

## Managing Accounting Information System for Business Profitability and Economic Development

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### Abstract

Successful organizations are those that plan the entrepreneurial activities: this includes making contacts on financial and legal aspects of the enterprise, obtaining market surveys, conducting product research, designing budget and undertaking comparative analysis with competitors. This study evaluated the role of accounting information system for business profitability and economy development. The study adopted the secondary sources of data collection through the review of texts, journals, internet, as well as as informed observations. Conceptual frame work and empirical study constituted the bedrock of the study. Recommendations were drawn based on the objectives of the study to evaluate the role of financial planning and budgeting in accounting for a continuous process of directing and allocating financial resources to curb financial crimes.

**Keywords:** *Forensic Accounting, Information System, Business Profitability, Planning, Budgeting*

### **Background to the Study**

An accounting information system (AIS) is a system of collecting, storing and processing financial and accounting data that is used by decision makers (Romney and Steinbart, 2009). They opined that an accounting information system is generally a computer-based method for tracking accounting activity in conjunction with information technology resources. The resulting statistical reports can be used internally by management or externally by other interested parties including investors, creditors and tax authorities.

Accounting Information System enhances ventures and economic growth. When entrepreneurs succeeds, leading to an increase in the level of productivity, which in turn leads to increase in the Gross Domestic Product and per capital income of the economy and a rise in the standard of living of the people.

The prevalent occurrences of corruption and sharp accounting practices such as fraud, misappropriation and embezzlement of funds experienced in most organizations not only adversely affected the organizations performance, but also crippled the economy. The result of which poverty, underdevelopment, societal crimes are the order of the day. These, among other issues form the basis for this study.

### **Statement of Problem**

Many Nigerian entrepreneurs operate inefficiently and keep no records and or keep haphazard record. This accounts for, to a considerable extent, most of the business failures. There is, therefore, the need to take advantage of the utility of Accounting Information System and making it functional to avert failures of enterprises.

### **Objectives of the Study**

The main objective of this study is to evaluate the role of financial planning and budgeting in accounting for a continuous process of directing and allocating financial resources to curb financial crimes. Specifically, the study evaluates the effects of forensic accounting in curbing financial crime such as money laundering.

### **Methodology**

This study adopted secondary source of data collection. The data were elicited from journals, internets, texts and other informed observations relating to the study variables. The dependent variables are forensic accounting, money laundering and book-keeping; while financial planning and budgeting are independent.

## **Literature Review**

The accounting system is the major information system in any organization. The information provided by accounting is for three major purposes first, for internal reporting which is to enable managers plan and control their routine operations, second, for internal reporting to managers for use in making non-routine decisions and formulating major plans and policies, and thirdly, serves as external reporting to shareholders, government, creditors and other interested parties.

Modern AIS typically follows a multitier architecture separating the presentation to the user, application processing and data management in distinct layers. The presentation layer manages how the information is displayed to and viewed by functional users of the system (through mobile devices, web browsers or client application). The entire system is backed by a centralized database that stores all of the data. This can include transactional data generated from the core business processes (purchasing, inventory, and accounting) or static, master data that is referenced when processing data (employee and customer account records and configuration settings). As transactions occur, the data is collected from the business events and stored into the system's database where it can be retrieved and processed into information that is useful for making decisions. The application layer retrieves the raw data held in the database layer, processes it based on the configured business logic and passes it onto the presentation layer to display to the users. For example, consider the accounts payable department when processing an invoice. With an accounting information system, an accounts payable clerk enters the invoice, provided by a vendor, into the system where it is then stored in the database. When goods from the vendor are received, a receipt is created and also entered into the AIS. Before the accounts payable department pays the vendor, the system's application processing tier performs a three-way matching where it automatically matches the amounts on the invoice against the amounts on the receipt and the initial purchase order. Once the match is complete, an email is sent to an accounts payable manager for approval. From here a voucher can be created and the vendor can ultimately be paid.

**Forensic Accounting** or **Financial Forensics** is the specialty practice area of accounting that describes engagements that result from actual or anticipated disputes or litigation. "Forensic" means "suitable for use in a court of law", and it is to that standard and potential outcome that forensic accountants generally have to work. Forensic accountants, also referred to as forensic auditors or investigative auditors, often have to give expert evidence at the eventual trial.[1] All of the larger accounting firms, as well as many medium-sized and boutique firms and various Police and Government agencies have specialist forensic accounting departments. Within these groups, there may be further sub-specializations: some forensic

accountants may, for example, just specialize in insurance claims, personal injury claims, fraud, Anti-Money Laundering, construction, or royalty audits.

