerations

The information must be supplied incrementally so that the difference between your cash flows with and without the project can be studied, which is another component of projecting future cash flows. This is significant because it is inappropriate to characterize cash flows in terms of anticipated sales of a new product without taking into account the potential impact that product may have on current products if you are considering a new product that is likely to compete with existing goods. You must take into account the likelihood of certain current items being cannibalized.

Another common presumption is that all investment ideas under consideration have the same risk or quality as current investment projects. Therefore, the relative business risk of the

company is unaffected by the acceptance of any investment proposal or collection of investment offers. This isn't always the case; the riskiness of each idea should be considered separately.

Depreciation

Usually, capital budgeting calculations employ after-tax cash flows. For tax reasons, depreciation at the maximum permissible method is often employed. But keep in mind that you are double counting if you take depreciation out of the equation for anything other than taxable revenue. This happens because the investment was "expensed" in year zero. Only the calculation of anticipated taxes necessitates interest in depreciation.

DISCUSSION

Lease-Purchase

Since a real lease needs no investment, the internal rate of return cannot be used to determine whether to lease or buy a piece of equipment. As a result, the rate of return would be unlimited. But buying is often more profitable. Most people who lease do so out of a need for money or a desire to save money. Due to the fact that it is a way of funding, it falls within the second-stage financing decision that was made earlier in this.

Because the manner of financing shouldn't affect whether a project is a good bargain, interest expenses on borrowed money shouldn't be included in the calculation of cash flows. In addition, the cash flows will be multiplied by the discount rate, which already takes interest into account when calculating the cost of capital.

Uncertainty

The discount rate should take uncertainty into account. When attempting to quantify uncertainty, you should inquire about the information's provenance by asking, "How reliable is the information?" and "How old is the information?" Always look for alternate information sources. Rarely is there only one method to complete a task. Find more approaches and assess them. If it seems like there is just one method to complete the job, be skeptical. Your folks could be hesitant to think about other options. Ask queries such, "Are there cheaper ways? Exist any less dangerous options? Exist any strategies that preserve more options?"

Product Abandonment

The decision of product discontinuation is one of the often-disregarded applications of the capital budgeting process. The appraisal of current product lines should be carried out on a regular basis using capital budgeting methodologies in a highly diversified industry where several comparable or related products are produced. This is helpful to assess if current items are making the most use of the company's resources.

Use this checklist to determine if a product requires assistance or needs to be eliminated. Through the deletion of low-margin or expensive items and by minimizing overdiversification in a company's product mix, product discontinuation may boost earnings. By focusing your efforts and optimizing resource use, eliminating over-diversification may boost production and marketing efficiency.

It should be emphasized, however, that the criteria for determining whether a product is eligible for removal do not only depend on the quantification of the items on the checklist. When an analysis reveals that product removal and effort focus are the best ways to achieve your overall objectives, it may be necessary to remove healthy products. A review of the

contributions items make to your goals often indicates that investing in the creation of a more profitable item with the resources used to produce a given product will provide higher returns.

Signals of Product Difficulties in Warning

1. a drop in total sales volume
2. falling sales volume as a proportion of total company sales
3. an erosion of market share
4. Sales volumes fall short of expectations
5. unfavorable product future market potential
6. Minimum levels of return on investment acceptable
7. Variable costs that are higher than actual revenues
8. Consistently rising costs as a percentage of revenues
9. A rising proportion of the product requiring administrative and supervisory control
10. Repeated price cuts are required to keep up existing or anticipated sales levels.
11. Budgets for advertising must be increased to sustain sales.

Product returns rising

A straightforward graph that shows trends month by month may be rapidly produced for the majority of these metrics. The graph then functions as a straightforward budget tracking tool.

The availability of relevant information at the right moment is essential to an elimination program's effectiveness. All significant business choices have this trait. Accounting sources provide you the necessary raw data on which to base your company plan decisions on which goods to drop, which to keep, and which to increase or reduce.

Bailout

Few individuals like to consider the possibility of anything going wrong. Although the responses are not always definitive, they do contribute to the go/no-go judgment. The use of the bailout concept also needs some forethought. Ask questions before taking a bailout into consideration. What are our options, for instance, if the project must be abandoned after two years? then consider the cash flows at that time, taking salvage into account. Lowered sales projections should be used instead of the original predictions since it's possible that a lack of sales will be a reason for people to leave. The same format that was previously used to estimate net present value may be utilized for all of this [4]–[6]. The fact that the bailout discussion serves as a reminder that not everything goes according to plan is a significant benefit. Many individuals never give up hope and won't consider "the dark side."

This illustration demonstrates how making decisions will be impacted by comparable cash flows throughout several time periods. Therefore, relying on a single approach without knowing how it works may lead to a decision-making process that is disrupted. The IRR technique suggests reinvestment rates that will vary based on the cash flow stream for each investment proposal under consideration, which is why some people believe the NPV method to be preferable to the IRR method. However, using the NPV technique, the suggested reinvestment rate, also known as the hurdle rate or necessary rate of return, is the same for each plan. This reinvestment rate essentially shows you the minimal return on opportunities that are open to you. In assessing the decisions that each model produces, you must use judgment. The decision between two proposals may change depending on factors other than the rate of return. For instance, one cash flow prediction may be preferred over another in

long-term tax planning in order to minimize future tax bills. Assess the anticipated cash flows and their timing as a result.

The continual system of corporate planning, evaluation, and implementation includes a procedure called capital budgeting. Identifying where you are, where you want to go, and how you plan to get there is the first step. Even if you decide not to make capital budgeting an ongoing practice, the act of putting up a method is still a worthwhile exercise in introspection. It encourages individuals to consider how wise investments in capital-intensive initiatives may aid in the expansion, diversification, or replacement of the company's current plant and equipment.

The four steps of capital budgeting are proposal solicitation or creation, assessment, implementation, and follow-up. As part of the review process, several alternative ideas are evaluated according to their respective investment returns. There is a likely danger of losing all or a portion of the invested money along with this promised return. Any choice must be based on weighing the potential profit against the potential danger. Of course, the issue is that there is no certainty, not even in estimations of risk and return. You should think about how estimates, predictions, and other data are produced in order to reduce the risk.

Because there are often several answers to an issue, you should exercise caution when just one is suggested. Create backup plans and scenarios while creating a capital budgeting strategy after considering several what-if situations. Do not bury your head in the sand as part of your contingency preparation. Think on the project's negative aspects: "What if it doesn't work out?" You should be prepared for a bailout in such a situation as a planned withdrawal; you shouldn't be made to worry mindlessly if a project is about to collapse right away.

Elementary Control Systems

the need of accurate capital and operational planning to guarantee that a business achieves its objectives. However, if the business does not also have a strong set of fundamental controls to prevent its finances and assets from going astray, these plans might potentially go wrong. In this, we examine the necessity for control systems, outline the forms of fraud that make their usage especially crucial, and list several measures that small businesses might use.

We examine the process of identifying these controls and assessing their use before eliminating them since controls typically have a cost attached to them, thus it is also conceivable to remove them from an accounting system in order to save money.

Control Systems Are Required

The most frequent instance when a control point is required is when a transaction is processed incorrectly. For instance, the corporation may overpay if an accounts payable clerk fails to match the price on a supplier's invoice to the price stated on the authorizing purchase order. Similar to the last example, the warehouse staff chooses to accept a supplier cargo despite the absence of approved purchase papers, forcing the business to pay for something it does not need. These kinds of acts may take place as a result of inadequate staff training, negligence, or a confluence of unique conditions that were unanticipated when the accounting systems were first designed. There are an infinite number of potential causes for transactional failures, which may lead to errors that go undetected and ultimately result in the loss of company assets.

At the points in a process where transactional mistakes often occur, controls serve as review points. A process flow specialist who examines a flowchart outlining a process will be able to see certain possible faults right away due to his or her familiarity with the common places

where errors occur in processes that are comparable to the one being reviewed. Other mistakes will be unique to a particular business. For instance, the casino industry handles vast amounts of cash, making the potential for financial loss from its cash-handling procedures considerably greater than that of methods used in other industries. Additionally, very particular conditions inside a corporation might result in mistakes in unexpected areas. For instance, a manufacturing business that mostly hires non-native English speakers may encounter more mistakes in any operations requiring these individuals to fill out paperwork, simply because they have a lower degree of grasp of what they are writing. As a result, the normal procedure may have many points when a corporation may stand to lose assets.

Numerous possible asset loss scenarios will include trivial or occasional mistakes that accountants may reasonably disregard without creating any compensating procedures. Others are protected with not just one control point but a full series of multilayered cross-checks that are created to prevent all but the most uncommon issues from arising or being detected at once because they have the potential for extremely high risk of loss.

The influence of controls' costs and interference with a process's efficiency also contributes to the necessity for controls. A thorough study of the resultant risk mitigation is likely to take place if a control necessitates the hire of an additional employee. comparable to this, if a huge and labor-intensive control point is going to be placed in the midst of a highly efficient process, it is quite probable that a different technique that offers a comparable degree of control but from outside the process should be discovered.

The implemented controls may be of the preventative kind, which are intended to identify issues before they arise, or of the detective type, which identify issues after they arise so that the accounting staff may investigate the underlying issues and address them after the fact. The first kind of control is the best since it prevents mistakes from ever being finished; the second type of control requires the accounting staff to do far more work to find and fix each error. As a result, the cost of eventual mistake correction should be considered while evaluating the kind of control point implemented. The perceived danger, cost, and efficiency will all have an influence on whether a corporation needs control systems and whether to consider preventative or investigative controls for each one.

Types of Fraud

The great majority of transactional issues that controls prevent are unintentional mistakes brought on by staff mistakes. When the appropriate control points are in place, they are often simple to identify and address. However, because these transactions are purposefully concealed, making it far more difficult to detect them, the most feared possible loss of assets is not due to these errors but rather due to intentional fraud on the part of workers. Following is a discussion of the eight most prevalent fraud types.

Theft of money and investments. The most well-known sort of fraud is cash theft, however the actual amount taken is frequently fairly tiny when compared to the complex systems of controls that are routinely put in place to stop it. Investment theft, which occurs when someone gets over security measures to empty a company's whole investment account, is the true issue in this field. The accountant should thus devote the greatest work to creating controls over the transfer of invested assets.

Abuse of expense accounts. Employees may provide fictitious cost receipts, request payment for things that have not been authorized, or submit numerous requests for reimbursement via their expense reports. While many of these things are so tiny that the expense of discovering them is hardly worth it, others, like the multiple billing of plane tickets to the company, may

build up to very significant sums of money. This kind of control often costs money and takes a lot of time. False information in financial reporting. Even when it doesn't seem that any assets have been taken, the intentional manipulation of financial data is nevertheless fraud since it lowers a company's stock price by misleading investors about its financial performance. Both thorough audits by external auditors and internal audits to verify that procedures are conducted appropriately should be part of the controls in this area.

Theft of fixed assets. Even while the phrase "fixed assets" suggests that every asset is large enough to be immovable, many things, especially computers, are simple targets for employee theft and resale. Without the aid of security personnel and monitoring technology, it is often impossible to stop the theft of valuables. The most popular form of control is the purchase of insurance with a low deductible since many firms do not want to go that far and losses may be easily repaid.

Theft of supplies and inventory. The simplest kind of theft for an employee is to take stock or supplies from a shelf and leave with them. Fencing and limiting access to the warehouse may improve inventory management, but workers can still distribute merchandise via the shipping and receiving gates. The degree of restrictions put in place in this area will rely on the amount of theft already occurring as well as the cost of supplies and inventories. Failure to pay back advances. Employees with little financial means are often ones that want advances, either on their salary or for travel. As a result, they are not required to repay loans until expressly asked to. This necessitates meticulous monitoring of any unfinished progress. Purchases made for private use. When given access to business credit cards, employees may buy things that are delivered to their homes. Instead, than relying on a quick review and approval of an incoming credit card statement, controls that demand thorough records of all credit card transactions are required. Supplier bribes. Suppliers may agree to source purchases via buying staff members in return for kickback payments made directly to the purchasing staff. As a consequence, a corporation often pays more than the going cost for such goods. This sort of fraud is difficult to identify because it requires a continuous evaluation of prices paid in comparison to a survey of market pricing.

Some businesses have more fraud issues than others because of the environment they operate in. Problems can also arise if the management team: is unwilling to pay for controls or for a sufficient number of supervisory personnel; is dominated by one or two people who can override existing controls; or has high turnover, so that new managers have a poor understanding of existing controls. As an example, a strict emphasis on increasing profits by top management may lead to false financial reporting in order to "make the numbers." When a corporation has a complicated organizational structure or is expanding quickly, fraud is especially frequent since there are often fewer safeguards in place, which makes it easier to steal assets. Therefore, if there are unrealistic development goals, if there are issues within the management ranks, or if controls are not keeping up with organizational structure changes, fraud is far more probable.

Major Controls

To make sure a company maintains adequate control over its assets, thousands of different controls may be implemented. The 14 most prevalent controls that may be found in most smaller companies are shown in the list below. In situations when the risk of asset loss is thought to be especially high, they may be complemented by additional controls; in other situations, the opposite is true.

1. **Cash.** Cash handling is said to be riddled with control problems, perhaps leading to an overuse of controls. Although there are a lot of possible controls given here, you should try to

combine them in a way that balances their cost against little improvements in the amount of control attained. Compare the actual check number sequence to the check register. The list of checks that the computer prints should be a perfect match to the checks that were actually utilized. If not, this might be proof that someone withdrew a check from the check supply with the intention of going undetected. Since laser checks are held as individual sheets and may therefore be more readily stolen than continuous rolls of check stock, this irregularity is particularly prevalent for laser check stock.

Perform petty cash audits on-the-spot. The use of various receipts and IOU vouchers may be used to falsify the contents of a petty cash box. You may find these anomalies by conducting ad hoc audits.

Control inventory. The check stock cannot be kept in the supply closet with the pencils and paper since anybody may take a check out of the stack and then steal money from the business with only a forgery of their signature. The check stock should be secured in a safe cabinet that is only accessible to authorized staff.

signature plates for control. It is feasible to fake checks as well as stamp legal documents with approved signatures if someone has access to the company's signature plates. The business safe should thus always include these plates. Every day, deposit all checks. There is a higher chance that someone will get access to cheques that are held on hand for a few days and cash them into their own accounts. As a result, daily bank deposits are required.

Transform receiving cash into a lockbox. A number of control issues connected to the possible abuse of client cash or cheques disappear if they never reach a business. To do this, establish a lockbox that is managed by the business's bank and instruct clients to transfer payments to the lockbox address.

Reduce your small cash holdings. There is less motivation for somebody to steal a petty cash box if there is little money inside. Procurement cards are a helpful substitute if a lot of cash is moving through the box.

Close out the petty cash. Due to how simple it is to withdraw money from petty cash boxes, fraud tends to occur more often in this context. Start unscheduled petty cash box reconciliations to detect offenders before they can hide their acts with a phony paper trail in an effort to lessen the frequency of these incidents. By concentrating on the petty cash boxes that have received abnormally large numbers of requests for cash replenishment, this control may be enhanced.

Make it necessary to fill out petty cash vouchers in ink. Any person in charge of a petty cash box has the easy ability to change a voucher that was previously filed as part of an authorized transaction and take money from the petty cash box to match the changed voucher. Demand that all vouchers be filled out in ink to prevent this. You may even mandate that users put the amount of any cash transactions on vouchers in words rather than numbers to be extra cautious, since numbers are more susceptible to change.

Verify your bank accounts. This is one of the most crucial controls in any organization since it shows all potential cash inflows and outflows. To be sure that checks have not been changed after they leave the firm or that the books have not been altered to conceal the amount of the checks, carefully verify the list of checks cashed on the bank statement to the company's internal records. Additionally, review the books and the bank's deposit records for any inconsistencies that may have been brought on by someone removing cheques or cash from the bank's batch deposits. Additionally, verify all firm bank account records to discover

if any check kiting has occurred. In order to prevent anyone from hiding their wrongdoings by altering the bank reconciliation, it is also imperative that the bank reconciliation be completed by someone who is unrelated to the accounts payable, accounts receivable, or cash receipts functions. In order to complete a daily reconciliation, it is now able to access online bank data over the Internet. This strategy is advantageous since errors may be found and fixed much more rapidly separate accountability for the functions of receiving and spending money. By manipulating the amount of incoming receipts and subsequently keeping the difference, a person with access to both the cash receiving and distribution operations may easily conduct fraud. Each function should be handled by a distinct employee inside the company to prevent this.

Employees having access to client checks, as well as anybody with access to mail that has already left the organization, may attempt to cash them. Stamp any incoming checks with "deposit to account number." This may be made more challenging by marking "deposit to account number xxxxx" on the back of the check, requiring them to remove this stamp in order to cash it.

2. Investments. The area in which a person has the highest opportunity of either stealing substantial sums of corporate assets or investing them in risky investments is the shifting of investment funds. The following precautions are intended to limit these hazards.

Set restrictions on investment. A corporation should have a policy that stipulates that it may only invest a certain amount in a certain kind of investment or vehicle. For instance, only the first \$100,000 of money are covered via a bank account; thus, surplus financing in excess of this amount might be transferred to another location. Another instance is when the business owner decides that investing in trash bonds carries too much risk and bans the practice generally [7]–[10].

To transfer money between accounts, you must have authorizations. To illegally transfer money out of a company's accounts and into a non-company account, a person must have permission authorization on file with one of the company's investment banks. Through signature agreements with the banks, this kind of authorisation may be tightly monitored. Since a person might find a flaw in the control system that allows a specific bank to transfer funds outside of a predetermined range of company accounts without being warned, they could shift all funds to that account and then transfer them to an external account. It is also possible to impose strict controls over the transfer of funds between company accounts.

3. Receivables Account. Controls in the accounts receivable department are required to prevent staff from accepting payments from clients and then concealing the wrongdoing by changing the records of clients' receivables. The most popular controls are listed below.

Checks received and applications made against accounts receivable should be compared. Cash application is another duty of an accounts receivable clerk, who might cash a check to his or her own account while concealing the theft of money by repeatedly applying new cash received to the oldest accounts receivable. This may be detected by sometimes comparing the checks indicated on a particular day's deposit slip to the accounts to which the monies were credited.

Verify the balances of the receivables. Send out confirmation forms to customers regularly to validate what they claim to have paid to the business in order to determine if an employee is dishonestly applying money from customers to various accounts in an effort to conceal the loss of some money that he or she has taken from the company. Compare amounts on invoices and shipment logs. Spot-checking the amounts invoiced to the quantities noted on

the shipment record is helpful. By doing this, you may spot billing department fraud, which occurs when too many units are invoiced and the accounting team keeps the difference when it comes in. Since it often calls for cooperation between the billing and cash receipts employees, this kind of fraud is uncommon. Only in cases when there is a blatant fraud risk is the control necessary.

Need authorization for bad debt costs. Any write-offs of bad debt from the list of accounts receivable should be approved by a management. Otherwise, a check from a client may be received, cashed into one's own account, and the associated account receivable could be written off as a bad debt. This control may be significantly improved by separating the functions of cash receipts and collections, making it more difficult for this kind of fraud to succeed without collaboration.

Need credit approval. Someone in the receivables department could give a customer a credit in return for a kickback from the customer. By employing permission forms for each credit provided and routinely comparing the credits granted to the relevant approval forms, you may avoid this. In order to clear up erroneous numbers on the accounts receivable listing, it is acceptable to let the accounting staff to issue very minor credits. However, they should periodically be reviewed to see if any particular customers are amassing a significant quantity of small credits.

Check the invoice's price. By sending out fictitious invoices to consumers at exorbitant rates and pocketing the difference when the customer check comes in, the billing department may commit fraud. Before sending out bills, have someone check the pricing to see whether it matches a regular price list. This kind of fraud is only conceivable when there is a chance that the billing and cash receipts personnel will work together, hence a control is only necessary when that risk is present.

Inventory. Large-scale controls may be required only to provide an inventory with any level of accuracy since they might be so complicated and large-scale. To attain a high degree of inventory record accuracy, it is thus advised to implement almost all of the following controls:

Audit your inventory. If the correctness of the inventory is never verified, it will eventually deviate from the book inventory as a collection of inaccuracies accumulates over time. You may either plan a periodic full inventory recount or an ongoing cycle count of tiny pieces of the inventory each day to address this issue. Regardless of the technique, it's critical to investigate the causes of mistakes and make an effort to address the underlying issues.

Limit who has access to inventory and bill of materials data. Only a very limited number of skilled staff should be able to access the files holding the bill of materials and inventory information, according to the security levels allocated to such files. You reduce the possibility of accidental or intentional alterations being made to these priceless documents by restricting access. In case proof is required to demonstrate that fraudulent actions have taken place, the security system should also keep track of the keystrokes and user access codes for anybody who has viewed these data.

Based on the bills of material, choose from the inventory. The use of bills of material for every produced item and the selection of components from the raw material stock for the manufacturing of these products in accordance with the amounts specified in the bills of material are effective ways to manage material costs. Since there is no valid reason why these issuances should have occurred, a reviewer may next focus on those warehouse issuances that were not permitted by a bill of materials.

To sign out more inventory than what is on the select list, you need permission. The standard authorization for inventory removal should be utilized if a standard pick list is used to remove raw materials from the warehouse for manufacturing needs. Production staff members should go to the warehouse gate and ask for any extra inventory they need, and the distribution that results should be recorded out of the warehouse. After manufacturing is finished, any inventory that is left over should be returned to the warehouse and recorded in. By using this method, the cost accountant may determine if the bills of material used to generate the pick lists include problems since any excess inventory requests or warehouse returns are likely indicative of flaws in the bills.

Allow only authorized employees access to the warehouse. The corporate warehouse is like a big shop with no pricing if there are no access limitations; simply grab everything you want. Employees may be removing large amounts of inventory for production needs, which results in a congested factory floor, but this does not always suggest that they are stealing products from stock for personal use. Additionally, this forces the buying team to take on the almost difficult task of attempting to out what is already in stock and what has to be purchased for urgent production requirements. As a result, fencing it off and severely limiting access to it constitutes a necessary control over inventories.

Check the inventory for out-of-date products. Large levels of outmoded inventory are the main factor contributing to inventory value mistakes. Printing a report on a regular basis that details which inventory items haven't been utilized lately and includes their extended cost may help you prevent this issue. Printing a report listing all inventory items for which there are no active production needs is a more accurate variant. As an alternative, you might utilize a report that contrasts the quantity of inventory on hand with each item's yearly historical consumption. With this knowledge in hand, you should arrange routine meetings with the materials manager to decide whether inventory items need to be discarded, liquidated, or sent back to suppliers.

Prepaid Charges. Prepaid costs have the biggest drawback of being a holding place for payments that ought to have been turned into expenses in the past. Additionally, progress that ought to have been gathered might be parked here. The following controls deal with these issues: All prepaid spending accounts should be reconciled as part of the month's end closure procedure. It is simple to identify which pre-paid things should be turned into expenses by carefully reviewing all prepaid accounts once a month. An itemized spreadsheet listing the types of each prepaid item in each account should be the end result of this evaluation. Reviewing prepaid spending accounts should be done just before the end of the month since it may be a time-consuming activity that requires some investigation work. This will allow for a complete evaluation to be done without being constrained by the regular closure process' time constraints. All payments in advance to workers should be subject to approval. The easiest method to lessen the workload associated with monitoring staff progress is to avoid making them in the first place. The ideal strategy is to insist that management approve all progress, no matter how little. Capital assets. In order to verify that the right permission has been secured to undertake either transaction and that the money connected with fixed assets are correctly accounted for, the acquisition and sale of fixed assets need additional controls. To guarantee that these objectives are met, all of the following controls should be put into place.

CONCLUSION

In conclusion, A critical component of capital planning is projecting future cash flows, which enables businesses to assess investment possibilities and make wise choices. Businesses may

improve the precision of their cash flow estimates by using the right methodology, taking into account a variety of variables, and include risk assessments. Cash flow forecasts are regularly reviewed and updated to ensure that capital budgeting choices continue to be in line with changing market conditions and organizational goals. Furthermore, the emphasizes how iteratively capital planning uses future cash flow estimation. Regularly reviewing and revising cash flow forecasts is essential to reflect changing conditions as projects advance and new information becomes available. Organizations may modify their investment choices and maximize resource allocation via this iterative process.

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CHAPTER 5

COMPARISON OF CAPITAL INVESTMENT PROJECTIONS TO ACTUAL RESULTS

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ABSTRACT:

Comparing capital investment projections to actual results is a crucial step in evaluating the effectiveness of investment decisions and enhancing future capital budgeting processes. This abstract explores the significance of this comparison, highlighting its role in assessing performance, identifying variances, and facilitating continuous improvement. Capital investment projections are estimates made during the capital budgeting process to forecast expected cash flows, profitability, and other financial metrics. Comparing these projections to the actual results allows organizations to evaluate the accuracy of their forecasting methods, identify areas of success or underperformance, and make adjustments for future investment decisions.

KEYWORDS:

Actual Performance, Budget Variance, Capital Expenditure Analysis, Comparative Analysis, Financial Evaluation, Forecast Accuracy, Post-Audit Analysis.

INTRODUCTION

To make strong arguments for asset purchases, managers have been known to create unduly optimistic estimates. Regular assessments of asset purchase outcomes in relation to early projections and subsequent tracking of these findings back to the beginning management might help to prevent this problem. This strategy may also be used at key checkpoints during building the asset to guarantee that actual costs match initial estimates. Make sure that any acquisitions of fixed assets have the proper prior approval. The funding of new or replacement capital projects may turn out to be one of a company's most crucial controls if its infrastructure is capital-intensive. These controls may include a comprehensive net present value evaluation of the cash flows connected with each possible investment as well as multiple approvals that go all the way up to the company owner or board of directors, depending on the potential amount of money involved. In order to determine whether a more accurate estimation process can be used in the future as well as to determine whether any intentional misrepresentation of estimates was made initially, a truly comprehensive control system will also include a postcompletion review that compares the original cash flow estimates to those actually achieved [1]–[3].

Verify that the disposal of fixed assets has been appropriately permitted. A business does not want a fire sale of its assets to take place without the knowledge of any members of the management team. To guarantee that the final price paid by the buyer is confirmed to be a fair one, the sale of assets should thus be properly approved before any sale transaction is launched. Check to make sure that money received from asset sales is handled correctly. Employees may sell a company's property, keep the money, and then tell the business that the property was truly demolished. By mandating that a bill of sale or receipt from a scrapping business be included in the file for every item that has been sold, this control problem may be

lessened. Invoices Payable. This is one of the most frequent instances of asset abuse, as well as the area where operational mistakes are most likely to happen. A carefully chosen combination of controls should be employed since an overuse of them in this area might significantly lower the performance of the accounts payable employees.

Look at your credit card statements. There is a chance that business credit cards given to workers will be utilized for personal spending. To prevent this, spot-check a few line items on each credit card statement, if not go through each statement completely. It is also possible to review an employee's online purchases on the same day that a purchase is made and to change credit limits at the same time, keeping tighter control over credit card usage. This option is available for employees who have a history of making inappropriate purchases but for whom a credit card is still provided.

Payables should be compared against the receiving log. All payments made via the accounts payable system, with the exception of payments for services or recurring payments, should have a corresponding record of receipt in the receiving log. If not, there should be cause to look into the circumstances around why a payment was made. Since a lot of human cross-checking will be required in the absence of an automatic three-way matching system, implementing this control may be challenging. All invoices that aren't accompanied by a purchase order need to be approved. The accounting staff must submit an invoice to the supervisor of the department it will be charged to if the buying department has not yet approved it so that they may evaluate and approve it.

DISCUSSION

Current Obligations. Items might unintentionally accumulate over time in the general category of current liabilities when they should be charged to expenses. The following rules need stringent oversight of the most typical current liabilities accounts. Include an accrual review for bonuses, commissions, real estate taxes, royalties, sick leave, vacation time, unpaid wages, and warranty claims in the closing process. Given their scale and repeated nature, there are several potential expenditures for which an accrual is required. This control is intended to ensure that no significant accruals are overlooked by continuously reviewing each potential current obligation as part of the regular monthly closure process.

Search for unreversed entries in accrual accounts. Some accruals, including commission accruals and unpaid pay accruals, are meant to be reversed in the period after the one in which the actual expenditure is incurred. However, if an accountant fails to correctly set up a journal entry for automatic reversal in the next quarter, a company may discover that it has recorded an excessive expenditure. A straightforward control point is to include a check of all accounts in which accrual entries are made in the period-end closure routine to make sure that all reversals have been executed[4]–[6].

For reversing journal entries, make ordinary entries. As a follow-up to the previous control point, creating boilerplate journal entry forms in the accounting system that are precond to be reversed automatically in the next period makes it simple to prevent issues with accruing journal entries that are meant to be reversed. No unreversed journal entry will ever exist as long as these formats are in use. Make a list of regular supplier invoices to include in the month-end cutoff by creating a standard checklist. After the month has ended, a number of invoices for services for which an accrual should be made come. Making a list of recurring bills with their approximate amounts and using it as a check-off list throughout the closure process is the simplest approach to ensure that these accruals are made. If the invoice hasn't come yet, start accruing for the stated price. Notes Receivable. The taking on of new debt is

often a significant event that the business owner pays special attention to, necessitating few restrictions. But as a general business policy, the following control point is advised.

Require that all borrowings and repayments be approved by the supervisor. High-level supervisory permission is necessary for all debt instruments, just as it was for the control point before it, but this time it is for the ultimate approval of each debt commitment. To ensure that there is complete agreement at all levels of the organization on the nature of the debt commitment, it may be beneficial to establish a policy requiring approval by the firm owner or board of directors if the debt to be acquired is particularly substantial. This signature requirement should be made known to the lender in order to prevent it from unintentionally accepting a debt arrangement that has not been signed by the right party. This will serve as a more effective control.

Revenues. The main control issue with regard to income is that all shipments must be promptly invoiced. A breach in these controls might result in a substantial revenue deficit and endanger the liquidity of the whole business. Verify all invoices against the shipment record. In order to make sure that everything transported is invoiced and to prevent unauthorized shipments that entail cooperation between outside parties and the shipping crew, billings and shipment logs should be continuously compared. As a result, the extra step of care of thoroughly comparing finished goods inventory levels to physical inventory counts and reviewing all transactions for each item must be used to determine where inventory shrinkage appears to be occurring. People who are dispensing goods at the shipping dock rarely will be compliant enough to record this transaction in the shipping log.

A comparison between desired and actual shipping dates should be made. Run a comparison between the dates on which customers have requested delivery and the dates on which orders have actually been dispatched if customer order data has been entered into the accounting computer system. It could be problematic to attempt to generate income by making shipments early if there is a persistent propensity to do so. A obvious attempt to raise sales by ignoring customer-mandated shipping deadlines is evident when there is a spike in early shipments in months when revenues would otherwise have been low. If the input delivery date is earlier than the customer-requested delivery date, it may be feasible to set the computer system to prevent the recording of deliveries, thereby preventing early revenue recognition [7]–[9].

Invoice dates should be compared to the database of recurring sales. There may be a desire to establish early billings in situations where a business acquires a recurring income stream by frequently billing consumers for maintenance or subscription services in order to record revenue a little bit sooner. For instance, a 12-month subscription invoice might be sent out after 11 months, hastening revenue recognition by one month. The total recurrent billings for a month should be compared to the total recurring revenue for that time period as calculated from the corporate database of clients with recurring revenue. Alternately, you may contrast the dates on which invoices were actually sent with the recurring billing dates for a small sample of clients.

Examine all journal entries that result in a rise in income. Any time a journal entry is made to boost a sales account, it should raise a "red flag" that suggests additional revenues may exist that weren't derived via regular sales journal transactions. These transactions might be real instances of increased revenue recognition related to prepaid services, but they could also be barter swaps or fraudulent transactions carried out only to boost profits. Reviewing every sale transaction is crucial, particularly when accounts receivable or cash is not the offset debit to the credit for the sale. This is a clear sign of transactions that are unique and may not really be sales. For instance, it is possible to mistakenly credit a gain from the sale of an asset or an

extraordinary gain to a sales account in order to deceive the reader of a company's financial statements into believing that its operational revenues have grown. Financial statements must be released the day after the period's conclusion. By closing the time gap between the reporting period's end and the release of the financial statements, any cutoff issues are immediately resolved since no one can issue new invoices for products shipped after the reporting period's conclusion.

Cost of the sold goods

Since it includes a big number of employees and makes up the majority of a company's expenditures, there are numerous ways for a business to lose control over its cost of products sold. The use of the following proposed controls in a production environment will mostly depend on the perceived benefit from applying them vs how much they would obstruct the productive operation of the production department.

cost analysis of inventory materials

A conventional costing technique or an inventory layering concept, such as last in, first out or first in, first out, are often used to allocate inventory charges. If there are any standard costs that need to be modified to better reflect real prices spent, you should routinely compare assigned costs to the actual cost of items purchased. If standard costs are being updated seldom according to corporate policy, you should make sure that the difference between real and standard costs is being deducted from the cost of products sold.

Compare the total cost of all finished projects to the planned amount. If a corporation does not maintain a close check on the expenses associated with finishing tasks, its gross margin might see significant decreases. To achieve this, the cost accountant should determine precisely which actual costs are greater than anticipated by comparing a comprehensive record of all expenditures spent for a task to the original budget or proposal. A list of the issues that led to the cost overruns should emerge from this analysis, which the management team may then address to prevent them from happening again. This procedure should also be carried out while working on a project so that issues may be identified and remedied before it is finished. Based on the bills of material, choose from the inventory. Demanding the usage of bills of material for every item created and mandating that components be selected from the raw material stock for the manufacturing of these things based on the amounts indicated in the bills of material are effective ways to manage material costs. As a result, a reviewer might focus on warehouse issuances that were not approved by a bill of material since there is no valid justification for their occurrence [10].

Expenses for travel and entertainment

Numerous line items of requested expenditure reimbursements may be included in employee expense reports, some of which may be in contradiction with the company's stated reimbursement rules. Many accountants devote a corresponding amount of clerical work to the minute examination of expenditure reports in order to make sure that these gray-area cost line items are discovered. The accountant's estimate of how many expenditures will be saved as a result of using this degree of control will determine if it is necessary. In actuality, certain weaker forms of control, such expenditure report audits, are often enough to maintain the "honesty" of expense reports.

Randomly examine expenditure reports

If employees believe that their costs are not being reviewed by the firm, they may be more likely to pass through expense items on their expense reports. By doing a few sporadic audits

of expenditure reports and following up with at-fault personnel about any improper spending sub-missions, this problem may be rectified quite affordably. As word of these actions spreads, employees will be more vigilant in checking their own expenditure records. Additionally, by mandating repeated audits for certain personnel, random audits may be rendered less random if there is evidence of serial violators.

Establish guidelines for acceptable costs. Simply because they have not been informed that the charges are incorrect, employees may submit inappropriate expenses for reimbursement. A thorough set of travel regulations and procedures may be released to address this issue. A corporate intranet website may be used to make the notion more accessible to workers. Additionally, if an online system for submitting expense reports is in place, these restrictions may be directly implemented into the underlying software, causing the system to alert employees about improper reimbursement submissions.

Payroll costs

The payroll controls utilized address two issues: preventing excessive compensation to workers and preventing fraud involving the production of paychecks for nonexistent employees. Here, both forms of restrictions are discussed.

All overtime hours put in by hourly employees should be approved

Making up phony extra hours by returning to the company after hours and clocking out at a later time, or having another employee do it on your behalf, is one of the easiest kinds of fraud. By mandating supervisor permission for all extra hours worked, this problem may be addressed. Using a digital time clock that classifies each employee according to a certain work period is a more sophisticated method that will automatically indicate any hours spent outside of the employee's typical time period for supervisory permission. Even beyond a certain hour of the day, such a system may not let an employee to clock out without first entering a supervisory code into the computer.

Ensure that any pay modifications are approved

If a payroll clerk and another employee collude, salary modifications may be accomplished relatively quickly via the payroll system. Regular comparisons of the pay rates given to the authorized pay rates kept in employee files will reveal this issue. All pay adjustments should ideally be subject to high-level management approval, which should include that person's signature on a standard pay change form. Auditing the deductions made from employee paychecks is also helpful since they may be adjusted lower to provide an increase in rate of pay. The quantity and timing of garnishment payments should be examined as part of this audit to make sure that they are being deducted in accordance with court orders. On long-term contracts, a few ongoing payments to suppliers are made. The majority of the following controls relate to fully understanding the terms of these contracts so that a business does not make payments that are not accurate.

Keep track of contract renewal dates. If a corporation unintentionally allows a long-term contract with advantageous pricing conditions to expire, it may find itself temporarily paying a supplier substantially higher rates. Setting up a master file of all contracts with contract expiration dates would be a good control to prevent this problem and provide fair notice of when contract renegotiations must begin.

Demand consent for varied degrees of a financial commitment based on a contract. The degrees of financial commitment at which extra layers of management approval are necessary should be listed in a corporate policy. Although taking this action may not enable the

business to revoke already signed contracts, it is a valuable preventative measure to stop management from approving agreements that include sizable or extended financial obligations. Employees in jobs with a high financial stake should get bonds. It is useful to obtain bonds on either specific employees or for entire departments in the event that there is a residual risk that, despite all the aforementioned controls, corporate assets will still be lost due to employee activity. This will allow the business to be compensated in the event of fraudulent activities.

These suggested controls only cover the most typical issue areas. Depending on how the processes are set up, they should be complemented by looking at the company's process flows to determine whether further controls are required. Controls will differ greatly by industry as well; for instance, because the casino industry is a cash-based enterprise, it imposes multilayered controls on cash collecting. As a result, these measures should only be seen as the basis for a full set of controls that must be customized to meet the unique requirements of each firm.

When to Eliminate Controls

Despite the extensive list of controls mentioned before, there are circumstances in which you may remove controls without risk. By doing this, you may often cut down on unnecessary administrative expenses or at the very least simplify the numerous accounting procedures. To determine if a control is suitable for removal, follow these five steps.

1. Diagram the procedure. Making a flowchart is the initial step in capturing every stage of the whole process where a control fits. The location of further controls in the process flow must be determined using this flowchart. The requirement for a particular control may thus be decided rationally based on knowledge of redundant control points or proof that no alternative controls are accessible.
2. Establish a control point's price. After using a flowchart to identify controls that may no longer be required, we must ascertain their price. This estimate may be difficult since there may be additional labor, material, or overhead expenses that need to be included. The presence of the control may immediately diminish the process's capacity since it is located in the middle of a bottleneck operation, which lowers earnings. In this case, the total cost of the control must be calculated by multiplying the additional cost of running the control by the incremental loss in earnings.
3. Establish the control's criticality. The capacity of the corporation to maintain control over its assets may not be significantly impacted if a control point is only a supporting one that supports another control. However, it could be preferable to maintain it in operation if its removal can only be stopped by a number of lesser controls.
4. Determine the cost and benefit of the control. To determine if a control point's cost is justified by its importance or whether the existing combination of controls will enable it to be removed with little to no change in risk and without incurring any cost, compare points 2 and 3.
5. Check that the controls that are being removed are being used. It is helpful to inform everyone engaged in the process in which a control point is embedded, even when there is a clear-cut argument for its eradication, to find out if it is being utilized for any other purposes. For instance, a manufacturing machine's cycle time control may no longer be required as a control point, but it may still be a great source of data for someone monitoring the equipment's % utilization. In these situations, it is advisable to assess the control's worth to its

alternative user before removing it. Before the control point can be eliminated, it may be required to work around the other usage.

Every time a substantial change to a process flow occurs, this control review procedure should be performed. Even if there hasn't been a noticeable change in a while, it's possible that a process has undergone a lot of little adjustments, the sum of which would need a controls review. The interval between these assessments may vary depending on the industry; while some haven't changed their supporting procedures in a long time, others have been continually changing their business models.

A thorough review of all associated process flows should be conducted both before and right away after any significant changes to a business model, such as the addition of any kind of technology, entry into new markets, or the addition of new product lines, so that unnecessary controls can be removed right away or weak controls can be strengthened.

CONCLUSION

The advantages of comparing capital investment estimates to actual outcomes are highlighted in the conclusion, including better decision-making, greater financial performance, and higher organizational effectiveness. An organization's strategic goals and changing market dynamics may be better aligned with future capital budgeting choices thanks to regular monitoring and assessment of investment projects. In conclusion, a crucial step in the capital budgeting process is comparing projected capital investments to actual outcomes. Organizations may evaluate performance using this comparison, spot differences, and promote ongoing development. Utilizing the information from this research, organizations may improve their forecasting methods and strengthen their capacity for wise investment choices.

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CHAPTER 6

AN ANALYSIS OF CASH FLOW CONCERNS

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ABSTRACT:

Cash flow concerns are a critical aspect of financial management that impact the liquidity, operational stability, and growth potential of businesses. This abstract explores the significance of cash flow concerns, highlighting their causes, consequences, and strategies to mitigate them. Cash flow concerns arise when an organization experiences a mismatch between its cash inflows and outflows. This can occur due to various factors, including delayed payments from customers, excessive inventory levels, unexpected expenses, fluctuations in sales volumes, or poor financial planning. Insufficient cash flow can hinder a company's ability to meet its financial obligations, invest in growth opportunities, and sustain day-to-day operations.

KEYWORDS:

Credit terms, financial liquidity, Funding sources, Operating cash flow, Payment delays, Receivables management, Short-term cash flow.

INTRODUCTION

The management of working capital is a crucial task for the company. There are four key components of working capital that you must prepare for and take into account in order to retain viability:

1. Cash
2. Debtor accounts
3. Payments to be made
4. Inventory

These covers managing cash as well as accounts payable and receivable.

Cash

1. The most movable asset in the company is cash, which has a variety of uses.
2. Transactions. The medium of choice for transactional payments is cash. Regardless of the structure or content of the payments, there is often a cash transfer at the end [1]–[3].
3. Investment. The transactions eventually include cash, regardless of who is involved—whether they are made by other people, companies, banks, or the firm investing in itself.
4. Security. A suitable amount of cash in a liquid account is a guarantee of the company's security. The required quantity of capital may be significant, depending on the kind and size of the firm.

The majority of investors take into account four considerations when deciding whether to invest money and, if so, how much:

1. **Yield.** Growth and dividends are the two components that make up yield. The market price of a company's stock or a rise in its valuation, which denotes a gain in equity value, serve as market indicators of a company's growth. For instance, if the market value of your stock is rising at a pace of 12 to 15 percent annually, this may be a substantial projected return that will draw investors even in the absence of cash dividends. If the market values your company at \$10 per share and you pay a yearly dividend of \$1.20 to \$1.50, your stock is also earning 12 to 15% on your investment. The proprietors of tiny or tightly held businesses sometimes extract the yield as increased remuneration or other "perks" from the company.

2. **Risk.** It is an intangible aspect of investment. Different investors—for instance, institutional and individual ones looking at the same company—will evaluate risk in different ways. Despite having the same return, a corporation with continual development and one with consistent profits may be perceived as posing distinct risks. Bankers could perceive your company as less hazardous than one that consistently makes a certain amount and "throws off dividends" to its shareholders if it exhibits continuous growth and reinvests extra earnings.

3. **Liquidity.** The investor in this case is worried about how fast the investment can be turned into cash. Essentially a time problem, liquidity is impacted by risk and return. While Treasury bills are riskier and provide greater yields than real estate, an investor looking for a liquid asset will choose T-bills over real estate because of how quickly they can be exchanged. Real estate might force investors to wait months for a buyer or force them to lower their asking price in order to sell the asset more quickly.

4. **Charges for transactions.** Transaction expenses need to be subtracted from any gross yield that an investment displays. For the aforementioned example, the gradually expanding company displays a gross yield of 12 to 15 percent annually, but the investor doesn't realize a profit until after selling the shares, when they must also pay brokerage fees and the necessary taxes. With the exception of taxes, the investor in the consistent dividend company receives direct payments every so often to realize the return. Real estate transactions may incur a considerable amount of transactional fees. Brokerage commissions might be as high as 6%. A considerable fraction of the gain may be accounted for by attorney's fees, recordings, documentary stamps, title searches, title insurance, and other elements [4]–[6].

When there isn't enough to cover the business's urgent demands, cash becomes a major worry. However, it is as important to take cash into consideration when there is a plentiful supply. Many individuals downplay the importance of having extra money. Many companies keep extra cash in accounts that don't pay interest idle. The investing of extra funds in profitable ventures is a need for effective financial management. The easiest commodity you have to turn a profit with is cash. Since cash is liquid, it may be handled or converted without the delay that prevents other assets from becoming liquid.

DISCUSSION

What to Do with Excess Cash

There are several profitable ways to invest extra money. Here, some of the more practical prospects will be covered.

Interest Streams

Daily inflows and outflows of cash occur inside the company. Unfortunately, the inflows and outflows for the majority of businesses—large and small—are neither stable nor all predictable with a high degree of accuracy. At certain points throughout the month, the company may have much or little cash on hand.

You must always have enough cash on hand or in liquid accounts to cover requests as they come in for payment due to this unpredictability. You should be equally worried that there isn't any idle cash lying in a checking account that doesn't pay interest. You miss the chance to gain on that money if the cash reserve is too large.