Forensic accountants, investigative accountants or expert accountants may be involved in recovering proceeds of crime and in relation to confiscation proceedings concerning actual or assumed proceeds of crime or money laundering.

Forensic accountants utilize an understanding of economic theories, business information, financial reporting systems, accounting and auditing standards and procedures, data management & electronic discovery, data analysis techniques for fraud detection, evidence gathering and investigative techniques, and litigation processes and procedures to perform their work. Forensic accountants are also increasingly playing more proactive risk reduction roles by designing and performing extended procedures as part of the statutory audit, acting as advisers to audit committees, fraud deterrence engagements, and assisting in investment analyst research.

While Forensic Accountants ("FAs") usually do not provide opinions, the work performed and reports issued will often provide answers to the how, where, what, why and who. The FAs have and are continuing to evolve in terms of utilizing technology to assist in engagements to identify anomalies and inconsistencies. It is important to remember that it is not the Forensic Accountants that determine fraud, but instead the court." (David Malamed, Forensic Accountant, Toronto Ontario.)

The types of crimes forensic accountants investigate are classified as "crimes against property." They investigate crimes such as fraud and give expert testimony in court trials. They also perform work related to civil disputes. Forensic accountants are also known as fraud investigators, investigative accountants, forensic auditors or fraud auditors.

Financial forensic engagements may fall into several categories. For example:

Economic damages

1. calculations, whether suffered through tort or breach of contract;
2. Post-acquisition disputes such as earnouts or breaches of warranties;
3. Bankruptcy, insolvency, and reorganization;
4. Securities fraud;
5. Tax fraud;
6. Money laundering;
7. Business valuation
8. Computer forensics/ e-discovery.

Forensic accountants often assist in professional negligence claims where they are assessing and commenting on the work of other professionals. Forensic accountants are also engaged in marital and family law of analyzing lifestyle for spousal support purposes, determining income available for child support and equitable distribution.

Engagements relating to criminal matters typically arise in the aftermath of fraud. They frequently involve the assessment of accounting systems and accounts presentation – in essence assessing if the numbers reflect reality.

Some forensic accountants specialize in forensic analytics which is the procurement and analysis of electronic data to reconstruct, detect, or otherwise support a claim of financial fraud. The main steps in forensic analytics are (a) data collection, (b) data preparation, (c) data analysis, and (d) reporting. For example, forensic analytics may be used to review an employee's purchasing card activity to assess whether any of the purchases were diverted or divertible for personal use.

### **Financial Planning and Budgeting**

Financial planning is a continuous process of directing and allocating financial resources to meet strategic goals and objectives. The output from financial planning takes the form of budgets. The most widely used form of budgets is Pro-Forma or Budgeted Financial Statements.

The foundation for Budgeted Financial Statements is Detail Budgets. Detail Budgets include sales forecasts, production forecasts, and other estimates in support of the Financial Plan. Collectively, all of these budgets are referred to as the Master Budget.

Financial planning encompasses planning for operations and planning for financing. Operating people focus on sales and production while financial planners are interested in how to finance the operations. Financial planning can be seen as a single process that encompasses both operations and financing.

In most businesses, there are two kinds of planning activities. These activities are:

- 1 Planning of the Entrepreneurial Activities: This includes making contacts on financial and legal aspects of your enterprise, obtaining market surveys, conducting product research, designing budget and undertaking comparative analysis with competitors. These activities are better handled by the entrepreneur ensure proper control.

2 Planning of the Routine Activities: This includes preparing monthly financial accounts, monitoring and revising budgets, managing the production activities, and marketing of products and services. These activities can be delegated to hired professional managers and supervisors.

### **Preparing a Cash Flow Forecast**

A forecast is a prediction of future events and their quantification for planning purposes. To forecast the cash flow, the amount that will be flowing into and out of the business and when it will be flowing must be known. It will help to avoid running out of cash and to calculate how much money should be raised from bank or elsewhere, before the new venture is undertaken. It is important to always prepare a cash flow forecast whenever one wants to start a new business, expand or change an existing one.

The viability of a project not only depends on whether the project is able but also on the availability of cash when needed. To know whether cash will be available when it is needed, the timing as well as the amounts of cash coming in (cash inflow) and going out (cash outflow), must be known.

The profit and loss account may not change and the operation may be profitable. However, the operation will not survive very long when cost falls due and there is no cash available for payment.

Cash flow analysis is another method of analysis that shows the timing amounts of cash flows. It matches expected cash receipts, and cash payments with period of negative and positive cash flows. The following schedule indicates the requirements of setting-up a pure water business from a technical feasibility:

A simple illustration is shown in Table 1 as follows:

An entrepreneur introduces capital of N150, 000; secures a loan offer N100,000 payable in quarterly installments with 20% interest. Revenue from monthly sales is put at N64, 000 and will be received in the second month of sales i.e. 1 month debt collection period.

Overhead tank- for water storage	N15,000
Set of filters of various micro pulse	N10,000
Ultra Violet lamp	N50,000
Carbon filter	N6,000
Pipes	N5,000
Water Bags with label imprint	N10,000
Sealing Machines	N11,500

Plumbing cost	N4,000
Furniture and fittings	N16,000
Factory Renovation	N20,000
2 Bicycles for distribution	N14,000
Total cost of Equipments required	N161,500
Additional forecast includes:	
Salaries and Wages Bill for each month will be	N9,000
Rent of factory for a year is	N25,000 payable in January
Payment for utilities for each month will be:	
Water supply bill	N2,500
Electricity bill	N1,200
Office stationeries	N2,000
Office Imprest	N3,000
Distribution/Sales cost	N6,000 per month
Local taxes per annum is	N3,500 payable in January
License fees and Environmental charges will be	N20,000

We have to layout the cash inflows and cash outflows to show the balance remaining at the end of each month as in Table 1

**Table 1 Cash Flow Analysis**

Months	Jan.	Feb.	Mar.	Apr.	May	June
Cash inflow:	N	N	N	N	N	N
Balance c/f	-	11,400	51,700	-2,000	38,300	14,600
Capital	150,000	-	-	-	-	-
Loan	100,000	-	-	-	-	-
Sales	-	64,000	-	64,000	-	64,000
Total	250,000	75,400	51,700	62,000	38,300	78,600
Cash outflow:						
Equipment	161,500	-	-	-	-	-
Salaries & Wages	9,000	9,000	9,000	9,000	9,000	9,000
Rent	25,000	-	-	-	-	-
Imprest	3,000	3,000	3,000	3,000	3,000	3,000
Utilities	5,700	5,700	5,700	5,700	5,700	5,700
SALES COST	6,000	6,000	6,000	6,000	6,000	6,000
License	20,000					
Loan payment			25,000			25,000
Interest			5,000			5,000
Local tax	3,500					
Total	238,600	23,700	53,700	23,700	23,700	53,700
Balance c/d	11,400	51,700	-2,000	38,300 <sup>^</sup>	14,600	24,900

The negative cash flow of the month of March may require sourcing to supplement the deficient cash flow in order to meet the business commitments. However unexpected improvement in sales revenue could turnaround the situation.

### **Budgeting for Business Activities**

There are businessmen who may question the advisability of the installation of a system of budgeting and budgetary control in their enterprises. Plans put down in an explicit and definite manner as in the budget system are more important than any general idea or procedure which an individual may have. In small enterprises that only one person the owner-manager controls all activities; often do not follow a plan. Planning and adherence to the plans adopted are essential to small as well as for large enterprises. The procedure is simple in the small enterprises.

A budget is a quantitative statement, for a defined period of time which planned revenues, expenses, assets, liabilities and cash flows. A budget provides a focus for the organization helps the co-ordination of activities and facilitates control. A budgetary control is the comparison of actual operations with the budget with a view to determining whether the plans are carried out so as to ascertain the reasons for deviations.

In practice, a considerable number of budgets would be prepared for example sales budget, production budget and administration budget. These budgets would then be combined into an overall budget known as Master budget. A master budget comprises budgeted Profit and Loss Accounts, Budgeted Balance Sheet and Budgeted Cash flow Statement.

There are important factors that must be investigated before the budgeting process begins. These important factors include:

- a) Estimated volume of sales to be made during a projected period. Estimates must be made in terms of both quantities and monetary amounts and should be reasonably anticipated in view of all conditions, including both internal and external factors, which may affect the business during the projected period.
- b) Estimated costs of producing the quantities required. This determination involves a study of the necessary costs of material, labour and overhead applicable to the required quantities.
- c) Estimated costs of distributing the quantities to be sold and the costs of general administration during this period.
- d) A determination of financial resources available to carry out the period's programme and the additional financing required both as to amount and source.