Look into your bank's choices for earning interest on checking or for maintaining money in an interest-bearing account with provisions for automatic transfers when checking balances reach a specific threshold. Cash deposited in money market accounts is another option. This kind of savings account has a greater interest and is more liquid. With limitations on the minimum balances in the accounts and the maximum number of transactions permitted each month, these accounts are often used in combination with a kind of checking. Idle wealth is a simple opportunity to seize, and the rewards may outweigh the time and effort required to find a solution.

Federal Reserve Notes

The greatest portion of the money market is made up of U.S. Treasury obligations. The primary securities issued are notes, bonds, tax-advantaged bills, and bills. The Treasury Department conducts weekly auctions for Treasury Bills with maturities of 91 and 182 days. Additionally, periodic sales of nine-month and one-year notes are made. Treasury notes are offered at a discount but do not include a coupon. For short-term investments, these instruments are very popular with businesses of all sizes. The market is quite active, and selling Treasury notes on the secondary market has low transaction costs in part due to the high volume of outstanding debt. Treasury bills are often seen as risk-free, interest-bearing notes in some of the more complex financial models.

Regulatory Securities

The agency issuing the security, and not often the Treasury, guarantees the obligations of the numerous federal agencies. The Federal Reserve is the main institution issuing securities [7]–[9]. Government National Mortgage Association and the Housing Administration. There is an inferred government guarantee even if the Treasury does not explicitly support these agreements. It's difficult to fathom how the federal Treasury could let an organization to collapse. The Federal National Mortgage Association, Federal Land Banks, and Federal Home Loan Banks are three significant government-sponsored organizations that issue securities. When compared to Treasury securities of the same maturity, the securities offered by these agencies provide a minor yield advantage. These securities are offered on the secondary market by the same security dealers that sell Treasury securities and have a high degree of marketability.

Banker's Acknowledgments

Banker's acceptances are drafts that are used to finance both local and international commerce. The bank accepting the draft, not the drawer, is used to determine the creditworthiness of banker's acceptances. Acceptances are often of extremely high quality and have maturities of fewer than 180 days. They are exchanged in a small number of dealers' monopolized over-the-counter market. Banker's acceptance rates often differ somewhat from Treasury bill rates for the same maturity.

Printed Paper

Commercial paper is made up of unsecured, short-term promissory notes that are issued by some industrial enterprises and financial institutions. Direct or dealer purchases of commercial paper are also options. CIT Financial Corporation, Ford Motor Credit Company,

and General Motors Acceptance Corporation are a few of the businesses that provide commercial paper on this basis.

Deposit certificates that are negotiable

Negotiable time certificates of deposit are investments that have a set time horizon. The CD serves as proof of a deposit of money with a commercial bank for a certain amount of time and at a predetermined interest rate. Money market banks quote CD rates that fluctuate in accordance with changes in other money market rates on a regular basis. The yields on CDs are higher than those on T-bills, but they are about the same as those on commercial paper and banker's acceptances.

Money Flows

We should think about the sources of cash input before addressing the issue of inadequate cash. The company receives money from the following four sources:

1. a fresh investment
2. Added debt
3. Fixed asset sales
4. operating income

Each of these sources has significant drawbacks. Operating earnings are the only source that can be counted upon continuously. Profit planning is a crucial task for every organization because of this. The company can expand most effectively when it continues to run profitably and has strong cash inflows.

Inflows

Any firm depends on its inflows, or the cash it receives from clients for goods or services. It goes without saying that the first rule of inflows is to persuade consumers to pay as soon as possible. For instance, a lot of physicians and attorneys now want payment upon receipt of services for standard office visits [10]. It is apparent that when consumer payments accelerate, cash management effectiveness rises. The fast food sector serves as an example of how a business may maintain a very low current ratio by solely accepting credit cards and cash payments. Payments made by check have a built-in delay due to the time it takes for a check to clear the bank, in contrast to payments made in cash. The monies are not accessible to the firm during this time. Reduce payment holdups and the amount of time needed for cash transfers to clear should be the goal. Numerous strategies have been explored to reduce the float in addition to federal regulations governing the maximum timeframes for banks to clear checks.

banking for concentration. If your company is big enough to serve a wide range of customers, you can think about hiring banks scattered around your target markets to accelerate check clearing. Checks from local customers may be processed by using banks in the locations of the sales. These often clear more rapidly, allowing for quicker money concentration for wire transfers to central banks.

Lockboxes. For collections, businesses may employ a lockbox system. Rent a post office box in the middle of a market to accomplish this, and give your bank permission to access the box and credit payments to your account. Both benefits and drawbacks to this process. The loss of control over the actual receipt of cash and the direct observation of customers' payment patterns are the apparent drawbacks. You are unable to process receipts prior to the bank

receiving them. You save time by not having to handle anything, but the bank does charge a fee for the service.

deletion of accounts that are not essential. Every local bank where you do business or have certain operations should have an account for you since it builds goodwill and a feeling of presence. You are, however, distributing money that might be spent more wisely if it were concentrated by keeping a lot of different, distinct accounts. You may possibly minimize your cash reserves while still operating effectively by focusing your cash flow.

account balances are zero. If a business wishes to have many checking accounts, it is wasteful to hold money in each of them that is either generating nothing or very little interest. Because the firm has consolidated its assets in one location and can now access higher-earning investments that need a larger minimum investment, it is preferable to maintain it in a single, central account that pays the greatest rate of interest. A business may employ a zero-balance account to make this cash centralization method function while still maintaining many checking accounts. This checking account has a constant zero cash balance but, when checks clear, takes money from another account, such the investment account. The major drawback to this strategy is that it makes bank reconciliation more challenging since all checks are now reconciled via a single account, creating a massive number of checks that must be sorted through.

controlled expenditures. Another way to keep cash on hand is via the accounts payable process, which may be done without the suppliers being aware that they are being kept out of payment for a few additional days. This strategy, known as restricted disbursements, entails paying checks from banks that are geographically far enough that it takes longer for checks to clear through them. A corporation may keep its capital in short-term investments for a little bit longer than usual thanks to this little extra float period, which enables it to generate a tiny bit more interest revenue than it otherwise would. In order to take advantage of a few more days of mail float, this strategy may also be broadened to include sending checks from corporate sites that are furthest from supplier locations. However, because this delay strategy is more obvious to suppliers, they often reject it outright.

The sale of fixed assets as a source of cash flows was one of the things that was highlighted at the beginning of this. Most businesses only seldom deal with the chore of selling assets, which causes the assets to depreciate over time as they gather dust in strange places throughout the business. However, if approached methodically, the routine assessment of fixed assets will lead to the quick identification of underutilized assets and ongoing focus on their disposal, resulting in the greatest selling prices for the assets and consequently supporting cash flows. The fundamental procedure is to organize an annual or more frequent periodic asset review during which the management team examines the list of fixed assets to identify which things may be sold all at once. This procedure should be overseen by only one person to prevent neglect of the system. This individual should also be obligated to routinely update the management team on the status of asset sales. This straightforward technique will guarantee that a business generates the most cash flow from the sale of its idle assets.

Outflows

On the income statement, costs represent the majority of cash withdrawals, even if some "accrued" expenses may not yet have been paid in cash. Depreciation and other non-cash flow costs may be shown on income statements. The principal portion of loan payments should also be included under "other expenses" even though it is not technically an expense item.

The timing and type of the demands made on the company's finances must be a worry. Prior to that, it was covered how important it is to shorten the "float" and when cash inflows should occur. The implication for cash outflows is that you should ride the float or take advantage of the delay in cash transfers. Some companies take advantage of the float by issuing checks on accounts that don't have enough money in them to cover them. They could really have sufficient cash reserves kept in high-yield accounts until they are required to fulfill a draw. The company is leveraging float to its advantage in this manner to maximize profit. To prevent the unlawful practice of "kiting," extreme caution must be used.

How should float use be planned? Paychecks are a logical float pattern to research. Some workers have their paychecks automatically deposited into credit unions; others deposit their checks right away, some even in the bank of their company; still others may hang onto their checks for a few days; and a few tough individuals may hold onto their checks for a week or more. You should collect certain information to establish the appropriate balances:

1. On each day after payday, count the number of checks and the total amount submitted for payment.
2. Determine the amount by day offered.
3. Repeat this procedure for each pay month that follows.
4. Create a frequency distribution for the amount of money needed each day.

You may make plans to ensure that you have the proper quantity of money in your account at the right moment based on this frequency distribution. Maintain a safety buffer in the account to make sure that you are not humiliated by inadequate cash. If the paycheck is considerable, even keeping a part of it in a high-yield account for a day or two results in significant profits. With automated deposits, you can predict the delay in the transmission of cash and may earn additional interest on this regular float. You should definitely have a contract with your bank that requires them to alert you if your account is underfunded, to automatically move money from another account, or to provide you with a line of credit to "cover" you.

Overview of Cash Flow Budgets

It is helpful to do a cash flow analysis prior to attempting a cash flow budget for the company. Managers often have a far better idea of how their organization is doing after creating a cash flow study. Understanding cash flows is essential for certain small organizations because of their increased susceptibility to cash management issues. Smaller companies often run with little or no financial reserves. Perhaps the most important factor to take into account is when financial flows will occur. The firm may collapse before it has the chance to collect enough cash inflows to sustain itself if all of the cash losses take place during the first six months and the majority of the cash inflows happen during the second six-month period. Flow timing is crucial.

Symptoms of Cash Flow Issues

Many companies never manage their cash flow. These companies often have overdrafts and have a poor bill-paying pace. In the end, many fail. Some may survive if management made the required preparations to develop a cash flow budget and control their cash flows while managing other areas of the business by doing the following:

Liquidity reduction, lacking sufficient operating capital, Stretching payables and having insufficient inventory to fulfill demand are other symptoms.

a lot of turning. turning inventory more quickly than other businesses in the industry with similar sizes. This may be a sign of sound management, but in severe circumstances, it may also be the result of insufficient operating capital to sustain necessary inventory.

dependency on short-term debt in excess. Here, you can be refinancing short-term debt to get the operating cash you want. Not all working capital is short term, despite what many people think. A certain amount of working capital is necessary for the normal functioning and expansion of most firms. This is what we mean by fixed working capital.

Discounts were dropped. Past-due payments and a failure to benefit from timely payment discounts may be signs of inadequate payables management or a lack of available funds to make timely payments collecting slowly. Poor receivables management is often indicated by a large number of old receivables. It undoubtedly points to a possible financial issue.

Inadequate cash flow may be the root of these issues, or it may be the outcome of subpar management. Low cash levels may sometimes even be a sign of a deliberate outcome. For instance, quick inventory turns may be beneficial. Due to the low margin per sale in the grocery industry, profit is increased through increasing the frequency of sales and inventory turnover. Therefore, signs of cash flow issues may simply indicate that additional research is necessary.

Controlling Cash

The technique of controlling money is not difficult to understand, nor is it strange. An structured and methodical strategy is necessary. The next eight phases provide a few straightforward rules that aid in organizing the procedure.

1. Determine all of your sources of inflowing funds, including operations, debt, asset sales, and investments.
2. List the expenditures you made with the money.
3. Determine the timing of cash inflows and outflows.
4. Make a difference calculation between cash inflows and outflows. It's critical to recognize cash delivery delays.
5. Determine any obstacles to speedy cash inflow and devise solutions to remove them.
6. List any restrictions on the usage of funds, such as covenants on bank loans.
7. Determine which cash inflows and outflows may be adjusted in time or that can be rescheduled.
8. Make a strategy for good cash flows your top priority. The preceding seven processes must first be finished and analyzed before this step can be performed. It will take time and effort to accomplish each of these tasks. Like most planning, the benefits far exceed the expenses of gathering and analyzing the data in the long term. It might save your company.

CONCLUSION

In conclusion, Businesses face difficult difficulties related to cash flow, which have an impact on their capacity to develop and maintain financial stability. Organizations may reduce cash flow problems by putting methods to handle accounts receivable, inventories, and finance. For managing cash flow issues and guaranteeing the long-term survival of organizations, proactive financial planning, monitoring, and strong financial management

techniques are crucial. Additionally, addressing cash flow issues is a function of using sound financial management techniques, such as increasing efficiency, reducing costs, and maximizing working capital. To improve their cash flow situation, businesses might simplify procedures, negotiate better terms with suppliers, and put cost-cutting measures in place. Making informed judgments may also be aided by implementing strong financial reporting systems and doing proactive financial analysis.

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CHAPTER 7

DESIGN AND IMPLEMENTATION OF CASH FLOW SYSTEM: A REVIEW STUDY

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ABSTRACT:

The design and implementation of a cash flow analysis is a vital component of financial management, enabling organizations to assess the inflow and outflow of cash and make informed decisions regarding liquidity, investment, and strategic planning. This abstract explores the significance of designing and implementing a cash flow analysis, highlighting its benefits, methodologies, and considerations. A cash flow analysis provides a comprehensive view of an organization's cash inflows and outflows over a specified period. It enables businesses to understand the timing and magnitude of cash flows, evaluate their sources and uses, and assess the overall liquidity and financial health of the company. By analyzing cash flow patterns, organizations can identify potential bottlenecks, anticipate cash shortfalls, and make informed decisions to improve financial stability.

KEYWORDS:

Discounted Cash Flow (DCF), Financial Modeling, Net Cash Flow, Sensitivity Analysis, Time Period.

INTRODUCTION

A flowchart showing how cash moves through the company is useful for carrying out the design and execution of a cash flow analysis successfully. Money comes from loans and new investments. They are, however, uncommon and cannot be counted on as constant sources of funding. Fixed asset sales resemble fresh investments. Fixed asset sales are not a consistent source of money. The asset can only be sold once. Although these sources cannot be disregarded, operational earnings take precedence. As a result, it's crucial to concentrate on operational earnings as your primary source of funding. However, it should be recognized that significant plant expansions are unlikely to be funded primarily by operating earnings[1]–[3].

Operating earnings are continual and more difficult to monitor than fresh investments or debt. They need to be continually watched after and controlled. Even expanding firms with increased cash inputs must routinely assess the budget and any associated variations and maintain control to avoid experiencing cash constraints. You will often encounter issues with cash as your organization expands. Even if your organization is highly sustainable and profitable, these issues might prevent it from fulfilling its short-term responsibilities. Cash requirements will change as you go through the phases of the company or product life cycle. For instance, the company would likely need more inventory, receivables, and transactional cash during times of rapid expansion. Similar to when a facility is expanded, these times of inventory increase need a significant investment of working capital. This solved the issue with working capital. Observe how inventory turns increase as more sales result in quicker turns. Additionally, take note of how receivables deteriorate as a result of sales to low-value clients and a lack of personnel availability to do appropriate credit checks

and follow-up. These are unfortunately commonplace situations. Assume that these statistics represent trends that might apply to you and many other firms.

You make \$150,000 to help with your working capital requirements on sales of \$1 million with profits of, say, 15% of sales. Your average profit margin falls to 13% on \$2 million in sales, which results in revenue of \$260,000. While your profit contribution grew only by \$110,000, your working capital requirements climbed by \$280,000. How are you funding this expansion?

The "fixed" working capital problem is that a certain minimum investment in working capital is necessary and should be funded as an asset for the long term rather than for the short term. In our example, if base sales fluctuate between \$1.5 million and \$1.8 million, the "fixed" portion of working capital amounts to around \$340,000. Rapid expansion may present issues rather than serving as a source of net cash inflow. Inventory, receivables, and other expenses may not only absorb all of your earnings during times of rapid expansion, but they may also need debt financing. Offering prolonged payment periods to clients while having to make quick payments to material suppliers may be a contributing factor in the issue. This delay between when you have to pay your suppliers and when you are paid by your customers might spell the difference between the company succeeding and failing.

The issues with increased working capital that were just discussed in relation to fast expansion may also occur in a firm that is not expanding at all, but for other reasons. For instance, if a company's purchasing staff buys components in unnecessarily large numbers, if completed items are not being sold, or if the engineering team has rendered a lot of parts obsolete by switching to new parts on older products, the company's investment in inventory will rise. Similar to this, a more lenient policy for giving credit to customers or a less effective attempt to recover debt would raise the investment in accounts receivable, whilst taking advantage of early payment discounts will lower the amount of outstanding debt on accounts payable. No matter the stage of a company's development, any of these problems might occur at any moment, therefore it is essential to track changes in the balances of all working capital items on a weekly basis and look into the causes of any abrupt increases in this category of investment. Otherwise, a business can discover that it needs far more cash than what its cash flow estimate indicated[4]–[6].

The cash journal or, if you don't have one, the checkbook, are both appropriate places to start when thinking about financial withdrawals. Finding out where the money is going is a crucial task at this stage of the process. Between the time they pay for merchandise for resale and the time they actually get money from the sale, many firms have protracted delays. The delay cannot be completely avoided. However, you may prepare for the amount of cash required to support this short-term investment in inventory and receivables by assessing the delay.

You paid for the inventory item in the case, but the purchaser did not reimburse you until 95 days later. There is some inevitable delay built into the mechanism. However, because the item can remain on the shelf for many months before being bought, the issue might become worse. It is important to thoroughly track and record all monetary outlays. The next step is to assess the need of each and every one of those financial outlays. We often get into the trap of thinking there are only two ways to do a task: our way and the incorrect way. Simply said, people tend to behave in a habitual manner since it requires less mental work than planning out every move they do during the day. Asking why is the key to being inventive.

The answers to these queries might result in immediate cost and financial savings. If you are unable to track down where the money is going, you may need to speak with your accountant for assistance setting up controls. However, a checkbook may provide sufficient daily records

of cash disbursements for many small firms. A calendar is the most practical instrument for determining cash inflows and outflows. Due to the cyclical nature of most organizations, a year is often an appropriate time frame for analyzing cash outlays and inflows. Making a list of the outflows that have set dates should come first

1. Paydays
2. tax payments
3. repayment of bank loan
4. payments for insurance
5. Additional recurring responsibilities

Once you're certain you've included all of the recurring expenses that happen each year, keep listing the things for which cash is used. You may start reporting inflows after listing the cash outflows. You must take into consideration your seasonal and recurring sales changes as well as the delays in obtaining payments from accounts receivable while doing this. For some of these goods, it may be required to take mean or average reception times into account.

Analyze when cash inflows and outflows occur. When there are more cash inflows than cash withdrawals, the cash flow is positive. This may not occur in every situation. But over the course of a year, it ought to average out. Funds must come from another source during any operational period if the company has a negative cash flow period.

There may sometimes be negative cash flow periods, such as during periods of rapid expansion. Sales rhythms are common in many organizations. Whether you see such a rhythm, check to determine whether it is common in the sector. To appropriately prepare for these situations, when you can face a negative cash flow phase, you must understand the rhythm and time-discretionary cash inflows. How quickly the company can afford to develop will depend on how well it understands the phenomena of delayed cash inflow as a consequence of expansion. It could be preferable to maintain a slower growth rate to prevent serious negative cash flow issues. You may uncover strategies to increase profitability by reducing expenses and expanding possibilities by examining the timing of cash inflows and outflows.

Plan your payments to get the most of your available cash. Consider delaying payments for as long as possible without running afoul of the creditors, in other words. Every businessperson is aware that the best strategy to increase cash flow is to cut down cash outflow while accelerating cash inflow. This is especially true in a tighter economic environment. Consider the effects of delaying vendor payments before taking this course of action blindly. Terms of payment are still often used in commerce. 2/10, N/30 is really a frequently presented discount. You should set up a frequent reporting method to manage this process so that you can keep an eye on discounts that are accepted and discounts that are missed. It grew or underwent redesigning to accommodate the precise discounts offered and the payment arrangements you use. You can efficiently monitor performance in this manner.

Discounts are intended to promote early payment. What are the repercussions of declining the discount, though? Assume a discount of 2/10, N/30. For starters, if you wait the entire 30 days to pay, you would still be charged an interest rate on the money that is essentially 36.9 percent annually. Even if the seller tolerates the payment time being prolonged for a full 50 days, you have only reduced the interest rate to 18%. This is generated from the following relationship: If you pay within the first 10 days of the 2/10, N/30, you earn a 2 percent reduction on the amount owed. If you retain the money for a further 20 days after the bill is due, you will be charged interest at the rate of 2% of the total amount owed. The annualized interest rate of 2 percent every 20 days equates to a 36 percent annual interest rate since there

are around 18 of these 20-day periods each year. This is not a fair interest rate to pay for borrowing money for such a little time. In a sense, you are borrowing at 2 percent for 40 days even if the time is extended to a full 50 days. There are around nine of these 40-day intervals each year, so the 2 percent for each of them equals 18 percent annually. Most companies can afford to borrow money from a bank at an interest rate of under 18 percent [7]–[9]. Delaying payment for up to 50 days may have further effects. The creditor has the right to start legal action to collect. But even if it doesn't, keeping the vendor's money for a 50-day period won't make you a preferred client. The slow-paying client will not rank highly on the list of most preferred customers during times of tightening economics or shortages of the materials offered by this vendor. If you are more expensive to deal with than other clients, you can discover that the vendor has shortages of the essential products or none at all.

There are four guidelines to keep in mind while handling accounts payable.

1. Buy no unneeded resources and avoid purchasing any required goods too early.
2. Plan your purchases so that you can balance your necessities with a little of safety stock.
3. Pay to avoid incurring pointless expenses. Consider vendor connections as well as the interest rates related to early payment discounts while doing this.

Create an accounting system to keep track of discounts that are lost or not used. Most accounting software records discounts received. While there are certain advantages to this, you won't be able to reduce opportunity expenses. In the long term, these missed chances can be more significant than the reductions received. Since taking discounts ought to be standard practice, exception reporting would require recording discounts lost. Determine which cash inflows and outflows are unavoidable. Many of the business's regular payments may not be rescheduled. Additionally, collecting policies may fall short of their goals. Identify the degree to which receipts and payments are rigid. Take into account strategies designed to increase cash inflows. It is feasible to distinguish certain customers who are generally trustworthy with their payments and others who are tardy. If a customer has a history of late payments, it could be more profitable to stop selling to them than to keep doing so. Keep in mind that when you send items to a customer, you are really lending them money. You made a financial investment in those items; therefore the buyer may think of it as a loan. Creating a credit policy is a vital factor to take into account here. A key point of control is having a credit policy and applying it regularly. You have the most power on a certain buyer prior to giving financing. A large portion of the power is gone after credit has been given. Even if the buyer is subject to legal action, this won't help the cash flow in the near future. For credit extensions, there are four guidelines.

1. Publish a credit policy.
2. Have a clear corporate collection policy that is followed by everybody.
3. Understand your legal rights in relation to collecting.
4. Be aware of the legal restrictions and requirements before extending credit.

It's crucial to have an archive of past due accounts receivable. Estimating cash inflows requires knowing which accounts to either collect from or receive payment from and when. Regarding aging accounts receivable, keep in mind the following:

1. The longer the account goes without being paid or collected from, the less likely it is that you will do either. The amount of work required to collect depends directly on how old the account is.

2. Depending on the age of the receivables, you may wish to define regulations for the cancellation of subsequent shipments.
3. Take these things into account while creating a collection policy.
4. Sort the actions you want to take to create a collection into categories. This might include sending "first letters," making the initial phone call, referring the collection to the legal department, and more.
5. Never set strict deadlines for moving from one stage to the next. Many clients may put off paying until the very last minute if the deadlines are known, preventing you from moving on to the next stage of collection.
6. Be cautious while trying to collect money. Debtors will act normally after your collection activities are accepted.

You may be able to balance payments and receipts to prevent unneeded negative cash flow situations by identifying those financial inflows and outflows that can be rescheduled. Working up payment plans with your creditors that satisfy both your requirements and theirs might sometimes result in a successful agreement. Because a lower payment that can be anticipated with some degree of certainty is preferable to uncertainty or no payment at all, a surprising number of banks and big businesses are open to working out such payment plans. Additionally, if creditors are aware that there could be a nonpayment period, they can plan their own cash flow needs to avoid being negatively impacted.

Businesses often have issues with their accounts payable. You could find that the time you spend making the money to pay your debts is longer than the time you spend corresponding with the people you owe money to. This might turn into a vicious cycle that puts you in more danger. The answer could be to go through all of the creditors and find all of the little invoices that fall under a certain cut-off. Less significant creditors may result in just as many phone calls as significant debtors. In many cases, borrowing money to pay off all of the tiny creditors is less costly than attempting to pay them off one at a time. Time may then be freed up to return to the task of making money in this manner. Your bank may be able to assist you in resolving your immediate financial issues. Some of the intermediate cash flow issues may often be solved by combining many small invoices into one big one with a set payment period. Revolving or longer-term, recurring payments should not be combined with nonrevolving payments to prevent include an interest payment. several non-revolving accounts being paid off. This could stimulate the creation of new debts on these accounts. You just start the cycle again by doing this.

Trade organizations could be reliable resources for knowledge on how to balance the business's cash intake and outflow. Businesses in the same sector may have had comparable collections experiences and be able to provide suggestions on how to enhance collections. A cash budget is a key instrument for planning cash flow. Budgets for cash include both cash receipts and forecasts of future cash requirements. The date and total amount of anticipated cash inflows and outflows during a certain period are shown in this budget. For instance, the majority of companies follow a one-year business cycle. A two-year cash budget that includes adjustments for the second year's budget after considerable first-year experience may be something you want to think about. Seasonal changes in sales and cash outflows should be taken into account in the cash flow budget. Short time period increments should be employed in the budgeting process if cash flows are very erratic. Depending on the reliability of the data, longer time periods may apply if the budgeting reveals a lengthier timeframe. Keep in mind that the prediction becomes more speculative the farther into the future you attempt to estimate cash flows. The usefulness of the cash budget depends on how well the

forecast that is used to create the forecasts is executed. You should plan for either a cash reserve, easy borrowing, or both if your cash flows are very unpredictable.

DISCUSSION

Preparation of the Cash Budget

A sales prediction is crucial to the precision of the majority of cash planning. When creating a sales forecast internally, the salespeople must be asked to predict sales for the next time periods. These estimates are gathered by the product sales manager or another suitable individual, who then compiles them into a sales estimate for a specific product line, turning raw data into actionable knowledge. Internally developed sales predictions, however, are often either too specific or unduly optimistic. They can overlook crucial developments affecting the economy and the sector as a whole. These factors contribute to the widespread use of sales projections produced by third parties. There are advisory or consulting companies that employ econometric modeling methods to predict future business and economic circumstances. Only bigger, multi-operational, multi-product, multi-sectoral organizations may benefit from these enterprises[10].

The next stage is to estimate market share by each product, pricing, and the anticipated consumer reception of the new products given the fundamental projections of business circumstances and industrial sales. Together with the company's marketing managers, these estimations should be created. A more precise estimate may be made by using a combined strategy with the sales forecast created in collaboration with internal and external marketing employees. Since the majority of other budgets, predictions, and forecasts are dependent on predicted sales, the significance of accurate sales forecasts cannot be understated.

Finding the estimated cash revenues from sales is the next stage in creating a cash budget. To calculate balancing variables and time delays connected with each, take into account your previous experience of credit and cash purchases. To produce predicted revenues, certain probability may be added to projected sales. By doing this, you are taking into account the credit conditions applied and compensating for the delay in receiving those sales proceeds.

Disbursements

An essential piece of data to be produced, given a sales prediction, is a manufacturing schedule. Whether to closely match production to sales or to produce at a mostly steady pace throughout time, disregarding the periodic changes in demand, must be decided. Keep in mind that when the firm tends to match output to sales, inventory carrying costs are often lower than when the schedule is flat. But level output is often more effective than variable production. The trade-off between inventory holding costs and the potential efficiency of different production schedules must thus be taken into account.

Whether you plan to produce just enough to fulfill demand or invest the resources to develop inventory levels is another crucial factor to take into account. A useful method for determining anticipated future manufacturing demands is the sales projection. You should think about creating a production prediction based on a plan for addressing this anticipated requirement. A commitment of resources is necessary for almost all tactics. Before you can anticipate receiving financial inflows, you must commit cash and other resources, even for manufacturing that is specifically customized to satisfy demand. It is necessary to anticipate an even bigger delay in receiving compensating cash inflows if you want to create a buffer inventory.

Estimates of the required materials to be acquired, the manpower needed for that production, and any extra fixed assets you may need to match the demand may all be made after a production schedule has been defined. The predicted financial outflows and even their timing may be assessed from the production schedule. Between the moment a sale is made and when the money is actually paid out, there is a delay.

It is anticipated that wages will rise as output levels do. The trade-off between overtime and more production workers is another determinant in salaries. When production peaks, employing overtime instead of spending money on recruiting extra workers is often a more cost-effective solution. Before adding more staff, establish a policy regarding how much overtime you will accept.

We have simplified the issue for illustration solely when determining the trade-off between extra hours and the choice to recruit more workers. Actually, the issue is more intricate. In the example, we've just taken into account the variable costs associated with hiring a new employee. Still, there are fixed and partially changeable elements. You will spend more money on hiring, training, insurance, paperwork processing, medical exams, and other expenses when you decide to hire a new employee. Consider the expenses of extra overtime hours against these constant and semi-variable cost components as well while deciding whether to work overtime or employ someone. Obviously, this is only a rough estimate. The length of the demand and the amount of training required for new hires to become productive must also be taken into account. Additionally, you'll need money for other things. Other costs include general administration and selling costs, property taxes, interest costs, utility costs, and maintenance costs. Over the near term, these costs are often quite predictable.

CONCLUSION

In conclusion, to obtain insight into their financial inflows and outflows, firms must plan and perform a cash flow analysis. Businesses may improve financial management, make educated choices, and increase overall operational efficiency by using precise processes, effective data collecting, and meticulous analysis. An effective cash flow analysis may help businesses keep their cash on hand, maintain their financial stability, and achieve long-term success. The last of the outlines factors to take into account before putting a cash flow analysis into practice, such as choosing the right software or tools to aid in data collecting and analysis. It highlights the need of routinely reviewing and monitoring cash flow statements to account for changes to corporate operations, market circumstances, and financial objectives.

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CHAPTER 8

SCHEDULE OF CASH DISBURSEMENTS: A REVIEW STUDY

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ABSTRACT:

A schedule of cash disbursements is a valuable tool in financial management that outlines the anticipated timing and amount of cash payments a business expects to make during a specified period. This abstract explores the significance of creating and implementing a schedule of cash disbursements, highlighting its benefits, components, and considerations. A schedule of cash disbursements provides a comprehensive view of a company's planned cash outflows, enabling effective cash management and financial planning. By forecasting and organizing the timing and amount of cash payments, businesses can anticipate liquidity needs, allocate resources efficiently, and ensure the availability of funds to meet financial obligations.

KEYWORDS:

Cash Outflows, Credit Terms, Disbursement Period, Expense Payments, Financial Obligations, Payment Terms, Procurement Process.

INTRODUCTION

Capital expenses, dividends, federal taxes, and other financial outflows must also be considered. A company should schedule its capital expenditures as far in ahead as feasible. The short-term cash budget should account for these anticipated expenses. For the majority of businesses, dividend payments are optional and are made on set dates. Based on projected earnings, which a bookkeeper can easily provide, federal income taxes may be estimated. To create a schedule of total cash disbursements, these cash outlays must be added to the total cash outlays. The following four categories should be included first in the schedule of cash disbursements:

1. Total outlay for cash
2. Investment costs
3. Payment of dividends

These need to be listed for the fiscal year month by month. A report that itemizes short-term future cash flows based on the billing and payment data previously input into the system is a common feature of accounting software programs. Based on the dates these bills are due for payment, these systems examine the open accounts receivable and calculate the most probable cash receiving dates from clients. Similar analysis is performed on open accounts payable by the systems to identify the due dates for supplier bills. As far into the future as there is information in the system to contribute to the forecast, the information is often displayed in weekly time buckets. Although this information is based on thorough underlying data and ought to be quite reliable, it needs to be extensively augmented by human changes for a number of reasons [1]–[3].

Accounts Payable is absent. Because the accounting staff likes to match supplier invoices to supporting purchase and receiving documents before making any computer entries, many businesses do not input their accounts payable into the computer system until just before they are due for payment. There will not be enough accounts payable projected for payment by the computer since this information is not included in it.

missing payments for major projects. Since many of these purchases require either cash in advance or cash on delivery, or multiple periodic payments, the payments for capital expenditures may not be entered into the accounts payable system until the day they are due, which prevents the system from including them in anticipated cash flows. Timing of accounts receivable. There is always a mix of late payments brought on by various circumstances that delays cash collections, therefore the actual dates on which payments from consumers come will differ greatly from the projected dates categorized by the computer. Additionally, there are constantly postponed cash inflows from previous billings, whose reception the computer had already anticipated in a prior time frame, which would favorably affect the projected cash flow.

Payroll is not included. Many businesses utilize separate payroll software or services that are not connected with the rest of their accounting systems. These factors prevent the accounting software from being able to obtain any data on cash withdrawals for paying employee salaries and wages. Due to these factors, it is recommended to utilize the computer-generated cash prediction as a tool for creating a manual forecast that is more precise. A thorough report that details the precise time of each individual account payment and receivable may be useful in confirming the manually produced cash estimate.

DISCUSSION

Net Cash Flow and Cash Balances

An organization must carefully check its schedules to make sure that it has accounted for all expected financial inflows and outflows. You may determine the net cash inflow or outflow for each period by adding the schedules for cash receipts and cash disbursements. You must discover a way to deal with the financial deficits and make plans for them after you have determined the months in which you will struggle to satisfy your cash demands. This is covered in further detail. You could be possible to postpone capital investments or payment for goods before looking for more money to cover these needs in order to avoid experiencing negative cash flow months.

Knowing your projected cash situation each month enables you to make decisions about whether to make capital investments, how to invest extra money in the stock market, and other aspects of cash planning [4]–[6].

Variations from Expected Cash Flows

Simply said, a cash budget is an estimate of future cash flows. The actual cash flows and the predicted cash flows may differ significantly depending on the care taken in budget preparation, market volatility, and the quality of the data utilized. It is necessary to convey information regarding the range of potential outcomes when taking into account such uncertainty. Consideration of cash flows with just one set of assumptions may lead to an inaccurate view of the future and inaccurate information for planning.

It could be necessary to develop supplementary cash budgets using various anticipated sales levels in order to take variations from predicted cash flows into account. These cash budget

scenarios assist you in making emergency plans. You could also wish to create budgets for the best case, the most probable case, and the worst case scenarios.

One advantage of discussing the cash budget inside the company is that management is better equipped to prepare for potential outcomes and likely occurrences. These conversations often help management's outlook on the future become more focused. Finally, management will be motivated to understand the significance and effect of numerous events on the company's profitability.

Different situations may be evaluated using computers. The appendix to this document contains an example of a computer-generated budget of this kind. The cash budget may be created to allow for the simple replacement of various probabilities for outcomes, producing a likely cash budget more quickly and with more flexibility than by manually adjusting for all of the potential outcomes. In this way, instances may be replayed on a computer, enabling in-depth study of minimal cash levels, the maturity structure of necessary debt, the business's borrowing power, and its capacity to adapt to variations from projected results.

The answers to these and other questions will demonstrate the organization's adaptability and efficiency under various circumstances. You have the ability to take into account and be ready for a lot more eventualities by depending on several budgets with various ranges of potential outcomes. Cash, inventory, accounts receivable, accounts payable, and other short-term payables make up the bulk of your working capital.

The firm relies heavily on cash, which also acts as the primary means of exchange for all transactions. The predicted income, the risk involved, the investment's liquidity, and the transaction expenses related to exchanging the investment for cash should all be taken into account when investing excess or momentarily idle capital. There are several methods to invest extra money, and each one comes with its own set of restrictions and conditions, as well as a risk-reward ratio. Liquidity and transaction cost issues are prevalent in many of the restrictions.

A company that sells its goods across a wide region must be cautious about the time lags involved with the actual payment transfers. The expense of this float, or delay, is borne by the company. Concentration banking, lockboxes, and other techniques have all been created to cut down on the wait time and increase cash receiving speed. Additionally, you might postpone cash withdrawals to collect more interest [7]–[9].

A cash flow budget is a good idea. The easiest way to think about figuring out how cash moves throughout the company is as an actual monetary flow for each transaction. financial management should take into account how things are done and should scrutinize every financial outlay, asking whether it is necessary. Can we put it off? Is there a cheaper way to accomplish it?

You can gain from controlling your accounts receivable, just as you can with cash. Establishing a frequency distribution of the age of the receivables is among the simplest ways to see how successfully collections are being done. Instead than continuing to provide credit and tie up valuable assets, it can be more profitable to stop selling to past-due clients. An unpaid account receivable is a loan that is still due.

Your bill-paying policy is the opposing side. A chart that lists discounts taken and, more importantly, discounts not taken is another straightforward tool. A typical discount, 2/10, N/30, suggests that adding 20 more days to your payment terms will cost you 2 percent of the

invoice's total cost. This is equivalent to a yearly interest rate of 37%. Losing discounts might have significant financial consequences.

Timing is important while doing business. Many firms go through cycles that have an impact on their financial situation. If you account for these scheduling differences, you may be able to increase your interest earnings during times when you have extra money while still having enough cash on hand to avoid borrowing during lean financial times.

Example of Cash Flow in Appendix

We examine a common cash forecasting model in this appendix, which makes a number of assumptions to provide a monthly estimate of cash input and outflow. In the s designated, the model makes initial assumptions about sales volume, length of debt collection, and interest rates on debt. We then put this information together in "Sheet 4.1" to get at a net cash change every month. These assumptions are then utilized to arrive at anticipated cash receipts and cash disbursements per month, as shown in the sheets labelled "Sheet 2.1" and "Sheet 3.1." In the last , "Sheet 5.1," it is stated how much money the firm anticipates spending on working capital and other important accounts throughout the year. Managers can rapidly understand the causes of fluctuations in cash flows because to this format's concision and readability.

We will explain the rationale for utilizing each line item in the cash prediction as well as the methodology used to get the data. This line-by-line breakdown helps you fully comprehend the model so that you can replicate it. Following are the line-item descriptions.

Revenue

dollar amount of sales. The timing of cash collections and the size of probable cash outlays are subsequently determined by the cash forecast, which is where this information from the sales department's projection comes from. A business must be careful to put the most correct information available into this since it has such a significant impact on the cash prediction.

Cash sales and collections. The "cash sales" that are reported under the Cash Receipts Detail are calculated by multiplying this percentage by the total dollar sales in the line above. Given that clients make their payments at the moment they get their purchases, this indicates a cash inflow that occurs immediately.

30-day collections deadline. This percentage is used to calculate a fraction of the "Collections of Receivables" displayed under the Cash Receipts Detail by multiplying it by the first line's total dollar sales. This indicates the percentage of cash inflow that comes with a delay of around 30 days and the percentage of accounts receivable that is paid on time. Instead of utilizing the 30 days utilized in this example, firms with varied payment terms on their billings should use the number of days specified therein [10].

In 60 days, collections are due. With the exception of representing the pro-portion of accounts receivable that are collected later than usual, this percentage is similar to the one before it in terms of use. This often varies with how lenient a company's credit-granting policy is and in inverse relation to how aggressively it pursues delinquent accounts receivable.

proceeds from November sales. Any late cash receipts from prior months must be included in this line since the example cash projection we are analyzing starts with December. Since the typical pro-portion collected in 30 days is 40% and \$40,000 is noted as having been received in December, we may assume that the sales in November were \$100,000 based on the monetary amounts given in the example 34 % of average gross margin. The average monthly

cost of sales is represented by this proportion. The Total Purchases on Credit, which is the first line in the Assumptions, is derived using it in this model. For instance, if we increase the \$140,000 in sales from February by 70%, we get \$98,000 in total purchases for the month, to which we add \$94,000 in inventory building. Together, these purchases total \$192,000, which is the amount stated under February in the Assumptions' Total Purchases on Credit line.

Assumptions

total credit-card purchases. For the average gross margin percentage, the *s* in this line's derivation were explained. After a delay of one month, the total purchases number is utilized in the Cash Disbursements Detail under the Payment for Purchases on Credit line. This makes up the majority of the overall cash disbursements. This percentage is used to calculate the interest payment on the line of credit, which is a cash disbursement, later in the Cash Disbursements Detail.

December's line of credit balance. The line of credit balance is calculated on the final line of the cash projection; however, unless the model already has the amount from the prior year, this will be erroneous. Consequently, we include this initial debt the interest rate on long-term debt. The interest payment on the long-term loan, which is a cash disbursement, is calculated using this % later in the Cash Disbursements Detail. Because the majority of long-term debt is fixed at the start of the debt agreement, there is no need to adjust the rate throughout the year, so there is only one entry for this amount rather than an entry in each month of the year. This is in contrast to the interest rate for the line of credit.

Balance of long-term debt in December. The interest and principal payments on long-term debt are shown as separate line items in the Cash Disbursements Detail. Since it shows the overall amount the corporation still owes on its debt, those payments are determined from the December debt balance. Schedule for paying off long-term debt. The entire amount due to lenders each month to satisfy debt payment obligations on the long-term debt total indicated in the previous line item is shown in this line item. Any debt balloon payments should be placed in this line with the appropriate month, if there are any.

Minimum cash balance for accep. The management team has determined that this is the bare minimum of cash that must be maintained on hand at all times, maybe to cover immediate financial requirements. The Analysis of Cash Requirements' Cash Needs Comparison line must be calculated using this. Additionally, the same document's Ending Cash Balance line shows that we have borrowed sufficient money via the line of credit to guarantee that the cash balance will never fall below the required accep cash level.

Detail of Cash Receipts

Cash transactions. The *s* on this line represents the total amount of money that was paid out in cash for sales. As immediate payment for purchases made by clients, these cash receipts have no temporal lag. The *s* are obtained by multiplying the Total Dollar Sales line's sales by the proportion of cash sales for the same month and same period. The delayed cash revenues from sales over the previous two months are calculated on this line.

1. In this particular model, it is 50% of the sales from two months ago plus 40% of the sales from the month before.
2. Other. Cash inflows from a number of sources, including tax refunds and proceeds from asset sales, are always a possibility. These *s* are manually typed into this line.
3. total cash taken in. This line lists all of the cash receipts that have previously been mentioned in this.

Detail of Cash Disbursements

payment for credit-based transactions. The *s* in this line are taken straight from the Assumptions' Total Purchases on Credit line. However, since we are presuming that purchases purchased in the previous month had 30-day payment terms and needed to be paid in the month after, their time has been advanced by one. For instance, purchases of \$90,000 made in July do not show up as payments in the cash projection until August.

operational costs. The *s* on this line, which come from the yearly budget, represent the wages, facility charges, and other administrative expenditures necessary to manage the company.

Interest on long-term debt. This line item and the one after it, Principal, both depend on a spreadsheet command. The Long-Term Debt Payment Schedule line's and the Long-Term Debt Interest Rate line's values, both found in the Assumptions, are used to calculate the demand. The amount of the monthly debt payment that is attributed to interest costs may be calculated using the IPMT function in Microsoft Excel, and the principle payment is calculated by deducting the interest costs from the total debt payment, which is shown in the following line. If management is not concerned with the interest and principal components that make up a loan payment, these two lines may be combined.

On the credit line, interest is paid. The interest payment owed to the lender for the current month is calculated using the month's end line of credit amount from the previous month, multiplied by the applicable interest rate. For instance, the January debt total of \$58,250 is multiplied by the interest rate of 15% to arrive at the February interest payment, which results in an interest charge of \$728.

Revenue taxes. This line, which is often inserted straight from the yearly budget, includes the expected income tax payments for each quarter of the year Other. There are always extra cash payments that don't fit into the pre-listed, typical categories in this . These additional cash outflows are manually entered into this line item. Total payments made in cash. The monetary disbursements previously indicated in this line are all summarized in this line.

Evaluation of Cash Needs

Net income produced during this time. The *s* in this line are calculated by deducting the sums in the Cash Receipts Detail's Total Cash Receipts line from the amounts in the previous line's Total Cash Disbursements line.

starting cash position. This is taken from the line labeled "Ending Cash Balance," but just for the previous month. The Cash Balance Before Borrowings line is obtained by netting it against the line for Net Cash Generated This Period.

Cash in hand prior to borrowing. As was previously mentioned, this line is created by subtracting the Cash Balance Before Borrowings line from the Net Cash Generated This Period line. The resultant *s* reflect the influx or outflow of cash as a consequence of activities.

Cash calls for contrast. This line calculates the total amount of borrowings required or the amount of cash available for an extra debt payment by comparing the Cash Balance before Borrowings line to the Minimum Accep Cash Balance in the Assumptions. For instance, we have a baseline cash need of \$32,450 for the month of April, but we subsequently raise it to \$52,450 since we also need a \$20,000 internal cash buffer.

borrowings for the short term in the present. This computation is simply the inverse of the calculation in the line above. It lists a borrowing demand that perfectly corresponds to the cash need we just determined in the Cash Needs Comparison line. However, take notice that

while we are paying off the line of credit in August and have extra cash on hand, the amount of debt paid down in August is less than the amount of cash generated by operations.

total borrowings on short terms. The numbers on this line increase month after month. For instance, the total short-term borrowings are \$58,250 at the end of January, but they rise by \$47,478 in February, totaling \$105,728.