Budgetary control has several important features. These features are as it follows:

- a) Managerial responsibilities have to be clearly defined;
- b) Individual budgets lay down a detailed plan of action for a particular sphere of responsibility;
- c) Managers have a responsibility to adhere to these budgets once budgets have been approved;
- d) The actual performance is constantly monitored and compared with the budgeted results;
- e) Corrective action is taken if the actual results differ from the budget;
- f) Departures from budget are only permitted if they have been approved by management; and
- g) Variances i.e. differences that are unaccounted for will be subject to individual investigation.

### **How the Budgeting Process Works**

The main budget period is usually based on a calendar year or what is referred accounting period i.e. twelve months. The budget procedure starts with an examination of the goals set when the business was established. Once an entrepreneur has decided on the overall objectives, she/he is in a position to tell detailed plans. This will probably start with business feasibility, s plan, a forecast and then budget.

In commercial businesses, the first budget to prepare is usually the sales budget. Once the sales for the budget period (and for each sub-budget have been determined, the next stage is to calculate its effect on production. This would enable an agreed level of activity to be determined. This may be expressed in many units or percentage of productive capacity of machines.

Once the production unit has been established, departmental managers instructed to prepare their budgets on the basis of required level of activity. The budgeted production level will be translated into how many units of materials and labour will be required to meet that particular level of production. Similarly, it will be necessary to prepare an overhead expenditure of the business. Administrative overhead which tends to be fixed will not be affected by production levels although sometimes a market change in activity may lead to change in fixed costs. The sales and distribution overhead budget may be one overhead budget may be one overhead budget that will be entirely fixed in nature. An increase in the number of units sold for example, may involve more delivery costs.

Any variance that occurs between the budgeted and actual will be subjected to individual investigation. It is considered necessary that actual performance will be immediately brought back into line with budget. Sometimes the budget changes, for instance when there is an unexpected increase in sales, thus will have affected the other budgets.

The control function of budgets provides for checks and balance record keeping and documentation. It also helps to keep operations on track and regulations in effect and expected results in view.

### Illustration

According to Mainoma and Aruwa (2012), the first budget to be developed is to forecast what drives much of our financial activity; namely sales. Therefore, the first forecast will be the Sales Forecast.

In order to estimate sales, we will look at past sales histories and various factors that influence sales. For example, marketing research may reveal that future sales are expected to stabilize. Maybe growing sales cannot be met because of limited production capacities or maybe there will be a general economic slowdown resulting in falling sales. Therefore, we need to look at several factors in arriving at our sales forecast. After collecting and analyzing all relevant information, one can estimate sales volumes for the planning period. It is very important that we arrive at an estimate since this estimate will be used for several other estimates in budgets. The Sales Forecast has to take into account what we expect to sell and at what sale price.

### Example 1

#### Explorer 1: Sales Forecast

Product	Volume	Price	Total Sales
Shoes	16,000	N45.00	N720,000

We now need to estimate account changes because of estimated sales. One way to estimate and forecast certain account balances is with the Percent of Sales Method. By looking at past account balances and past changes to establish a percentage relationship. For example, all variable current assets and current liabilities will vary as sales change.

For example, past history shows that accounts receivable runs around 30% of sales. We have estimated that next year's sales will be N720,000. Therefore, our estimated accounts receivable is N218,000 ( $N720,000 \times .30$ ).

We also need to prepare several detail budgets for developing a Budgeted Income Statement. For example, production must be planned for our estimated sales of 16,000 units from Exhibit 1. The Production Department will need to budget for materials, labor, and overhead based on what we expect to sell and what we expect in inventory.

### Explorer 2: Production Budget

Planned Sales (Explorer 1)	16,000
Desired Ending Inventory	<u>1,500</u>
Total Units	17,500
Less: Beginning Inventory	<u>(3,000)</u>
Planned Production	<u>14,500</u>

Once we have established our level of production (Explorer 2), one can prepare a Materials Budget. The Materials Budget attempts to forecast level of purchases required, taking into account materials required production and inventory levels. We can summarize materials to be purchased as:

Materials Purchased = Materials Required + Ending Inventory - Beginning Inventory

### Explorer 3: Materials Budget

The Shoes require .25 square yards of leather and the leather is estimated to cost N5.00 per yard next year.