Cash balance at the end. This in this line are based on a minimum cash amount of \$20,000 or, if the line of credit has been paid off, a larger cash level. For instance, the line of credit was paid off in August, increasing the ending cash amount from \$20,000 to \$67,404. This additional \$47,404 will be added to the starting cash balance for the following month.

CONCLUSION

In conclusion, for efficient cash management and financial planning, a calendar of cash disbursements is a crucial instrument. Businesses may anticipate liquidity demands, utilize resources effectively, and maintain solid financial stability by planning and predicting cash outflows. Organizations can respond to changing conditions, manage cash flow, and guarantee the availability of money to satisfy financial responsibilities by regularly reviewing and revising the calendar. The also emphasizes the need of routinely checking and revising the cash distributions schedule. It is critical to update the schedule to account for changes in the situation as they occur, such as modifications to company operations, unanticipated costs, or changes in the state of the economy. This continuing oversight guarantees that the cash distribution projection is correct and keeps pace with the organization's changing demands.

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CHAPTER 9

BALANCES IN KEY ACCOUNTS

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ABSTRACT:

Balances in key accounts are a critical aspect of financial management, providing insights into the financial position and performance of businesses. This abstract explores the significance of monitoring and analyzing balances in key accounts, highlighting their importance in decision-making, financial reporting, and assessing organizational health. Key accounts refer to specific financial accounts that play a significant role in a company's operations and financial statements. These accounts include assets, liabilities, equity, revenue, and expenses that are essential for evaluating the financial health and performance of an organization. Monitoring and analyzing the balances in these accounts enable businesses to assess their liquidity, solvency, profitability, and overall financial stability.

KEYWORDS:

Cash Outflows, Credit Terms, Disbursement Period, Expense Payments, Financial Obligations, Procurement Process.

INTRODUCTION

Cash. The s in this line are taken straight from the previous line's Ending Cash Balance. Its role in this is to be included among the major accounts that have the most impact on monthly cash flows. Receivables in credit. The sales and collections at the top are used to calculate the s on this line. The December receivable, for instance, is made up of two computations. Assuming that just 10% of purchases are made with cash, the first represents 90 percent of the current month's sales. The balance comes from sales from the prior month, which in this case represent 40% of November sales. We arrive at an anticipated accounts receivable amount of \$152,900 after combining the two computations.

Inventory. The s on this line is manually calculated and often imported from the yearly budget's production or inventory budget page. The inventory level may not always directly correlate to monthly sales levels since many manufacturing organizations will increase inventory levels before the start of their major selling seasons. As stated previously in the bullet for that line, this line item is taken into account in the Cash Disbursements Detail computation for the Payment for Purchases on Credit line [1]–[3].

Payable accounts. The s on this line shows the total source of funds from suppliers that will balance cash used by the other line items in this and are taken straight from the Total Purchases on Credit line in the Assumptions the credit lines. The data on this line is taken straight from the line above that lists all short-term borrowings. Its role in this is to be included among the major accounts that have the most impact on monthly cash flows. To fully comprehend how a cash flow projection works, carefully go through the following cash flow example. If there are any areas of confusion, refer to the explanations. Because cash flow is a corporation's lifeblood and may quickly trigger a cash flow coronary that ends in a business heart attack, we strongly advise every company to develop a cash flow forecast and to update and review it on a frequent basis.

New Businesses

Many new enterprises start their operations using "stolen funds," or money that was taken from other regular financial activities and allocated to the initiative without proper justification. The capital needed to launch a new firm often originates from personal funds. Even in bigger companies, the first capital may be obtained by theft. As a result, they can show up in a different budget that is not specifically designated for the project to which they are applied.

Personal loans provided by people using their houses and other types of property as collateral might be another source of stolen money. Finally, investments made by, or loans from, friends or family may be the final source of venture capital for a small business.

In any case, these funds are an unreliable source of long-term or ongoing finance. Additional funding from these sources is generally not going to be available if firms try to expand for ongoing operations and expansion. For the purpose of supporting operations, equipment, inventories, and accounts receivable, more money and resources will be required. When they find out how much money is required to maintain accounts receivable, many individuals with new firms are shocked. Accounts receivable may seem to be eating up cash as the company expands.

We will talk about sources of equity financing later on. At this point, it's crucial to remind out that it is often preferable to borrow money rather than look for funding from outside equity sources. Entrepreneurial control is often diluted by equity sources, which is a serious potential issue for smaller enterprises.

For at least two reasons, debt may be the most advantageous method of financing:

1. It may be affordable. Before-tax money is used to pay interest on debt. Equity dividends are paid in after-tax dollars. Dividend payments, on the other hand, are optional, whereas interest payments are required.
2. Debt increases the impact of income. If the company is profitable "after debt service," the earnings available to investors grow as the ratio of debt to equity rises for a certain level of profits. In other words, when debt has been paid off, the extra profits from the capital flow to the investors rather than the creditors [4]–[6].

Working capital and fixed assets both equal zero

It is important to mention a few strategies for avoiding the need for funding before we dig into the different types of finance. The idea of zero working capital, or the situation in which a company's investments in accounts receivable, inventory, and accounts payable balance out to zero, is one of the greatest. This is made feasible by applying various management strategies to each of these working capital components:

Receivables in credit. Managing accounts receivable aims to reduce the time it takes for clients to pay the business. There are several methods for doing this. One strategy is to employ a highly aggressive collections staff to get in touch with consumers regarding past-due payments and make sure they are paid on time. Another strategy is to make the credit approval process more stringent, keeping prospective clients with even marginally weak credit histories on a very short credit leash or denying them credit altogether. The typical customer payment periods might even be dramatically shortened to the point of necessitating upfront cash payments as a last resort.

Inventory. Inventory management is to keep it to a minimum, which may be done in two different ways. One is to completely outsource the firm's manufacturing process and have the production provider drop ship products to the company's clients, preventing the company from ever having to finance any inventory or work-in-progress purchases. Instead, it pays the supplier once final products are sent to its clients. Utilizing a just-in-time production planning system is an alternative strategy. Through a variety of methods, including frequent small supplier deliveries directly to the production line, kanban cards to manage the flow of parts, and building to specific customer orders, the inventory levels required to maintain a proper flow of inventory are reduced to the bare minimum under this concept.

Payable accounts. To delay paying suppliers as long as possible is the aim of accounts payable management. Regardless of the supplier payment terms, delaying payments is one approach to do this. However, this will quickly annoy suppliers, who may stop extending credit to any business that repeatedly violates the agreed-upon payment conditions. A better strategy is to officially bargain with them for longer payment periods, maybe in return for somewhat higher costs. For instance, terms of 30 days at a price point of \$1.00 per unit may be changed to terms of 60 days at a new price of \$1.02 per unit, which would pay the cost of the supplier for the money that has basically been borrowed to the business. Although there is a fee involved with extending supplier terms, for a business with few alternative funding options, this may be a good bargain.

DISCUSSION

If a corporation understands that it accounts for a sizable portion of its suppliers' revenues, giving it significant negotiation influence over them, it will be considerably simpler to compel longer payment terms from them. Customers must agree to abide by the short payment terms in the same way if a business offers a unique product or service that they cannot easily get elsewhere. The only alternative available for a business if it lacks these advantages or if competitive pressures prevent it from using them is inventory reduction since this is an internal problem unrelated to the whims of suppliers and consumers.

The working capital position of Dell Computer Company is negative, indicating that the company generates profits from its working capital. This is accomplished by only having one or two days' worth of inventory on hand and only buying from suppliers when it has specific client orders in hand. Additionally, Dell offers lengthier payment terms to its suppliers than it does to its consumers, many of whom pay using credit cards. As a consequence, this quickly expanding business is in the fortunate position of being able to both ignore and profit from the financial demands that always accompany expansion [7]–[9].

Working capital is not the only financial loss a business may encounter. Additionally, it must spend money on permanent assets like vehicles and warehouses for the logistics department, office furniture for its employees, and production equipment for the manufacturing activity. There are a few strategies to lessen or even totally eliminate these expenses, even though they can seem to be inevitable necessities that come with running a company.

Operational centralized. A corporation must make fixed asset investments for each additional branch office or distribution warehouse it opens. This is especially problematic when more distribution warehouses are built since a business must cover both the building's cost and the cost of the product stored there. Even if there is a cost involved with not decentralizing, it is preferable for a corporation that is short for funds to centralize almost all activities. By switching to a central warehouse, for instance, the cost of a subsidiary warehouse will be eliminated, but the cost of deliveries from the central warehouse will go up since shipments will now have to go farther.

Equipment and space may be rented or leased. A firm has a wide range of financing options thanks to the abundance of leasing companies on the market today, as well as the fact that manufacturers often finance the leasing of their own equipment. This enables them to avoid having to buy their facilities and equipment. These agreements may be a capital lease, where the provisions of the lease agreement anticipate that the business will take control of the asset being leased at the conclusion of the payment period, or a straight rental, where the firm has no ownership stake in the assets it utilizes. Due to the maintenance, interest, and profit expenses of the lease provider, as well as its profit, the sum of the rental or lease payments in any of these scenarios will be more than the cost of the asset if a corporation opted to buy it. The key benefit is that there is no need for a large lump sum payment at the time of asset purchase.

Outsource your work. Every department has some work that may be contracted out to a supplier. You may make a compelling argument for outsourcing because it decreases the requirement for fixed assets, even when the major motivations are more operational and strategic in nature. A business may save money on office space, furniture, and computer systems by outsourcing the tasks that would otherwise necessitate the hire of clerical workers. Additionally, outsourcing production will reduce the significant fixed asset investment that is typical for most manufacturing facilities, but moving the distribution function to a supplier might totally eliminate a company's investment in trucks and warehousing equipment. Similar to this, moving a company's computer operations to a supplier's data processing facility would reduce the company's potentially sizable investment in its own data processing facility. A business may save not just the initial investment in fixed assets but also the updating and replacement of those same assets by adopting outsourcing. Use alliances. A firm may be able to do business using the assets of another company if it can form a partnership with that company. For instance, if a drug research company has a novel medication to sell, it should collaborate with an existing pharmaceutical company rather than investing in a production facility of its own. This agreement benefits both parties: While the other firm can make better use of its current assets, the research company can avoid making new capital investments in fixed assets. A business may leverage a particularly valuable patent or technique it introduces to a partnership to get a sizable cut of the future partnership revenues.

Many of the situations on this list call for the elimination of fixed assets, although doing so would result in higher variable costs. An outlying distribution warehouse was eliminated in return for higher distribution expenses, equipment was rented rather than purchased, and services were outsourced rather than tried to be operated internally. For a variety of companies, these are acceptable ways.

One of them is that avoiding the fixed expenses related to a fixed-asset acquisition would keep a company's overall fixed costs lower than would otherwise be the case, allowing it to have a lower break-even point, allowing it to still generate a profit even if sales suffer a downturn. Additionally, if there are few and insufficient financing sources, the additional variable expenses won't seem like much of an issue when compared to the money that a company has just saved by forgoing the purchase of fixed assets.

Finally, by consolidating activities and using outsourcing, less management time will be spent on distant sites that are no longer needed or departments that have been moved to a supplier. This is a significant benefit for smaller businesses with a shortage of management. Because of this, it is not recommended to use some of the fixed-asset reduction alternatives discussed here because of their higher variable costs [10].

Financing Options

The two types of capital investment that are often used to fund enterprises are debt and equity. There is a range of options as varied and imaginative as human imagination within these two broad categories. Debt is the original and most popular kind of finance.

Debt

Borrowing may be organized as debt with short-, medium-, or long-term repayment options. It may be unsecured or secured by the company's or its owners' assets. The parameters of the commitment and loan repayment are often outlined by conditions or covenants.

In general, short-term debt is designed to be self-liquidating, meaning that the asset it is used to buy will provide enough cash flow within a year to pay it off. Inventory expansions and seasonal increases in accounts receivable are often financed using it. Short-term, unsecured finance may be obtained through sources including trade credit, lines of credit, and commercial paper. Some short-term, unsecured funding options call for further compensation. For instance, a bank can demand that a compensatory amount be placed in order to open a line of credit. Many banks demand that you keep a balance of, say, 15%, or \$30,000, in a demand-deposit account throughout the course of the year in order to create a line of credit for \$200,000 in their institution. The cost of the extra amount is an additional cost of borrowing if the compensatory balance is more than the amount you would typically keep on deposit. In the previous example, if you wanted to borrow \$200,000 and the bank's rate was 11%, you would only have \$170,000 at your disposal due to the compensating amount of \$30,000 higher than you typically hold on deposit. The nominal yearly cost is equal to \$24,000, or 12 percent of \$200,000, every year.

Loans with Security and Intermediate Financing

Because they lack a track record, many new businesses find it difficult to acquire finance on an unsecured arrangement. Banks look at your capacity for cash flow first. If it doesn't work, the security of the promised collateral for payment assurance must be taken into account. To provide a margin of safety, the lender will look for collateral that is worth more than the loan amount. Because the asset may be further undervalued and sold more rapidly to cover the call on the loan, the collateral is more liquid the higher the margin of safety.

In order to secure the loan, one strategy that may be used is borrowing against accounts receivable. The debt owed by the borrower for products or services rendered to customers serves as collateral to the lender. The processing of the collateral is expensive from the lender's perspective, and fraud and default are risks. As a result, using this technique of borrowing could be pricey.

As a result of the lower interest rate given by commercial banks compared to financing businesses, loans secured by accounts receivable are often obtained via them. The lender reduces the face value of the receivables and could even exclude those that have bad credit, are unrated, or have a sluggish payment rate from consideration.

The quantity or amount of each receivable is another aspect that the lender is concerned about. There is a trade-off: the likelihood of default increases with the size of the receivable. But the expense of administration is lower since there are fewer accounts to keep track of. Administrative expenses are greater for several small accounts, but the aggregate effect of any one default is smaller.

Because more security is added to the base as new accounts are added and allocated, accounts receivable financing is a continuous financing arrangement. Old receivables are replaced with new ones, and the loan amount may alter as the base changes. For expanding businesses with expanding receivables, this kind of financing is beneficial.

Another method of financing is the sale or factoring of receivables. When receivables are sold, the buyer takes the position of the seller, and the buyers of the receivables are paid by the consumers. Receivables may be sold either with or without recourse to the seller. The discounting will be substantially greater when the sale of receivables is made without recourse than when the buyer of the receivable still has a chance of recovering money from the seller. Receivables may sometimes be sold "without notification." Customers in this situation continue to make payments to the supplier of products or services who serves as the buyer's agent.

The issue with selling accounts receivable is that struggling businesses often do it. If you try to sell accounts receivable while not in financial distress, you run the risk of sending the wrong message to your clients and lending institutions. Despite the gains from the sale that outweigh it, this can have a negative impact. Selling their accounts might result in you losing clients. Sometimes companies that buy accounts receivable don't treat clients equally when they implement collection procedures. Their strict collection methods are founded only on the idea of making money. Maintaining long-term business relationships with your clients is important to you if you want to successfully collect from them. Your aims do not align with those of the collection division of the receivables buyers.

Accounts receivable finance is expensive, as was previously said. Receivables are also highly costly to sell or factor for a number of reasons:

1. The company buying receivables spends a lot of money collecting them.
2. It also has upfront expenses when determining the value of the receivables. The discount rate for the receivables is where the cost of this analysis must be repaid.
3. The risk of noncollections lies with the collection agency. The acquiring company will further discount the receivables to account for the proportion of prospective bad debt since there is a possibility of noncollections.
4. The selling business may still have the "worst" receivables on its books if the acquiring firm declines to acquire high-risk-of-default accounts.

Loans for inventory. Stocks amount to a big investment. Because of the perceived ease of liquidation, the lender providing a loan secured by inventory often underestimates the market worth of the inventory. An inventory-secured loan may have an advance of up to 90%. However, lenders would rather have the loan returned than having to attempt to foreclose on the inventory since they do not want to be in the business of making sales. Depending on how much merchandise is being purchased, these loans may be recurring and of varying amounts.

Contingent Financing. In general, long-term financing is seen as an equity-based investment. Investment bankers are often needed to acquire such investments since they serve as the intermediaries between the company issuing the securities and the sources of capital looking to invest. Some of the risks connected with the sale of a company's offering are assumed by investment bankers. The usage of investment banking companies is justified by their experience.

Bidding and negotiation are the two approaches used by investment banks to acquire offers. The investment banker earns a profit in the issuance in either scenario by the difference between the selling price and the price at which the banker buys the offering. This margin

might be minimal—typically less than 1% of the offering price. Underwriting is the process that absolves the issuing business of the risk associated with selling the issue.

Adaptable debt. Bonds that are convertible into common stock at a certain ratio may be issued by the company. Convertible debt is opposed for a number of reasons, one of which being the potential for future equity dilution. Corporations have other conversion alternatives than converting long-term debt to common stock. For instance, short-term debt might become long-term debt or the other way around. Despite the potentially harmful effects of the latter conversion, it is essentially no different from a creditor accelerating payments as a result of breaching a loan covenant.

Common Shares

A right of ownership in the company granted to investors in exchange for their capital contribution is represented by common stock. The stock certificate and the market both make comments about the value of common stock. A par value, a stated value, or the fact that the stock was issued without a par or stated value may all be seen on the stock certificate. These values have implications for the company's minimum legal capital. Because different state laws apply in certain circumstances, a competent corporate attorney should be contacted for information on applicable legislation.

The market value, or what someone will pay to buy a share of the stock, is the real worth that matters. This perception of value determines how much ownership you must give up in order to get enough money. The benefit of common stock is that the company is not obligated to pay dividends in any particular year. The board of directors has the authority to distribute dividends, provided the business is profitable and there are enough extra funds to cover the payout.

A stock has no maturity date, in contrast to debt. Common stock serves as the company's financial safety net as a result. The people who bear the losses and get the rewards during the good times are the common shareholders. Ownership of common stock is seen as residual ownership and should be viewed as a hazardous investment. Businesses may have almost equivalent yields but different dividend payout ratios and growth rates. As a result, the dividend alone cannot accurately reflect the true cost of common stock; also take into account the rate of increase in stock value.

Favored Stock

Preferred stock, which is sometimes referred to as a compromise investment, combines some of the benefits of both debt and common stock. Under the following circumstances, a company's interest in selling preferred shares often increases:

1. The business wants to employ more leverage but is unable to do so.
2. The corporation wants greater stock ownership but does not want to erode the rights of present ordinary shareholders.
3. The business could decide to sell preferred shares in any scenario. The following are some traits that make preferred stock unique.
4. The dividend is optional and only paid when announced by the board, despite the fact that it may have a set rate of return.

Sinking fund provisions for the purchase of preferred shares are possible. In the event of a liquidation, debt holders have a superior claim to assets and have first dibs on profits. Preferred investors' claims, however, are stronger than those of regular stockholders.

The amount of profits required to pay debt service and preferred stock distributions is impacted by taxes. However, since they are taxed differently, they have differing effects on earnings. Let's say the appropriate corporation tax rate is 46% and the return on both debt and preferred stock is 12%. The company has to make 12 percent before taxes in order to pay the debt's 12 percent interest rate. Debt interest is paid in pre-tax money. The company must have after-tax profits of 12 percent in order to pay the 12 percent dividend for preferred shares.

For a 12 percent after-tax income, 22.2 percent—or 12 percent—must be paid in before-tax funds. Because dividends are paid in after-tax funds, the company must earn more than it must to pay an investor a dividend of equivalent value than it must to pay interest. The amount of dividend given will be significantly influenced by the tax rate the firm pays for two reasons:

1. The corporation will have more spare cash to reinvest and pay dividends the lower its actual tax rate.
2. The more freedom a business has to develop dividend policies that appeal to investors and raise the company's goodwill and value, the more flexibility it will have.

CONCLUSION

In conclusion, for efficient financial management and decision-making, vital account balances must be tracked and analyzed. Businesses may examine their financial situation, evaluate performance, and make well-informed strategic choices by carefully examining these balances. The overall financial health of businesses is improved through accurate financial reporting and analysis of important account balances, which promote openness and aid in compliance. Businesses are able to react to shifting market circumstances, pinpoint areas for development, and achieve long-term success by routinely monitoring and analyzing important account balances. The function of financial analysis in assessing balances in important accounts. The importance of these balances may be interpreted with the use of financial ratios, trend analysis, and benchmarking tools, which allow comparisons to organizational goals or industry norms. Finding areas of strength, need for development, and possible hazards or possibilities is made easier with the help of critical account balance analysis.

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CHAPTER 10

PRIVATE PLACEMENT OF STOCK: AN ANALYSIS

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ABSTRACT:

Private placement of stock is a method utilized by companies to raise capital from select investors in a non-public offering. This abstract explores the significance of private placements, highlighting their benefits, regulatory considerations, and potential implications for businesses. Private placements involve the sale of securities, typically stocks or bonds, to a limited number of qualified investors. The abstract discusses the advantages of private placements, including the ability to raise funds quickly, access specialized investors, and maintain control and confidentiality. Private placements also offer flexibility in structuring the offering, allowing companies to negotiate terms and conditions with investors based on their specific needs.

KEYWORDS:

Accredited Investors, Capital Raising, Equity Financing, Institutional Investors, Investment Memorandum, Offering Memorandum, Private Equity.

INTRODUCTION

If a company's debt to equity ratio is too high or there are no available sources of new loans, the owner may be forced to look for more stock. A private corporation does this by selling shares to a small group of people or companies as part of a private stock placement. Although it could be conceivable for management of the firm to sell informal shares to friends and family, this is at most a small source of equity. You must go beyond your social network when additional equity is required.

A formal stock private placement could need the assistance of an investment banker with extensive contacts. To make sure that the firm is an appropriate investment vehicle for prospective investors, a reputable investment banker will need to do a thorough analysis of it. The banker will next draft an offering memorandum outlining the kind of stock to be issued, its price, the business, and its intended purpose for the proceeds. Following investment meetings when the management team makes presentations to investors, the offering memorandum will be issued to a group of prospective investors. If all goes according to plan, the investment banker will arrange a close at which the investors will pay the firm for the offered shares [1]–[3].

Easy enough? Not at all. It might be challenging to find the ideal investment banker that gets along well with the business. Writing an offering memorandum can also be challenging. Not to mention the fee charged by the investment banker. The Lehman Formula, which is 5 percent of the first \$1 million raised, 4 percent of the second \$1 million, 3 percent of the third \$1 million, 2 percent of the fourth \$1 million, and 1 percent of any monies generated over that level, may vary significantly, but anticipate some variance. For instance, an investment banker will be paid \$150,000 if they successfully fund \$5 million for the business. Additionally, a banker may ask for a big number of warrants when buying firm shares in order to profit from any possible future growth in the company's worth.