Materials Required = 14,500 (Explorer 2) x .25 = 3,625 yards.

Materials Required for Production	3,625
Desired Ending Inventory	<u>375</u>
Total Materials	4,000
Less Beginning Inventory	<u>(500)</u>
Total Materials Required	3,500
Unit Cost for Materials	x N5.00
Total Materials Purchased	N17,500

The second component of production is labour. We need to forecast our labor needs based on expected production. The Labor Budget arrives at expected labor cost by applying an expected labor rate to required labor hour

#### **Explorer 4: Labour Budget**

Shoes require .50 hours to produce one unit.

14,500 units x .50 = 7,250 hours.

The expected hourly labor rate next year is N12.00.

Estimated Production Hours	7,250
Hourly Labor Rate	<u>x 12.00</u>
Total Labor Costs	<u>N87,000</u>

As production moves up or down, support services and other costs dated to production will also change. These overhead costs represent the rd major costs of production. Each item that comprises overhead may warrant independent analysis so that we can determine what drives the specific cost. For example, production rental equipment may be driven by production orders while depreciation is driven by levels of capital investment spending.

#### **Explorer 5: Overhead Budget (Based on Unique Drivers)**

Estimated for each line item as follows:

Indirect Labor Costs *	12,000
Utilities	5,000
Depreciation	3,000
Maintenance	1,000
Insurance and Taxes	<u>4,000</u>
Total Overhead Costs	<u>25,000</u>

\*Production Supervision and Inspection

Once production costs (direct materials, direct labor, and overhead) have been budgeted, we can work these numbers into our beginning inventory levels for Direct Materials, Work In Progress, and Finished Inventory. Beginning inventory levels are actual amounts from the last reporting period. We need to apply our costs based on what we want ending inventory to be. The end-result is a Budget for Cost of Goods Sold, which we will use for our Forecasted Income Statement.

### Explorer 6: Cost of Goods Sold Budget

	Direct Materials	Work in Progress	Finished Inventory
Beginning Inventory	N2,500	N16,000	N46,000
Purchases (Explorer 3)	17,500		
Less Ending Inventory	(1,875)		
Materials Required	18,125		
Direct Labor (Explorer 4)	87,000		
Overhead (Explorer 5)	<u>25,000</u>		
Total Manufacturing Costs	N130,125		130,125
Total Work In Progress			146,125
Less Ending Inventory			<u>(12,000)</u>
Cost of Goods Manufactured		N134,125	134,125
Cost of Goods Available for Sale			180,125
Less Ending Inventory			(36,000)
Cost of Goods Sold			N144,125

We can now finish our estimate of expenses by looking at remaining operating expenses by looking at all remaining operating expenses. The first major type of operating expense is marketing. Marketing and Sales Managers will prepare and submit Marketing Budget to upper level management for approval.

### Explorer 7: Marketing Budget

Estimated for each line item per the Marketing Department:

Marketing Personnel	N75,000
Advertising & Promotion	42,000
Marketing Research	12,000
Travel & Personal Expenses	<u>6,500</u>
Total Marketing Expenses	<u>N135,500</u>

The final area of operating expenses is the administrative costs running the overall business. These types of expenses will be estimated based on past trends and what we expect to happen in the future. For example, if company has plans for a new computer system, then we should budget additional technology related expenses. Several department managers will be involved in preparing the General and Administrative Expense Budget.

### Explorer 8: General & Administrative Budget

Estimated for each line item per Department Managers:

Management Personnel	N110,000
Accounting Personnel	55,000
Legal Personnel	40,000

Technology Personnel	45,000
Rent & Utilities	25,000
Supplies	15,000
Miscellaneous	<u>7,500</u>
G & A Expenses	<u>N297,500</u>

Based on the detail budgets we have prepared (Explorers 1 through 8), we can finalize our budgets in the form of a Budgeted Income Statement. A few line items are added to account for non-operating items, such as received on investments and financing costs. The Finance and Tax Departments will assist in estimating items like financing expenses and tax expenses. The Budgeted Income Statement will pull together all and expense estimates from our previously prepared detail budgets.