Trading expenses for stock

Equity is often purchased to cover urgent costs. Getting the equity from one party and utilizing the money that results to pay the suppliers is a two-step procedure. By giving stock directly to suppliers in return for their services, you may sometimes speed up this process. Although this may be a good approach to pay off debt, it also makes it evident to suppliers that the business is running low on cash. As a result, this strategy often only succeeds when suppliers have already delivered the firm their invoices and the company reply by negotiating a stock payment in place of cash. It is doubtful that a company will have many takers if it attempts to persuade suppliers to accept shares as payment in advance.

Stock Warrants

A stock warrant is a legal instrument that grants the owner the authority to purchase a specified number of shares of a firm at a specific price for a set period of time, after which it expires and is no longer valid. Typically, the warrant's stock purchase price is more than the market price at the time of issue.

In addition to being linked to debt instruments to make them seem more appealing investments to purchasers, a stock warrant may be used as payment in lieu of cash for services rendered by other entities to the firm. For instance, let's imagine you attach stock warrants to a new bond offering in order to borrow financing at a very cheap interest rate. Due to the value that investors place on the connected warrants, they choose to buy the bonds at a lower effective interest rate than they otherwise would have [4]–[6].

Rarely does a corporation sell stock warrants on its own without expecting to get a significant sum of money in return. As a result, this is not a suitable method to receive equity investment directly; instead, it is used to lower the cost of other forms of funding or to lower or eliminate certain supplier fees.

subscriptions to stocks

Stock subscriptions let customers or staff members provide a business a regular sum over time in return for shares of stock. A receivable is established for the whole amount anticipated in such an agreement, with an offset to a common stock subscription account. The money is taken out of these accounts and transferred to the common stock accounts after the cash is collected and the stock is issued.

Employee stock subscriptions are possible, albeit the amount invested is often modest and they are not a substantial source of fresh equity funding. When used with investors, it usually entails an up-front promise to make payments to the firm as part of a new share sale and hence tends to happen over a short time period rather than include tiny incremental payments over a lengthy time period.

How to Get a Loan from a Bank

A borrower who is a company and is applying for a loan for the first time has more reporting obligations and requirements than a borrower who has been working regularly with a bank for short-term financing. A loan request is significantly easier to be approved for after a bank has had positive experiences with a borrower. Usually, for an application that is already on file, the borrower merely has to provide updated information. Additionally, information that isn't usually represented in the financial accounts is of importance to bankers. For instance, they are interested in learning about the borrower's organizational strength, experience, and reputation. In order to assess the borrower's creditworthiness, the bank will often also need

the completion of a few standard reporting forms in addition to this reputational information. We'll talk about a few of these filing requirements next.

Statements of Projected Cash Flow

The anticipated cash flow statement is one of the best tools for figuring out the required loan amount and payback schedule. The predictions need to identify the key presumptions that management relied on to create the cash estimate. In general, preparation should be based on historical performance, but it should be modified to take into account current trends. Pro forma and an attrition allowance are two methods of adjusting. An attrition adjustment may be used to highlight recurrent changes and costs. Pro forma adjustments are used to reflect changes in a company's forecasted cash flow that are nonrecurring. A 7 percent yearly rise in labor costs, for instance, would be recognized as an extra allowance and added to other recurring expenditures to represent an overall percentage change to spending. Nonrecurring costs may be thought of as one-item adjustments to one-off costs. The payment of damages owing to a loss in a personal injury lawsuit can be an example of a common nonrecurring item. It is unlikely that the business will lose a litigation of this kind in the future. It should be handled as an attrition allowance if it does [7]–[9].

An estimate of monthly revenues from all sources, including cash sales, accounts receivable, miscellaneous income, and loans, should be included in the cash flow statement. Capital improvement, accounts payable, taxes, wages, other operational costs, and loan repayment should all be included in the expected costs.

DISCUSSION

Monetary Trends

Bankers are interested in various financial patterns as well as cash flow when examining a company's financial statistics. The comparison of this year's ratios to those from prior years may be more interesting than the ratios themselves. How does your financial situation compare to the state of the national economy as a whole and to the sector in which the borrower operates? Banks often enter all of the crucial balance sheet and operating s onto a spreadsheet in order to maintain track of customers' financial movements.

Some of these significant financial factors may be computed by banks:

1. Profitability
2. Working capital net
3. Current ratio or working capital
4. Quick ratio net
5. Debt to Net Worth Ratio
6. Days in which sales are recorded as receivable
7. Days since purchases were made in accounts payable
8. number of days' worth of inventory supply
9. Here, the relevant ones are defined and briefly covered.

Profitability. Profitability is a metric used to assess how well a company has been doing. At least three ratios may provide useful estimates of a company's profitability:

1. Net income to net revenue
2. Gross margin to sales
3. Net income to total assets

A corporation must be able to generate profits in a way that is consistent with the capital invested and the anticipated expansion. When a firm demonstrates that it has a large net profit, it not only has money to pay off debt but also new cash to reinvest and support its own expansion. These are signs of effective management. The profitability from year to year and any ratio patterns should be noted by a bank.

Additionally, bankers will check to determine whether the company's working capital is receiving more net profits. They want to know whether earnings have to be continually invested in fixed assets. Additionally, a business that distributes all of its income as dividends and wages won't be able to demonstrate net worth increase from this source.

Bankers often add non-cash elements like depreciation back to the company's net profit to determine the cash flow or debt-service funding available from earnings. Here, caution must be stressed since the bank may be turning to monies designated as a "reserve" for equipment repair. Enlightened bankers will also care about replacing worn-out assets, even if the bank may in the worst scenario be interested in the prospective use of those money for debt payment. The finest bankers care about the demands of the company over the long term in addition to advancing their personal objectives.

Working capital net

The excess of the company's current assets over its current liabilities is known as its net working capital, and it is an important component to take into account when granting credit. A bank anticipates that a business will provide enough of its regular working capital to maintain reasonable levels of inventory, accounts receivable, and other current assets. The organization must be able to fulfill these responsibilities during the year's off-peak sales periods. The bank thus anticipates that the firm will be able to pay its present obligations within the normal terms of trade, even during lean periods.

Work in Progress or Current Ratio

The proportion of current assets to current liabilities is shown below. Even more so than in the working capital budget, it is crucial in the bank's evaluation. For instance, Company A has \$100,000 in net working capital, \$200,000 in current assets, and \$100,000 in current liabilities. The working capital ratio is $\$200k/\$100k$, or 2:1. Company B has \$100,000 in net working capital, \$500,000 in current assets, and \$400,000 in current liabilities. The working capital ratio is 1.25 to 1, or \$500k to \$400k.

Both businesses have \$100,000 in net working capital, but the first is in a better position since, in the event that it has to liquidate assets, it has \$2 in current assets to cover every \$1 in current obligations. Only \$1.25 is available for the second firm to cover its \$1.00 in current obligations. Accordingly, firm A would be seen to be in a considerably stronger financial situation based on this ratio. Quick Ratio Net. The net quick ratio is another metric that lenders use to assess a company's ability to make payments on time. This ratio is calculated by dividing the sum of current obligations by the sum of cash, short-term marketable securities, and net receivables. This is a straightforward way to gauge a company's liquidity or debt-paying capacity.

A bank will be more concerned about the pattern created by many years' worth of net quick ratios, to reiterate. This will demonstrate to the bank if the company's liquidity is expanding or declining, and therefore, its capacity to pay its loan. This ratio is an excellent predictor of the company's relative short-term liquidity risk since cash and accounts receivable are much more current than inventories.

Debt to Net Worth Ratio. The ratio of total debt, including current obligations, to net value is another way to assess a company's ability to fund operations. Again, banks often depend on both the ratio's overall trend and the particular itself. Days Sales Pending in Accounts Receivable. The following presumptions are used to calculate this number:

1. a steady stream of sales
2. consistency in the collection of unpaid debt

The concern here is how long on average it takes the business to collect its accounts in comparison to other businesses in the same sector. The number of days abnormal for the conditions of the sale and those in the sector will be taken into account by the banks. For instance: Assume a company has \$20,000 in average daily credit sales and \$1.8 million in accounts receivable. The sale has a 30-day cooling off period. The \$1.8 million in accounts receivable must first be divided by the \$20,000 average daily credit sales. This shows that there are still 90 days' worth of sales in accounts receivable and that it is taking longer than the typical 30-day periods to collect those accounts. In reality, this business collects its receivables on average 60 days after the due date has passed. This is a period of time that is 60 days longer than what the pricing policy permits, and it is presumably having a significant impact on cash flow [10], [11].

This suggests that management may not be handling its accounts receivable in a responsible manner. This could, however, be the norm for the sector. If this applies to you, you should aim to enhance your accounts receivable collection policy by taking some action. You extended the length of the loans you made to your clients when you fixed the conditions of the sale by an average of 60 days.

Days when Purchases Have Been Made in Accounts Payable. This is calculated by dividing the accounts due by the daily average of purchases. The number of days purchases in accounts payable is 30, for instance, if the average daily purchases are \$5,000 and there are \$150,000 in accounts payable. A lender may immediately determine from this if the firm pays its invoices on time. It is necessary to explain major departures from customary commercial terms. If the business is operating on a net 30-day cycle, it is likely fulfilling its commitments and receiving all the discounts to which it is entitled under its purchase agreements. Further investigation is necessary for that query. The ratio is useful, but you shouldn't only focus on the average payments; you should also pay attention to the accounts due for which discounts were lost.

The business has to check how old its payables are and keep track of any missed discounts. Days of Inventory Supply in Number. Assuming an equal flow of sales, this amount is calculated by dividing the cost of the inventory by the average daily cost of sales. The banker receives the response and learns how many days on average it takes the business to turn over inventory. Excess inventory is what the bank is searching for in this case. This ratio will vary significantly from company to company. The average inventory cycle for supermarkets is fairly quick, whereas the cycle for car dealers is longer.

Other Supplemental Data

Other details that have to be taken into account for inclusion in the loan proposal presentation include:

1. a review of product line profitability, if such data is available and appropriate.
2. Unusual past or future occurrences that have an impact on the business.

3. sales concentration, if any, among a select group of clients. This demonstrates the bank's dependence on a small number of loyal clients. Sales that are heavily concentrated among a small number of customers, as in the aerospace sector, may be linked with a greater level of risk.
4. analysis of how unique circumstances, such the last-in, first-out technique of inventory appraisal, may affect the business.

Words of Credit

A business may not wish to borrow any money from a bank, but a potential subcontractor or raw material supplier could be concerned about the company's trustworthiness. Purchasing a letter of credit is a possible low-cost way to increase supposed creditworthiness. Some suppliers may decline to supply materials to a firm that is new or that is testing the waters with a new product or product line. They would rather have the business demonstrate its creditworthiness by demonstrating a history of on-time payments. Obtaining a letter of credit and, in effect, using a bank's strong credit rating might be a solution to this issue. The business is stating, "If we don't pay you, the bank will," by securing a letter of credit. The bank might then pursue the corporation for payment.

The firm is improving the bank's creditworthiness in this manner. A letter of credit typically has a fee of 1% of the amount the business intends to advance and has a validity period of one year. The actual cost of a letter of credit is determined by how often the business plans to make purchases utilizing the document as a payment guarantee. Consider a scenario where a raw material supplier requests payment net 30 days but is ready to extend credit for 90 days in exchange for a letter of credit from the company. Assume that the letter of credit will cost 1% as well. Assuming the letter of credit and the supplies bought are the same amount, the corporation is getting money advanced for two more months at the expense of 1 percent, which is the same as borrowing money at 6 percent annually. However, the business continues to benefit from that one-time payment of 1% each time it utilizes the letter of credit's guarantee during the year. The cost of the guarantee decreases as the company utilizes the letter of credit more often.

The business could think about forming partnerships. In essence, joint ventures are a method through which a business modifies its organizational structure. To enhance the market image to lenders and investors, the financial creditworthiness of a collective company is still utilised in this kind of financing. The joint venture entity is supported financially by two or more entities.

Various Debt Financing Sources

A company may think of a variety of financial institutions as potential lenders. The significant and well-known ones are:

Banks. The majority of the credit that commercial banks and savings and loan associations have available is given to enterprises.

commercial finance institutions. The majority of commercial finance firms have a niche, such discounting accounts receivable. Finance businesses often have higher interest rates since, as a source of funding, they look to be institutions of last resort. Commercial finance organizations are a possible last resort for businesses that have exhausted all other options for financing insurance organizations. Many large insurance firms engage in direct and indirect investment banking. Insurance firms often lend large sums of money. The typical insurance business borrower is thus a large corporation. Smaller businesses are rarely given credit as

often or easily as larger ones. The preferred transaction size for insurance firms is \$1 million or greater. Some insurance firms are only drawn to deals worth more than \$5 million.

brokering firms. Financial products ranging from bonds and commercial paper to private loans from individual investors are offered or arranged by several stock brokerage companies. As their name implies, brokerage firms act as middlemen between sources of funding and ultimate consumers.

speculative bankers. Any of the lenders that were previously mentioned might do investment banking. They often make it easier to sell security problems by facilitating a contract or a bidding procedure. They sell securities using their knowledge of the market and relationships for a fee.

In certain financing arrangements, the lender acquires equity in the form of a loan or acquires an option or warrant to purchase shares should the business expand. This is referred to as a "kicker" or "sweetener," and it is often seen by borrowers as giving up some potential future control over the company in return for cost management in the present. Many investors want to influence the course and character of the firm financially or managerially. When a firm receives a large loan, it often needs to cede some level of control.

investors in startups. When they invest money, arrange loans, and provide managerial guidance to help a firm develop significantly, venture capitalists may qualify as investment bankers. During the course of their expansion, a lot of venture-backed businesses go from being tightly held enterprises to public corporations.

Federal grants and loans. There are several lending programs available from the federal government. Some loans are direct, while others are sponsored or insured by the government and distributed via banks. Smaller firms may apply for financing from the Small Business Administration. The federal government also runs a funding program for small businesses looking to innovate. These awards are designed to help small enterprises get funding for the development of certain concepts.

Loan Arrangement Types

There are several lending options available. Among them are:

Business loans. A commercial loan's terms are created so that it may be repaid based on certain assets or business cycle activities. These agreements might be either short-term or long-term debts.

Leases. Many financial organizations let borrowers choose between a lease and debt. When it comes to rate and payment, leases are often fixed commitments for the particular assets. Most also provide the option of purchasing. When deciding between leasing and outright buying with a mortgage, some care must be used. Frequently, the expenses associated with leasing an item are far more than the price associated with buying it altogether.

Mortgages. By using a collateral asset and a defined repayment plan, a mortgage secures a loan. Principal and interest payments made over the course of a mortgage are shown on amortization schedules.

loan balloons. Mortgages and balloon loans are extremely similar, with the exception that the balloon payment or unpaid debt becomes due and payable after a certain period of time. A 20-year mortgage with a clause mandating the unpaid amount of the principal be payable after 5 years of mortgage payments is a common example of a balloon payment. A balloon mortgage has the benefit of generating substantial interest payments in the first few years of

the loan, which is advantageous to the lender. The majority of the payment is made up of interest throughout this time. The advantage for borrowers is that after a few years of operation, they anticipate paying up the principle without accruing additional interest obligations. Additionally, for tax reasons, these interest payments are a sizable deduction. Remember that the federal government will repay \$.46 for every dollar of interest paid if the company pays taxes at a rate of 46% on earnings. When the balloon payment cannot be made, these loans often allow for refinancing.

Loans funded via leverage. These loans are used for company acquisition. Lenders, who secure all assets, provide the majority of the money needed to buy a business. Borrowers are drawn to these loans apparently because when a company is heavily leveraged, a smaller increment of earnings results in a significantly larger percentage return on equity. Consider comparing: Firm A earns a \$100,000 profit and has a \$1 million capitalization. It is equally divided between debt and equity.

Because of the growing fixed requirement to pay debt service, the risk grows as the debt-to-equity ratio rises. If you can demonstrate a significant capacity to manage your cash flow to pay off the debt, this link to risk may not be accurate. Therefore, without further information, the debt-to-equity ratio may be deceptive.

Bonds. Bonds are debt securities that are privately or publicly underwritten and issued to lenders. A company often has to be somewhat large in order to issue bonds. Small enterprises seldom have access to bonds, with the exception of a few exceptional circumstances when they are supported by regional governments.

Business paper. Large, s firms who want to raise operating cash for brief periods of time provide commercial paper. Commercial paper often takes the form of short-term, unsecured promissory notes and is traded on a public market. The typical amounts are \$25,000 and above.

Loans from the Small Business Administration. A bank loan is often guaranteed by the SBA, which reduces the borrower's risk and interest expense. These loans are designed for businesspeople who meet specific criteria and qualify. These loans may be given depending on requirements, such as the necessity for a company in a hard-hit region or an area with a high unemployment rate. On occasion, these loans are given to regions who have just experienced a natural calamity.

Loans from the Economic Development Authority. EDA loans often have to do with social objectives supported by the government, including increasing minority employment or employment in underdeveloped regions. State-run organizations are in charge of making and managing these loans. These loans are often used to acquire working capital allowances rather than to buy particular assets.

bonds for industrial revenue. IRBs are granted by governmental organizations with the purpose of being used in the purchase of property and machinery. Bonds are issued by the government and then bought by investors, often banks. They are tax free since they are governmental bonds. As a result, the interest rate on IRBs is now lower than the rate on the market. IRBs have come under heavy fire since some firms who compete with those that get IRBs claim they are unable to obtain comparable low-interest financing, making them less able to compete.

Finance plans for research and development. Companies and individual investors often engage into innovative financing agreements to generate the money required to pay for R&D.

These have evolved into restricted partnerships in recent years. In a limited partnership, the sponsoring firm often offers the right to a product in return for a stake in the partnership, frequently as the general partner. Limited partners' capital contributions often provide money for R&D projects that may be subcontracted to the sponsoring firm or even to other companies. The product's sale and development are expected to generate cash for the limited partners in the form of royalties. Capital gains rates are another possible source of income tax reductions for them. The primary benefit to the sponsor is that there are no loan payback obligations and no interest costs if the project fails [12], .

CONCLUSION

In conclusion, A beneficial financing option for businesses looking to obtain money from a small group of investors is a private placement of shares.

For businesses contemplating private placements as a means of acquiring capital, it is crucial to comprehend the advantages, legal requirements, and consequences of this kind of financing.

Businesses may successfully use private placements to raise money, promote development, and maintain a sound capital structure with careful due diligence and strategic planning. the significance of doing your homework before investing in a private placement. Companies should verify the credentials and reliability of possible investors, the terms and circumstances of the offering, and make sure that they are in line with their long-term goals and objectives. To maintain a solid shareholder base and promote future development, careful analysis of investor relationships and suitability is essential.

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CHAPTER 11

RESTRICTIONS ON LOANS AND REGULATION

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ABSTRACT:

Restrictions on loans refer to regulations, policies, or contractual provisions that impose limitations or conditions on the borrowing and lending activities of individuals, businesses, or financial institutions. This abstract explores the significance of loan restrictions, highlighting their purpose, types, and potential impacts on borrowers and lenders. Loan restrictions are implemented to ensure responsible lending practices, mitigate financial risks, protect consumers, and maintain stability in the financial system. They aim to prevent excessive debt burdens, discourage predatory lending, and promote transparency and fairness in lending transactions. These restrictions can be imposed by regulatory authorities, industry standards, or as a result of contractual agreements between lenders and borrowers.

KEYWORDS:

Credit limits, Debt-to-income ratio, Loan covenants, Loan eligibility criteria, Loan-to-value ratio.

INTRODUCTION

An institution may often seek agreements to control the company's business operations and collect updates on the firm's present state as part of a loan when it is contemplating issuing a sizable loan to the company. Usually, these layouts consist of restrictions on the acquisition of new assets. Some lenders have a policy to limit further costs once a loan has been provided. As a result, growth is slowed or stopped. Negotiate with the lender to make sure there isn't a strict restriction on the purchase of additional assets. If there is demonstrable growth linked with the need for such acquisitions, make sure that more new assets may be acquired on a regular basis. Demonstrate to the lender how planned expansion reduces the risk of default. Only the acquisition of new assets based on a solid business strategy may result in planned expansion restrictions on taking on new debt. Once again, a lender could make an effort to restrict taking on new debt. This also hinders development and has a negative impact. Make it plain to the lender during negotiations that further debt may need to be taken on in order to maintain steady growth. An effective business plan will undoubtedly be useful as negotiating power to ensure that the proper provisions of the loan agreement are carried out. The lender's selling argument is that taking on more debt helps the economy thrive and generate more money. The lender's assurance of repayment increases together with the company's growth [1]–[3].

Wage limitations. Lenders often desire some control on these payments to prevent them from skyrocketing since they are a direct expenditure for chief executives and other executives. Large increases in this compensation will eat into the company's earnings and, sometimes, dramatically raise costs. Offer a legitimate counterargument, such as connecting the hikes to the company's profitability. Additionally, this helps the management by inspiring them.

Limits on dividends. If the firm provides dividends, you should try to come to an agreement on a fair distribution schedule. The corporation must contend with the conflicting interests of

stock and debt investors. Any dividend payments may be halted by the lender. This makes it possible to utilize the extra retained profits to pay down debt. However, it could discourage the financing of further stock capital. Both a company's absolute net worth increase and the dividend income stream determine how appealing an equity investment opportunity it is. A no-dividends policy makes it less appealing to consider making an equity investment.

Usually, businesses must provide frequent financial reports to their lenders. Financial statements and a report from a certified public accountant are often required by lenders. The preparation of audited reports approved by CPAs is expensive and time-consuming. Try to change the requirement to a less expensive substitute, such a review or a compilation.

Some individuals believe that by incorporating, they are releasing themselves from any personal responsibility for the debt the corporation accrues while operating. That could be accurate legally. However, lenders have also discovered that individuals typically incorporate their businesses in an effort to reduce their personal liability and often demand specific personal guarantees from the firm owner. In order to demonstrate your "good faith" or "personal commitment" to the company, certain banks may ask you to sign a general guarantee of the business loan. Here are some things to think about when it comes to loan guarantees and collateral.

Specific possessions. Risking all you have is not a good idea. Choose one specific asset to risk if the lender requests a promise of "good faith". In any circumstance, never take a risk that you cannot afford to lose the worth of existing company collateral. Lenders often want as much collateral as they can get. They could even demand irrational collateral. In certain situations, it may be advantageous to provide reports outlining the scope and value of the assets used to guarantee the loan. Independent assessments of the worth of real estate and other assets often discourage banks from requesting further collateral. Stock in the company used as security. The lender may need some equity as security if the company is both attractive and has a good chance of succeeding. Be careful not to give away too much shares lest you lose control of your company [4]–[6].

Conditions That a Borrower Should Seek

You are key to the company's success. Too much dependence on the lending institution might be detrimental to the operation of the company. Therefore, the contract should be flexible to allow for the expansion and success of the firm. Lender assistance and advice should not be disregarded. You may benefit from the lenders' expertise working with firms that are similar to yours. You should ask for the following clauses to be included in the loan agreement as a borrower:

1. You need to have the choice to refinance whenever you choose.
2. Frequently, the lender will impose conditions on this clause, allowing refinancing only after a particular amount of time has passed or with a prepayment fee. If lower current interest rates do arise, you may need this clause to benefit from them.
3. If specific "growth forecasts" are reached, a conversion agreement should make it possible to get loans with more favourable terms. This clause accounts for the possibility that your company's risks might diminish as it expands. Since interest rates should be based on perceived risk, you are entitled to pay a lower interest charge as you demonstrate your viability and success, arguably lowering your riskiness.

Accept the no-penalty prepayment policy. You could have enough money to pay off the loan early due to changes in your financial situation. This may be done in order to get considerable tax advantages, as a prerequisite for receiving further finance, or in order to improve your

business situation. Prepayment often causes the lender little stress other from losing the assurance of projected future income. Nothing would prevent the lender from lending this money to further borrowers in order to recover the future revenues from someone else. The money's inability to be refinanced at par or higher rates represents the risk to the lender.

Interest rate restrictions on requests. Banks like using variable interest rates. Limitations or restrictions on rates should be negotiated, and this should be a key factor in deciding whether to participate into the financing arrangement.

Accept the prospect of a larger loan if certain requirements are met. If your firm is expanding within expected ranges and you are successful, extra debt funding may be required to maintain the development pattern. As a result, you may want the loan arrangement to allow for more debt advances in order to support that expansion. In these arrangements, a lender should see itself as an ongoing business partner. Your growth is mirrored by the lender's revenue. You may borrow up to the maximum credit limit for certain loans without making a formal application.

The assets that are pledged as collateral must be identified in the agreement.

Request a loan "grace" term of 30 to 60 days in case of debt agreement non-compliance. This clause often demands that you inform the lender in advance that you intend to utilize it. The number of times this can be done will presumably be limited. When you provide a plan outlining how you're going to make up the difference after giving the lender the proper notice, lenders can be more prepared to accept minor defaults. Surprising your lender is the worst thing you can do. Most of the time, a lender would prefer to reach a mutually accepted compromise than pursue legal recourse [7]–[9]. The operational part of the company is analogous to financing in certain ways. Each of them has risks and rewards. Each has implications for a company's strategy.

Debt and equity are the two main types of finance. Each has specific repercussions. The most popular kind of finance is debt, whether it is unsecured or secured by property. Both the principal and the interest must be repaid according to set terms. Default usually happens when interest payments are missed, unless something else is specified. Additionally, prior-tax funds are used to pay interest. Interest payments are thereby effectively discounted by a company's federal tax burden, depending on the tax rate. Earnings are multiplied by the relative quantity of debt financing. The percentage return on equity increases with the ratio of debt to equity for a given constant amount of earnings.

A business may try to raise money by selling ownership. This is accomplished by issuing and selling shares. Common and preferred stock certificates are the two main types of certificates sold by businesses. There is no need for common stock to pay dividends. However, debt and preferred stock both have fixed rates that are optional if no dividends are given. Payment to holders of common stock cannot be paid before dividends on preferred shares have been satisfied.

DISCUSSION

It takes persuading cautious lenders or investors to give up their money in order to get finance. It involves persuading them that the risks are minor and that they would get fair rewards in exchange for accepting the risk, just as in any sales transaction. The greatest way to sell is by using a solid company strategy with favorable ratios and a stable financial picture. Developing a long-lasting, reliable financial connection with these sources should be one of the main goals.

Keep in mind that a lot of the conditions of a financial contract are negotiable. Therefore, strive to be ready to negotiate from strength when you enter any such circumstance. A good financial arrangement is more likely if you put in more preparation time before dealing with lenders and investors.

Performance Evaluation Methods

Like many of the techniques mentioned before, performance measures may be used to aid in the logical decision-making necessary to achieve business goals. Measurements are analytical techniques used by the firm itself to assess how well it is doing as well as by external capital providers, creditors, and investors. Additionally, measurements may be used to assess how the company looks to investors. Depending on the particular interest that each party is trying to serve, several types of analysis are conducted.

1. A trade creditor that has provided raw materials, commodities, or services would typically be concerned in liquidity the business's capacity to pay its debts.
2. An investor in bonds is more concerned with long-term financial security. As a result, the company's cash flow and debt serviceability would be of interest to him or her.
3. An investor in common stock may have a focus on the profits that are now being generated, those that are anticipated, and the stability of those earnings.

The usefulness of trend analysis may be larger than any point-in-time data, depending on the planning horizon of each individual interested in the performance metrics. Making informed judgments requires knowledge of the company's past performance and projected future performance. Finally, the pattern that performance metrics show should also worry the organization. You should be knowledgeable of every facet of financial analysis that outsiders use to evaluate the organization in order to negotiate more successfully for outside money. Additionally useful instruments for monitoring and regulating the firm are financial and operational ratios. There are two main measuring categories that need to be considered. Financial ratios make up the first set. Financial ratios were briefly covered. We won't try to regurgitate that information here; instead, we'll just add to it. Operating ratios make up the second set of metrics and may be tailored to a user's particular requirements. These ratios are designed to be a tool for the study and management of commercial activities [10].

Monetary Ratios

To assess the business's performance or financial situation, some kind of unit of measurement is required. A ratio, often known as an index, is a method that relates two pieces of operational or financial information. By properly interpreting a ratio, an analyst may get insight into the company's financial health and performance that may not be immediately obvious through standard forms of reporting. It's crucial to keep in mind that a single ratio could not be a highly insightful piece of data. More often than not, a trend displaying previous historical ratios will provide more information than the present ratio by itself. An analysis of the composite change will rapidly show if the financial position has improved or become worse over time when financial ratios are presented on a spreadsheet for a number of years. Additionally, it is simple to show how the firm's productivity, profitability, or performance compares to previous performances. whether you analyze the capacity of the company to pay its debts over the previous five years, for instance, you can see whether it is becoming better or worse. Current ratios are the ratio of current assets to current liabilities.

The second way of comparison is comparing the ratio of one organization to others that are in a comparable position for the same time frame. If done correctly, such a comparison will provide some information about the company's relative financial situation. If carried out

incorrectly, the conclusions drawn from this research can be damaging rather than just worthless. The main issue is compatibility. Be careful not to apply "rules of thumb" arbitrarily. Your financial ratios may not be accurate when compared to those reported by reputable sources.

For instance, you could have many product lines and a different product mix than other businesses in the sector. You could be more diverse than one industry at a time. Instead of attempting to compare your firm to others, it is wiser to gradually develop equivalents for your own. However, when done correctly, external comparisons may sometimes be beneficial. If a generalization is to be utilized, it should come from your sector. Trade associations may be a reliable source of financial ratio data. For instance, the current ratio, which is the ratio of current assets to current liabilities, has a default value of 2:1. To ensure a stable cash flow and strong financial position, it is recommended for small businesses to maintain a current ratio of at least 2:1. But keep in mind that generalizations are averages. As a result, the number of businesses that do better than average may be equal. Consider a fast-food restaurant as an illustration of how this maxim could be misused. The current ratio can be 1:2 or even 1:3. When you compare this current ratio to the general rule, you can see right away that the company has a liquidity issue and may not have enough liquid assets on hand to pay off all of the obligations that are coming due. This is most likely not the case, however. A typical fast-food restaurant includes:

1. Receivables. At a fast-food restaurant, there are often no credit sales and no delayed payments.
2. Levels of inventory. Fast food restaurants often have relatively little inventories and get small, frequent, and fresh deliveries.

Payables for regular or prolonged trading. Due to their high amount of business, certain profit franchisees may pay local suppliers more slowly than usual. As a result, fast food restaurants consistently produce streams of revenue and churn over inventory at a phenomenal pace. If the firm is spending cash to pay off longer-term debt or to buy more fixed assets, it may not always have a lot of cash on hand. A 1:4 ratio may be even better than a 1:2 ratio, according on the company's own historical tendency in the present ratio and comparisons with comparable fast-food outlets.

The fast-food sector may not fit the standard rule of thumb or be represented by it. The purpose of this example is to demonstrate the importance of taking into account ratios that are appropriate for your business, provide actionable management information, and are readily available.

CONCLUSION

In conclusion, Loan limitations are essential for encouraging prudent lending practices, safeguarding customers, and preserving financial stability. To find a balance between safeguarding borrowers and promoting economic progress, lending limitations' implementation and effects must be carefully considered. Effective regulation and responsible lending practices make sure that loan limits achieve their goals without unreasonably restricting credit availability or hindering economic growth. the significance of finding a balance between limiting credit opportunities and promoting economic expansion. While limits are meant to safeguard people and the financial system, they may hamper lending operations and make it more difficult for those who need credit to acquire it. It is crucial to take into account any unforeseen repercussions and make sure that loan limitations don't unnecessarily limit access to credit or impede the expansion of enterprises and the economy.

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CHAPTER 12

EXPLORING THE IMPORTANT TOOLS FOR FINANCIAL ANALYSIS

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ABSTRACT:

Financial ratios are important tools in financial analysis that enable stakeholders to assess the performance, profitability, and financial health of companies. This abstract explores the significance of financial ratios, highlighting their uses, types, and interpretation in evaluating a company's financial position. Financial ratios provide a quantitative framework for analyzing various aspects of a company's financial statements, such as the balance sheet, income statement, and statement of cash flows. These ratios enable stakeholders, including investors, lenders, and management, to gain insights into key financial indicators and make informed decisions. The capacity of a corporation to fulfill commitments for the near term is shown by its liquidity ratios. These ratios serve as a gauge of the company's resilience to misfortune and provide some insight into the current cash solvency. Liquidity ratios often include both short-term debts and commitments as well as short-term resources and assets.

KEYWORDS:

Acid-Test Ratio, Asset Turnover Ratio, Current Ratio, Debt-To-Equity Ratio, Earnings Per Share (Eps), Gross Margin Ratio, Liquidity Ratio.

INTRODUCTION

We have been focused on short-term liquidity measurements up to this point. Depending on the usage, a corporation and its investors may be interested in certain long-term solvency ratios. The capacity of the corporation to fulfill long-term commitments is shown by these ratios. In order to determine tangible net worth, intangible assets are often subtracted from net value if they are quite big. Note that we utilized assets divided by liabilities for the liquidity ratios previously mentioned. Here, liabilities are prioritized above other metrics when establishing debt ratios. The ratio is considered to be "better" for liquidity the higher the value. The opposite is true for debt ratios; the smaller the , the "better" the ratio. Preferred stock is sometimes included with debt instead of net value when calculating this ratio. This recognizes that preferred stock reflects a claim that is superior to common shareholders' claim. Additionally, it emphasizes the need to examine the definitions of the ratios in order to ensure that the computations are genuinely similar when employing "comparable ratios."

The ratio of debt to net value varies by sector. The unpredictability of cash flows is one element that often contributes to this fluctuation. The bigger the debt you may be able to continually pay depends on how predictable and steady your income flow is. This ratio is frequently used as a gauge for roughly estimating financial risk since it is an effective indicator of capacity to pay debts over time [1]–[3].

Debt to Capital. The proportion of total debt to total capital is another helpful debt statistic. Only the firm's long-term capitalisation is taken into account in this ratio.

This ratio demonstrates the significance of long-term debt financing in the capital structure when compared to other forms of financing. Using market values rather than book values for

the stock component prices when calculating this ratio could be more illuminating. This calculation may show a completely different leverage factor if stock market values are provided.

Comparison Ratios

The link between financing costs and a company's capacity to pay them is examined using coverage ratios. The interest coverage ratio is one of the conventional coverage ratios. Divide the yearly profits before interest, taxes, and inflation by the interest expenses for the specified time to get this ratio. The denominator of different coverage ratios uses various interest rates. For instance, the total coverage technique takes into account all fixed interest, independent of the claim's seniority. By ignoring certain debt's seniority, it is implied that senior debt obligations are only as secure as their capacity to pay off all debt commitments. The cumulative deduction technique is one that takes the seniority of debt into account.

Ratios of Profitability

The profitability on sales ratio and the profitability on investment ratio might provide insight into your business' operational efficiency. The gross profit margin is the first of these ratios. This ratio provides a measurement of total effectiveness after deducting costs and taxes, but excluding unusual charges. You may assess operational changes over time using these two ratios. A change in the tax rate or an increase in selling and administrative costs, for instance, would be indicated if the gross profit margin stayed relatively constant over time but the net profit margin decreased. Areas that may need managerial attention may be found based on the relative change between these ratios. Another example is that if the cost of items sold rises, the gross profit margin will have decreased. This might indicate a number of things:

1. The company could have had to reduce the cost of its goods to remain competitive.
2. It's possible that the cost of labor, supplies, or bought components has gone up.
3. Possible decrease in overall effectiveness.

Profits are taken into account after interest is paid to creditors; however, in certain cases, this ratio may not be acceptable since some of the same creditors also supply the funding for some of the assets. It would be preferable to construct a different ratio for comparative reasons when the financing costs are high. The net operational profit rate of return may be a more suitable ratio [4]–[6].

DISCUSSION

Turnover and Earning Power Ratios

Total sales and total tangible assets are compared using the asset turnover ratio. Similar to many of the ratios previously described, the significance of this ratio depends on the pattern the firm sets and how it compares to other companies in the same industry that are similarly placed and comparable. The ratio is used to gauge how well a company utilizes its resources to produce output. This ratio has the drawback of prioritizing businesses with more completely depreciated equipment above those with fresher investment, which may affect efficiency. The cost of manufacturing things with new equipment should be cheaper per unit than with outdated, older equipment. This ratio should thus be used in combination with other ratios.

Both the turnover ratio and the net profit margin are insufficient measures of operational efficiency since they do not take profitability into account. These inadequacies are addressed

by the earning power ratio. This ratio makes it obvious that rising turnover, rising net profit margins, or both, will enhance earning power.

Making Predictions Based on Performance Measures

Any ratio computation is based on previous data, which may or may not be relevant to predictions for the future. For instance, a company that makes Christmas ornaments might have a terrible profitability ratio for the first two-thirds of the year, which would lead you to assume that losses would continue, only to see a late-season surge in sales volume completely defy all predictions based on previously calculated ratios. Does this imply that ratios cannot be used to forecast the future because of their historical foundation? In no way. However, the outcomes they provide must be evaluated in light of your business expertise and in light of comparisons to a number of other performance indicators.

For instance, if a corporation's current ratio abruptly decreases from 2:1 to 1:1, this may indicate that the company is quickly depleting its resources to meet its liabilities, which is a blatant pre-indication of bankruptcy. The ratio, however, may also be wholly deceptive since a business may have opted to utilize a significant portion of its present assets to pay off a long-term debt before the due date. A thorough understanding of the financial transactions of the subject firm or a more thorough understanding of other ratios would have been necessary for the accurate interpretation. For instance, if the debt-to-equity ratio had replaced the current ratio, it would have been simple to understand how the decline in the current ratio would be balanced out by the rise in the debt-to-equity ratio. As a result, ratio analysis cannot be utilized as a prediction tool without the addition of other data.

Running Ratios

Due to the timely nature of their computation and the decision-specific nature of their usage, operating ratios may be even more beneficial than financial ratios. The ideas of operational ratios may be used successfully in service and manufacturing, even though these ratios are consistent with the thinking of the majority of engineers and managers of sales [7]–[9].

Similarities between Financial and Operating Ratios Comparison

Financial and operational ratios are both most helpful when they provide timely information. Like other tools, ratios are only useful if you have them on hand when you need them. Operating ratios may be calculated for any two *s*, such as the number of salesmen and the monthly dollar amount of sales, much as financial ratios. The average sales per salesperson that results from these two *s* may be used to calculate a relative performance index. Similar to financial ratios, the resultant ratio is useless in the absence of a link. Operating ratios should not be taken at face value, much as financial ratios. Assume that the average number of sales per salesperson per day at an automobile dealership is 17, in order to calculate the sales per person ratio. The remaining five salespeople generate 3 sales, 6 sales, 5 sales, 5 sales, and 4 sales every day, while the other two salespeople generate 43 and 53 sales per day, respectively. It would seem that you would be better off if you replaced the five salespeople with a single pushy individual. Additional information, however, may demonstrate that the two low-volume workers work in the parts department, whereas the two auto-mobile showroom salesmen are the low-volume employees. Despite having just 28.6 percent of the sales force, the parts department generates 17 percent of the revenues. More ratios might be created to assist assess how effectively managed, effective, and environmentally friendly the sales force is. No one ratio is as helpful on its own as a group of related ratios. We may discern a two-peak cycle in the sales of cars from this. The dealership may schedule when to order more vehicles to boost inventory in advance of seasonal sales. It could also be useful to

prepare for operational aspects like vacation scheduling, promotional advertising, and sales incentives. The expense of obtaining the data required for any ratio shouldn't be more than the value of the information that may be obtained from the data. A ratio should, like any instrument, have a positive cost-benefit analysis. In other words, the advantages need to exceed the disadvantages. If a ratio does not satisfy a demand, it is pointless. In the past, the ratio of average sales to salespeople within a certain time period was created to gauge how well each salesman was doing. That was not done well enough. It failed to educate management of the distinction between salespeople for cars and those for components in terms of significant performance. An operational ratio or set of ratios may be utilized for planning and management when properly constructed. Some of the previously described financial parameters, for instance, may be used to assess credit policy. Similarly, operating ratios are accurate. We can quantify individual performance by keeping track of how vehicle sales representatives do against monthly historical averages. We may determine how well the company is performing in comparison to prior performance by comparing the total sales of average sales per person per day to the historical average.

Dissimilarities

Operational ratios are primarily focused on production, service, and sales that may not be stored in the accounting system whereas financial ratios relate to data from the balance sheet and income statement. Because of this, operational ratios are more often customized to fit specific demands, while conventional financial ratios are more likely to be created on a regular basis. Financial ratios are more often compared across companies practically randomly, which leads to inaccurate comparisons between diverse enterprises. Operating ratios may be customized, thus there is less risk of misuse and more dependence on previous patterns. Operating ratios may often be simply computed from obvious data. At the beginning of each workday, management may obtain a precise estimate of the average sales per salesperson from the previous day for each member of the sales force. The collection and verification of financial data are often more challenging [10].

Operating Ratios are used

Any function may be assessed using operating ratios. To compile the necessary information for ratio production, a sizable number of data collection attempts may be required. It is expensive and time-consuming to collect data. It signifies an expense that should be accompanied with an expectation of a profit. As a result, you should start by using ratios that offer the highest return or level of control. The capacity to generate and evaluate ratios to enhance control should be focused on the process' essential components.

Failures at crucial stages might stop all manufacturing. For instance, in an appeals-focused legal business, time limitations are externally produced by judicial regulations, with little alternatives for extensions or departures. Utilizing sophisticated terminals linked to national data banks, research is accomplished operationally. Using word processing software, writing and editing are done.

All work is handled by individuals who are proficient in word processing. The ability to achieve important deadlines might be seriously hampered by a malfunction in the word processing system. The word processor often requires slower input than dictation. The ratio of proficient typists to authors may thus be crucial. Finding the right connection may be mostly determined by ratio analysis. A control system based on ratio analysis may be designed and implemented using a standard five-step method. Depending on how sophisticated the system is, different processes may be required.

These are the five steps:

1. Examine the system or process: Detail the procedure in writing, step-by-step.
2. Locate and name crucial steps: Is there a single phase that most or all work flows through?
3. Examine the crucial stage to see if there is any possibility for a bottleneck or restriction. How can it be a bottleneck?
4. Establish a desired performance ratio: Find out how well you have performed based on previous data and then ask, "How much better can we do?"
5. Assess performance and criticism: How are things going right now? How can the system be made better? What justification is there?

Any kind of company may use operating ratios. The following case study does a ratio analysis on a service provider. There will be further suggestions provided for a manufacturing company and a retailer. Six partners and eleven associate lawyers make up the Midwest legal firm Simmer, Braize and Broyle, P.A. In the defense litigation, they represent three big motor insurance firms. With just two minor seasonal fluctuations, the company's business is mostly consistent. The company has a high-end word processing system with satellite terminals, one laser printer, one letter-quality printer, and one draft, high-speed printer. Two senior secretaries, two junior secretaries, and a clerk-typist/receptionist work for the company. One senior secretary now spends virtually all of her time creating new case files due to the increased demand. The senior partner was worried that things were only being completed barely in time after the firm discovered that the secretaries were working extra overtime. An associate with a business undergraduate degree conducted the ratio analysis. She examined the document trail from the time a complaint was received until the trial court's final ruling. She created a flowchart outlining who did what task when. She identified two essential steps:

1. The two junior secretaries and one senior secretary entered, edited, and printed out all of the work products of the attorneys.
2. The duplication and forwarding of correspondence, motions, and briefs.

A backlog was about to form in the technical word processing. Simply put, processing the task appeared to take too long. The breeding facility was a complete failure. People often walked back to work without copies while the equipment was functioning because "the line was too long" or "a long critical job was on the machine". She discovered that each of the three secretaries processed words at a rate of 52 words per minute on average. She looked at the distribution so she wouldn't be duped by averages. The top secretary typed at 75 words per minute, whereas the two inferior secretaries typed at 38 and 42 apiece. The other senior secretary, who did nothing except set up files, had an 81-word-per-minute typing speed. The associate determined that the company could aim word input at 67 words per minute, on average, without changing employees if the senior secretary traded jobs with the younger secretary. The associate was informed that this secretary had been chosen because of her typing speed. All the files could be prepared as they came in by the junior secretary and the receptionist. The junior secretary was starting or updating 61 files daily, the colleague discovered. She gave the junior secretary a goal of 45 files and the receptionist a goal of 20.

By requesting each user to record the number of copies produced of each original and the total number of originals, she conducted a study of the copier. She gained a lot of knowledge from this. Short runs and long runs were the only two main kinds of copying needs. Average daily time spent on lengthy runs was six hours, while short runs took just an hour and a half.

The average long run was 17 minutes, whereas the average short run was less than 30 seconds. Every day, we ran roughly 200 small runs and twenty-one long runs. When the machine failures were taken into account, the copier operated effectively for an average of 8.2 hours throughout each 9-hour day. Frequently, copies were made on a staggered secretarial shift through lunch.