**Explorer 9: Budgeted Income Statement**

Revenue (Explorer 1)	N720,000
Less cost of Goods Sold (Explorer 6)	<u>(144,125)</u>
Gross Profit	575,875
Less Marketing (Explorer 7)	(135,500)
Less G&A (Explorer 8)	<u>(297,500)</u>
Operating Income	142,875
Less Interest on Debt	(8,000)
Income Before Taxes	134,875
Taxes @37.5%	<u>(50,578)</u>
Net Income	<u>N84,297</u>

**Example 2:**

**Budgeted Income Statement**

The Company has compiled the following information:

Planned sales are 50,000 units at a price of N110.00 per unit.

Beginning Inventory consists of 5,000 units at a cost of N60.00 per unit.

Planned production is 55,000 units with the following production cost:

Direct Materials are NI8.50 per unit

Direct Labor required is 4 hours per unit @ N12.00 per hour

Overhead is estimated at 20% of Direct Labor Cost

Desired Ending Inventory is 6,000 units under the LIFO Method.

Marketing Expenses are budgeted at N 350,000

General & Administrative Expenses are budgeted at & 400,000

### **Budgeted Income Statement**

Sales (50,000 x N110)	N5,500,000
Less Cost of Goods Sold:	
Beginning Inventory (5,000 x N 60.00)	300,000
Direct Materials (55,000 x N18.50)	1,017,500
Direct Labor (55,000 x 4 hours x 1412.00)	2,640,000
Overhead (N 2,640,000 x .20)	<u>528,000</u>
Cost of Available Sales	4,485,500
Less Ending Inventory (1)	<u>(380,500)</u>
Cost of Goods Sold	<u>(4,105,000)</u>
Gross Profits	1,395,000
Less Operating Expenses:	
Marketing Expenses	(350,000)
General & Administrative	<u>(400,000)</u>
Net Income	<u>N645,000</u>

(1) Under LIFO, last costs in are:  $N1,017,500 + N2,640,000 + N528,000 = N4,185,500 / 55,000 = N76.10 \times 5,000 = N380,500$ .

Now that we have a Budgeted Income Statement, we can prepare a Budgeted Balance Sheet. The Budgeted Balance Sheet will provide us with an estimate of how much external financing is required to support our estimated sales.

The main link between the Income Statement and the Balance Sheet is Retained Earnings. Therefore, preparation of the Budgeted Balance Sheet starts with an estimate of the ending balance for Retained Earnings. In order to estimate ending Retained Earnings, we need to project future dividends based on current dividend policies and what management expects to pay in the next planning period.

### **Explorer 10: Estimated Retained Earnings**

Beginning Balance	N270,000
Budgeted Net Income (Explorer 9)	84,297
Less Estimated Dividends	<u>(55,000)</u>
Ending Retained Earnings	<u>N299,297</u>

Next, we need to account for the acquisition of fixed assets. As a business depletes its asset base, it must re-invest to sustain assets which are the basis for generating revenues. For example, do we need to purchase new machinery or computer equipment? Do we plan to expand our production facilities? Operating personnel and upper-level management will decide on future capital spending. Future capital expenditures are summarized on the Capital Expenditures Budget.

### Explorer 11: Capital Expenditures Budget

Purchase New Office Equipment	N16,000
Replace Leather Cutting Machine	<u>8,500</u>
Total Capital Expenditures	<u>N24,500</u>

Based on the beginning balance in assets and the budget for capital assets (Explorer 11), we can estimate an ending asset balance for the Budgeted Balance Sheet.

### Explorer 12: Change in Fixed Assets

Beginning Balance	N 886,000
New Acquisitions (Explorer 11)	24,500
Less Depreciation for the Year	<u>(33,500)</u>
Ending Fixed Assets	<u>N877,000</u>

We will assume that liabilities and interest expense will remain the same. However, after we have determined our level of external financing, we will need to revise these amounts. Additionally, we need to analyze trends and ratios in order to ascertain accounts that do not fluctuate with sales. For example, prepaid expense is a current asset that has little to do with sales.

Since the Balance Sheet is a year-end estimate, it assumes that all other estimates have been met. In a world of rapid change, annual forecasts are rarely close. Therefore, we will simplify our preparation of the Budgeted Balance Sheet by relying on relationships. Stable relationships over the last five years are particularly helpful. The Budgeted Balance Sheet will show either a surplus (excess financing over assets) or a deficit (additional financing needed to cover assets). This difference is derived from the Accounting Equation:  $\text{Assets} = \text{Liabilities} + \text{Equity}$ .

### Explorer 13: Budgeted Balance Sheet

Cash	N36,000	5% of Sales
Accounts Receivable	86,400	12% of Sales
Inventory	50,400	7% of Sales
Prepaid Expenses	11,000	5 year trend analysis
Fixed Assets	877,000	Explorer 12
Total Assets	N1,060,800	
Accounts Payable	79,200	11% of Sales
Current Portion of LT Debt	6,000	Principal Paid
Long Term Debt	60,000	Subject to Revision
Total Liabilities	145,200	
Common Stock	450,000	unchanged
Retained Earnings	299,297	Exhibit 10



Total Equity	749,297
Total Liab & Equity	894,497
External Financing Required	<u>N166,303</u>

External Financing Required (EFR) can also be calculated based on the relationships between assets, liabilities, and sales. The following formula can be used:

$$\text{EFR} = (A/S \times \Delta\text{Sales}) - (L/S \times \Delta\text{Sales}) - (\text{PM} \times \text{FS} \times (1 - d))$$

Where:

A/S: Assets that change given a change in sales, expressed as a percentage of sales.

$\Delta$ Sales: Change in sales between the last reporting period and the forecasted sales.

L/S: Liabilities that change given a change in sales, expressed as a percentage of sales.

PM: Profit Margin on Sales; i.e. net income/sales.

FS: Forecasted Sales

(1- d): Percent of earnings retained after paying out dividends; d is the dividend payout ratio.

After preparing budgeted financial statements, it is very important to carefully review these statements with management. For example, can we truly expect to raise N166,303 in capital as indicated in explorer 13? Will the budgeted financial statements meet the expectations of shareholders? Several critical questions must be asked before we finalize our budgeted financial statements.

Additionally, our budgets were prepared on an annual basis. Many unplanned events can take place during the year, making our annual budgets extremely inaccurate. Therefore, financial planning is often improved by simply forecasting on a monthly or quarterly basis as opposed to an annual basis.

### **The Cash Budget**

A good example of short-term financial planning is the Cash Budget. The Cash is an estimate of future cash inflows and outflows. Cash Budgets are often led with the Budgeted Balance Sheet. However, it should be noted that Cash Budgets are not widely used as a general forecasting tool since they are specific to f account, namely cash. Instead, Cash Budgets are often used by Cash Managers 1 Treasury personnel for managing cash.

We can use our previous forecasts to help us prepare a Cash Budget. For example, we can get an idea of payable disbursements for manufacturing by looking at the Materials Budget (Explorer 3), Labour Budget (Explorer 4), and the Overhead Budget (Explorer 5). We can start preparing a Cash Budget by simply looking at our

stable cash flow patterns, such as accounts receivable, accounts payable, payroll, etc. We also have several predictable transactions, such as insurance payments, loan payments, etc.

**Explorer 14 – Cash Budget For January**

Beginning Cash Balance	N28,000
Cash Collections on Sales (60 day lag)	47,000
Sold old machine in January	3,000
Investment Revenues	2,000
Total Cash Inflows	52,000
Disbursements for Manufacturing (30 day lag)	12,400
Marketing Expenses	10,000
General & Administrative Expenses	26,000
Capital Expenditures	-0-
Repayments on Debt	750
Debt Interest Payment	450
Dividend Payments	-0-
Taxes Paid	-0-
Total Cash Outflows	49,600
Net Cash Inflow (Outflow)	2,400
Ending Cash Balance	30,400
Minimum Desire Cash Balance	10,000
Cash Surplus or (Deficit)	N20,400

**Summary/Conclusion**

This study however, has identified that accounting system is the major information system in any organization. Therefore the study purist that one way to curb corrupt practices in organizations is for management of organizations to appreciate the application of accounting system as professional knowledge and skill in the preparation and presentation of accounting information in such a way as to assist in the formulation of policies, planning and controlling of the operations of an organization for economy development.

**Recommendations**

- i. Managers should concentrate more on internal reporting to enable to plan and control their routine operations for use in making non-routine operations.
- ii. External reporting to shareholders, government, creditors and other interested parties should always be carried along with financial reporting. Proper interpretation of accounting information should be made available to stake holders.

- iii. The actual physical devices and systems that allow the AIS to operate and perform its functions such as internal controls and data security measures should be safe guarded and implement the use of model base management.

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