The associate recommended the following based on these ratios: Purchase a compact, extremely dependable copier and use it just for short runs. Employ a clerk to make the copies. She used ratio analysis to support the following conclusions. Before heading to the machine, each secretary typically stored up five short runs or one long run 6.8 out of every 9 hours, or around 75% of the time, the machine was either stuck on lengthy runs or broken down. A secretary observed the machine was being used by a lengthy run on three of every four visits. The secretaries were making around 120 failed visits to the copier each day while only making 40 successful trips each day. They had to wait 812 minutes if they choose to wait for a lengthy run to end instead of going back to their work.

All failed visits were eliminated by designating a clerk to copy. 1.5 hours of secretarial time were saved, even though the fruitless trip to the copier only took 45 seconds. The breakdown rate was anticipated to increase by lowering the demand placed on the copier. The company's largest benefit came from the real 7.5 hours of secretarial time that were freed up. A secretary simply stood in front of the copier for 6 hours per day for long runs and 1.5 hours per day for short runs to complete the copying. This, together with the 1.5 hours of time saved on fruitless excursions, resulted in enough overtime savings in dollars to pay for the small-run copier in nine months while still covering the clerk's salary and benefits.

Ratio analysis helped the company run more efficiently, provided it with quantitative performance indicators, and gave it some sense of operational control. At least two or three important ratios should be continuously monitored by each management or supervisor involved in the business's activities. To gather historical data that may be utilized for planning, control, and budgeting, this information may be plotted on a daily basis. Often, this information will highlight important problem areas before they become lethal. Consequently, ratios may be effective management tools provided they are properly designed and managed.

CONCLUSION

In conclusion, financial ratios are useful instruments for assessing the financial status and performance of an organization. Their applications go beyond determining profitability and also include market performance, liquidity, solvency, and efficiency. Financial ratios may be effectively interpreted and compared to provide stakeholders important insights into the company's financial health and support decision-making. To fully comprehend a company's financial status, it is essential to take into account the limits of financial measurements and use qualitative analysis to supplement them. Financial ratios' drawbacks, such as their dependence on past data, vulnerability to manipulation, and lack of context. Ratios provide a snapshot of a company's financial status at a certain moment in time; qualitative analysis, consideration of a company's strategic goals and market dynamics, should be added.

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CHAPTER 13

STRATEGIC MANAGEMENT IN THE BALANCED SCORECARD

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ABSTRACT:

The balanced scorecard is a strategic management tool that provides a comprehensive framework for evaluating and measuring the performance of organizations across multiple dimensions. This abstract explores the significance of the balanced scorecard, highlighting its components, benefits, and implementation considerations. The balanced scorecard goes beyond traditional financial metrics and incorporates non-financial measures to provide a balanced view of organizational performance. It encompasses four key perspectives: financial, customer, internal processes, and learning and growth. Each perspective represents a different aspect of the organization's goals and objectives, allowing for a holistic assessment of performance. Too often, a business just considers its financial performance. By doing so, it could be diverting attention from other crucial metrics that, in the end, have a significant influence on financial performance and improve it over time. Robert Kaplan and David Norton wrote *The Balanced Scorecard* to address this issue. The authors of this book argue persuasively for the division of key performance indicators into four categories: financial, customer, internal business processes, and learning and development.

KEYWORDS:

Performance Measurement, Strategy Execution, Sustainability, Targets, Value Creation.

INTRODUCTION

The three non-financial measurement categories are meant to complement one another, so paying enough attention to them will lead to better financial measures as well. An illustration of this metric system. Its learning and development statistics, which are shown in the bottom left-hand corner, are intended to increase employee performance via training and decrease turnover. Employees may observe patterns in the data by comparing the most recent readings to those from earlier intervals. Improvements to the company's internal business procedures, which are listed in the bottom right corner of the chart, should follow success in the learning and growth sector. In this area, more staff training has reduced order processing times for customers and brought a just-in-time production system closer to completion. The enhanced customer-related measures shown in the top right corner should be the outcome of these process adjustments. We anticipate that increased customer satisfaction, timely deliveries, and product quality will result in increased financial performance, which will be represented in the final box in the top left corner.

The business objective, which is to spin off enough cash from operations to finance new facilities and purchase rivals, is stated at the top of the page. In this regard, the financial measurements are directly related to this objective. As a consequence, the balanced scorecard reporting system generates a logical collection of interconnected statistics that are directly related to an organization's objectives [1]–[3]. Each organization that implements the balanced scorecard needs a customized version of it since they all operate under different conditions. The measures used in the example were not intended for use by a service provider

since they were created for a manufacturing plant. A company's senior management team should produce a short list of the most relevant metrics to achieve the proper set of measurements for a balanced scorecard, maybe with the help of a skilled facilitator who can keep the debate on track.

Following consensus on the best metrics, there has to be agreement on how each one should be computed and when they will be reported back to the management team for ongoing evaluation. By making these choices up front, managers can be confident that the right metrics will be computed and applied to the firm. The prior measurement techniques that a corporation used to monitor its performance shouldn't be replaced by the balanced scorecard. There may already be dozens or even hundreds of measures in place that are very helpful for carrying out everyday operations and that should be kept up. The management team should utilize the balanced scorecard to assess how successfully they are managing the company's progress toward its main objectives. In order to do this, it should be seen as a high-level collection of metrics, under which many other measurements exist that must still be utilized to conduct everyday business for the organization.

Ratios are a control and reporting analytical tool. Both internal and external applications are available. The ratios and the patterns shown by a historical history of such ratios are of interest to bondholders, banks, and trade creditors on the outside. Internally, financial and operational ratios show how well the company is doing and act as a tool for control feedback. Analysts sometimes use rules of thumb, which are just averages, to attempt to interpret what a ratio indicates. As a result, they may not be relevant, leading to inaccurate comparisons and conclusions. The most beneficial financial ratios for the firm's needs can be those that have been produced internally over time. Next, you may contrast the ratios produced by trade groups for other, comparable businesses. You might produce liquidity ratios, debt ratios, long-term liquidity measures, coverage ratios, and profitability ratios for financial ratios.

Operating ratios may be produced as a gauge of how well the company is functioning, where bottlenecks emerge, and where objective metrics of performance can be formed, following financial concerns [4]–. For each business, developing operating ratios is a unique task. Although some of the established ratios, such as the ratio of acceptable components to manufactured parts, may be standard, what is acceptable will vary from company to business. Additionally, depending on personal expenses, you may choose to prioritize control in different places. It is possible to identify places where a business may have crucial stages or potential bottlenecks using a five-step examination of a process or system. You may want to put some work into creating ratios for management and reporting in these areas. The objective of this analysis is to provide meaningful ratios. If you decide to create the data required for the installation of a ratio control or feedback system, the ratio and the data must both be relevant. Since ratios are used as guidelines, mobility over time is implied. Ratios may provide managers with information, but that information could be deceptive. Ratio trends show what is happening in the industry and maybe even what may happen in the future. Ratios are a powerful tool for internal and external reporting, control, and assessments when used correctly.

DISCUSSION

Financial Analysis

The company owner should be knowledgeable about a variety of financial analysis areas. The first method deals with the unpredictability of data used to make choices and is known as risk analysis. Another is capacity utilization, which is crucial for measuring an organization's ability to alter the volume of income it generates and for tracking bottleneck processes. The

break-even chart is the last analytical tool, and it is discussed at ever more complicated levels to demonstrate how it may be altered to take a number of factors into account. All of these resources may be used to manage a firm.

Risk Evaluation

Making judgments based on predicted knowledge is common practice. Every time a sales prediction or company forecast is made, this occurs. It is a crucial component of any cash flow projection for a capital expenditure in particular. An implemented project should not have been accepted at the outset if there is even a little discrepancy between the planned and actual cash flows from the project. This might lead to a negative net present value. You must be well-versed in projection risk, which is simply the possibility that the real value may differ materially from the predicted one, in order to prevent this issue.

Data dispersion may be roughly measured in a number of ways. They demonstrate how dispersed the anticipated results are relative to a central average point. You may get a decent sense of how closely projections cluster together by looking at the various measures. A high degree of dispersion shows significant disagreement about the anticipated result, and a higher level of risk is linked with this condition. If they are closely grouped, the chance of not meeting the estimated outcome is minimal. Finding the center, or midpoint, of the data is the first step in figuring out data dispersion. From here, you can see how much the group of estimates deviates. There are a number of methods to get here [7]–[9].

The sum of all projections divided by the total number of projections is represented by this value. It seldom yields a specific point that fits any of the underlying assumptions since it is based just on the average of all points, which does not depend on any particular projection. It just equalizes the biggest and smallest projects. It often yields an average that is biased in the direction of the considerably different forecasts if the underlying data include one or two projections that are significantly different from the other projections. Half of the forecasts are below this threshold, while the other half are above. The median is the average of the two middle values, supposing an even number of forecasts are being utilized. You may prevent the impact of any outlying forecasts that are drastically different from the main group by using this technique, Mode. In a group of underlying projections, this value is the most often seen one. As a result, none of the extreme forecasts had an effect on it. It essentially stands in for the most common projection.

You must keep the purpose of employing the midpoint in mind while choosing which to use for the data's midway. You want to ascertain how far away the estimates are from a midpoint since the purpose is to evaluate the amount of risk. You do not need to include the extreme values when determining the center of the projections since you will be included them in the next set of measurements. As a result, the measurement of choice for determining the center of the collection of expected outcomes is the median, which overlooks the magnitude of outlying values. The distance between the projections and the median must then be calculated. This is not too difficult, given the modest amount of forecasts. Simply choose the greatest and lowest numbers from the list of results, then calculate the distance between them and the median. To achieve this, you compute the same variance between the median and the highest value and divide the difference between the lowest and median values by the median. This is a useful method for estimating the range of potential outcomes. For instance, these cash flow forecasts were gathered in order to determine risk: There is a moderate chance that the actual result will be higher than the estimate, but there is a sizable risk that it may turn out to be lower than expected if the difference between the median and the highest possible estimate is only 25% but the difference between the median and the lowest possible estimate

is 64%. Calculating the data's standard deviation is a different method of identifying dispersion. The average data dispersion around the mean is measured using this technique. In other words, it determines a number that represents the difference between the midpoint and the average data point, either above or below it. The coefficient of variation is a percentage that may be calculated by dividing it by the data's mean. This is a great technique to translate the units-based standard deviation into a percentage. Since it can be difficult to determine whether a standard deviation of \$23 is good or bad, converting it to a percentage deviation of 3 percent allows you to see that the same number indicates a very tight clustering of data around the center point of all data. This is a much better way of expressing the range of deviation within a group of projections.

Efficiency of Capacity

Both human and mechanical resources are included in the concept of capacity. There are immediate reasons for reducing such resources if they are not used enough, either via layoffs or the sale of equipment. An increase in profits follows a layoff since there is no longer a long-term commitment to pay wages, thus there is often a short-term loss to meet severance payments.

The sale of a machine does not significantly affect profits, unless there is a gain or loss on the sale of the asset, but it will result in an improvement in cash flow as sale proceeds are received; these funds can be used for a number of purposes to boost corporate value, such as reinvesting in new machines, paying off loans, buying back stock, and so forth. As a result, it is important to closely monitor capacity levels throughout a whole organization. Those who advocate maintaining capacity utilization at or near present levels will significantly affect both profitability and cash flows [10].

When doing such evaluations, it's important to keep in mind that company owners have a tendency to be conservative; they want to make the most of their present capacity and get rid of anything that isn't being utilized. When activity levels are anticipated to grow significantly in the near future, this could not be a good thing. If management eliminates superfluous capacity just before a significant rise in production volumes, it will take some extraordinary scrambling—possibly at a great cost—to bring the newly needed capacity back in-house.

As a result, make careful to consult the sales team to identify potential sales trends before recommending any capacity reductions.

Additionally, capacity utilization identifies the precise points in a production process when work is being slowed down. These bottleneck operations restrict a manufacturing line from producing as much income as it is capable of. This bottleneck information may be used in two different ways:

1. To suggest modifications to bottleneck processes in order to boost the potential for revenue creation
2. To emphasize that any investments made in a manufacturing operation's other parts are effectively a waste of money since all output will still result in a bottleneck in front of that operation.

Information on capacity usage is also used to determine price levels. For instance, it makes logical to provide price concessions on additional sales with low profit margins if a firm has a lot of spare capacity and has no immediate plans to sell it off. This is because neither the manufacturing staff nor the equipment have any other applications. The only option if low-margin employment are not created is to create no jobs at all, for which there is absolutely no

profit. However, if a company owner is aware that a manufacturing plant is operating at full capacity, it is important to be selective about additional sales and only accept those with high profits. In the future, it could even be possible to cease accepting orders for low-margin goods, which would force them out of the present manufacturing mix in favor of fresher, higher-margin sales. This strategy is incredibly effective, but it may annoy consumers who are given take-it-or-leave-it responses by a business that forbids further orders unless the client agrees to increased pricing. As a result, incremental price for new sales is directly related to both a company's long-term plan for how it wants to treat its customers as well as how much production capacity it still has.

There are several business operations where capacity utilization may be significant enough to measure. Because management teams are always interested in keeping costly gear functioning for as long as possible so that the invested money is not lost, machine utilization is the area that is most often monitored. As a result, monitoring capacity for costly equipment is undoubtedly a routine task. The capacity utilization assessment for every bottleneck function is another aspect that many firms overlook. This has nothing to do with a pricey item; rather, it has to do with identifying whether a crucial step in a procedure is getting in the way of a transaction being processed successfully. A bottleneck operation is one that prevents the timely completion of the production schedule, such as when several production lines feed their products to a single person who must box and ship them and this person is unable to keep up with the volume of production arriving at her workstation. She is a bottleneck, thus it is important to monitor how well her capacity is being used. Although this employee is not a costly machine and may even be paid very little, she may be preventing the realization of a significant amount of income that cannot be transported to consumers. Therefore, in this case, utilizing a capacity utilization metric makes a lot of sense.

To elaborate on the idea of capacity planning for bottleneck operations, it is not enough to monitor the utilization of a single bottleneck operation since, when system enhancements are made, the bottleneck will relocate to new phases in the production process. For instance, the just-in-time concept's basic tenet is that management should try to identify and address bottleneck processes. Each individual bottleneck will be removed as a consequence, but now the second-most restrictive operation is brought to light for examination and modification. This is followed by a third operation, and so on. Therefore, it is preferable to identify each work center and monitor their use individually. Utilizing this more thorough method, management may identify potential bottleneck issues and solve them before they worsen.

When it comes to equipment, keeping track of utilization for almost all of them is also helpful since, in addition to being potential bottleneck operations, underutilized machines are a waste of invested cash and should be sold off if at all feasible. A thorough capacity utilization report will identify the underutilized equipment and inform management of any prospective removals. When machines are grouped together on the report according to type, a subtotal of capacity usage is reported for each group of machines, making this information particularly helpful. The management may calculate the total amount of work needed of each cluster and add or remove machines to satisfy that demand if the machines within each cluster can be utilized interchangeably to do identical tasks. This results in a highly efficient use of capital.

A corporation usually measures its capacity utilization by just considering the number of shifts that are currently in operation when determining its production capacity. For instance, a manufacturing plant that runs for a single eight-hour shift and utilizes all of its equipment during that period perceives itself as being at full utilization. In actuality, it is only using one-third of the day's total hours, which gives plenty of capacity for further output. Accordingly, instead of using the amount of time that is actually being utilized throughout the day as the

baseline when creating a utilization assessment, always use the maximum amount of theoretical capacity. This translates to 24 hours for a single day and 168 hours for a week. Since there are typically between 28 and 31 days in a month, the overall number of hours will change on a monthly basis. In order to circumvent this issue, it is simpler to measure capacity on a weekly basis and utilize either four or five full weeks for particular months, depending on where the final month-end dates occur. This way, all months of the year will display full-week results for either four or five weeks on the capacity report.

With this report style, managers may scan the document from left to right to see any patterns in capacity use and can scroll down the page to see machine cluster usage. Because each equipment in the molding industry is quite costly and must be removed if it is not being utilized to its full potential, the second element is very important. Consider the tonnage range of 300–400 tons, which may be found halfway through the paper. A cluster of six machines continuously displays use between 68% and 76%. Is it conceivable to remove one machine, distributing the work across fewer machines and increasing the total utilization rate for all the machines in the process? If one machine has been removed, divide the total number of hours that the machine cluster has available by the total reported hours of usage for that cluster of machines, which comes to 770, in order to arrive at the solution using data for the high-est utilization reporting period, which is for the first week of May and has a 76% utilization rate. The total number of production hours will be 168 multiplied by five machines, or 840. As a consequence, 92 percent of the work that has been published in the last three months has been used. It is thus theoretically conceivable to eliminate one machine from the 300–400 ton range of equipment and still be able to finish all the work, therefore that is the solution.

However, there are a number of other elements to take into account when evaluating a capacity assessment to reach such conclusions. The machines' dependability is the first. If they have a history of failures, the utilization calculation must account for a specified number of hours each running period for repair work, which will lower the machine's theoretical capacity. Another issue is that, typically, a machine is deleted in order to generate cash flow from its sale. However, what if the machines that are most likely to be sold only provide a little profit? If so, it could be more advantageous to have equipment on hand, even if it isn't being utilized, so that it can be employed for more tasks in the event that sales volume increases. Another concern is that it would be difficult to hire enough people to operate or maintain a machine throughout all of its theoretical running hours. For maximum efficiency, organizations with fewer maintenance staff members frequently cluster those employees on the day shift. As a result, any machine failures during other hours will result in a machine shutdown until the maintenance staff is present the following day. The scenario concludes with management increasing the actual capacity utilization of its equipment to 92 percent. Is this prudent considering that by selling the extra computer, management has basically eliminated all remaining available capacity? What happens if a current client unexpectedly raises their order and discovers that the business cannot handle the task because all machines are booked? There will be lost profits as well as potentially even a lost client.

A capacity study may be skewed if there are either many tiny tasks going through a process, each of which takes just a little period of downtime to switch to the next work, or few jobs, each of which requires a highly drawn-out changeover procedure. In either scenario, the claimed capacity will never be used to its fullest extent since the setup time would use all of the capacity. Working to shorten the transition period required to change jobs is one step management may take to address this issue. This usually entails videotaping the switchover procedure, evaluating the video with the switchover team, and implementing process changes that will save preparation times. When setup periods use a significant fraction of overall

capacity, a revenue-related issue occurs since the sales department may assure clients that work on their orders would start right away because the capacity usage report seems to indicate that there is a ton of extra capacity. Customers may choose to conduct business elsewhere if lengthy changeover durations don't allow for more client orders. Finding the practical capacity, which is the overall capacity less the typical length of changeover time, is important to address this issue. The practical capacity will rise if the setup reduction effort mentioned in the previous sentence is put into practice since there will be more time available for production as changeover times decrease. In order to guarantee that the proper is utilized, an assessment of the practical capacity should be done quite often. The fact that practical capacity is based on an average of real capacity data over many weeks or months makes it problematic to use it as the benchmark for determining how much work can still be placed into the production system. The stated practical capacity measure, however, will not accurately represent reality if there are one or more tasks planned for a switch that take an excessive amount of time to accomplish. Similar to the last example, the genuine capacity will be more than the quoted practical capacity if the actual changeover durations are relatively short. Practical capacity is a historical average, thus it is almost always possible for the real capacity to differ somewhat from this average. Although a business with significant extra capacity would describe this as hairsplitting, a business operating at full output levels might be caught off guard by a shortage of time or some unanticipated downtime. Having erroneous capacity information has a cost in both scenarios. By precisely arranging tasks and changeover times, and updating the data as soon as changes are made, businesses using well-maintained manufacturing resources planning software may prevent this issue.

Breakeven Evaluation

In order to turn a profit, a business often works within a fairly constrained range of expenses and prices. It will swiftly deplete its cash reserves and go out of business if it does not charge a minimal price to meet its fixed and variable expenses. Prices fall to the point where they bare minimum cover expenses in a competitive market, and profits are little or nonexistent. At this point, only businesses that have a thorough grasp of both their own and their rivals' breakeven thresholds are likely to decide on prices and costs in a way that keeps them competitive. This demonstrates the calculation of breakeven as well as several other more intricate variants on the fundamental method. You should regularly employ capacity analysis from a practical standpoint. This may include keeping an eye on things like revenue per worker, equipment utilization rates, sales per salesperson, and the need of required capital investments. Each of these problems calls for costly adjustments to worker levels or equipment. In light of this, it is important to routinely check that the company is not overspending on surplus capacity. Instead, it should maintain capacity levels as high as possible while making sure that some spare capacity is accessible for quick expansion.

Any plan to change the fundamental structure of a corporation should include a breakeven analysis as a requirement. By reading it, you may determine if any changes—such as those to pricing points, capital expenditures, or the occurrence of new expenses—will significantly affect the organization's capacity to consistently outperform its breakeven point.

Any tax repercussions to a business are described in Chapter 9, "Reporting." The benefits connected with different liability-limiting provisions in the tax legislation are highlighted here, along with how to continuously manage taxes to do so. Taxes may significantly reduce a company's cash flow if they are not taken into account on a regular basis.

You soon see that considerable gains may be realized if taxes can be postponed or, better still, avoided if you take into account that, under the federal corporation tax rates, paying taxes on

a yearly basis may represent one of the highest percentage deductions from a company's earnings. Businesses have a variety of tax options at their disposal that might reduce or postpone paying income taxes. The legislation allows for the temporary delay of tax payments in a few specific circumstances, notwithstanding the fact that relatively few circumstances allow for the permanent deferral of taxes. These advantages of such tax deferral apply:

1. A company's cash flow obligation to the government is reduced by deferring taxes. This implies that there will be more money accessible for withdrawal and usage in business prospects.
2. There is a risk that the federal government would alter the tax legislation to make paying taxes more advantageous or abolish certain tax liabilities completely if taxes can be delayed for a long enough period of time. When deferred taxes are paid after the legislation is changed rather than before, the overall amount may be less. The rate or the approach used to calculate liability may fluctuate. Of course, the opposite might also be true.
3. A tax deferral is essentially a loan from the federal government with no interest. There is no more advantageous rate for a loan than a zero percent interest rate, thus it may be considered as a legitimate source of funding. The corporation has power over a wide range of tax alternatives. When one course of action proves unfavorable, it may switch to another.

CONCLUSION

In conclusion, A thorough framework for assessing and monitoring organizational performance is offered by the balanced scorecard. It helps firms to evaluate performance across several dimensions and match strategic goals with performance measurements by taking into account financial and non-financial viewpoints.

A balanced scorecard that is successfully implemented and ingrained into an organization's culture may promote strategic decision-making, encourage continual development, and improve communication. the significance of incorporating the balanced scorecard into management procedures and company culture. It needs to be a continuous, iterative process that is routinely examined and revised to take market trends and shifting objectives into account. For the balanced scorecard to be successful, communication and alignment with strategic efforts and individual performance assessments are essential.

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