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7 Cash Flow

Of the many feasible supporting budgeting schedules, none is as important to the financial manager as the cash budget. The reason is simple: regardless of the future potential of the organization, unless cash is available to meet near term obligations such as payroll, power, telephone, notes due, and so forth, the organization is effectively out of business. While in the private sector the organization's long term survival depends on profitability and in the public sector on outside funding, near term survival in either case necessitates the availability of necessary cash to meet immediate requirements.

Budgeting systems for long term planning and control purposes are usually geared to accepted accounting conventions. Thus, for example, sales are recorded at the time the merchandise is shipped, not at the time payment is received. Since most transactions are based on credit, an additional sale will be reflected as increased operating income without necessarily increasing the availability of cash simultaneously. On the contrary, the sale might require short run cash expenditures for labor and material, thus effectively reducing the cash balances available to the organization. At the same time accounting conventions indicate increased profits on the performance reports. The opposite situation may also exist. The performance report of a profit center may indicate a loss based on customary accounting practices of deducting appropriate depreciation expenses. Since, however, depreciation expense is an internal adjustment, and not associated with the disbursement of cash as most other expenses are, the cash position of the entity may actually have improved.

The availability of adequate cash balances to meet the organization's needs is too important an issue to be handled indirectly. Financial management should be guided by a dual criterion: long run profitability subject to the availability of adequate working capital in the short run. The document tracing the flow of cash through the organization is the cash budget. Although of little direct significance to managers of profit centers, it is a key document for financial management.

WORKING CAPITAL

Working capital is a term almost synonymous with current assets and reflects the short term disposition of the organization's capital. In general, as business activities increase, working capital needs of the organization increase. This is caused by increased financing requirements for accounts receivable, increased levels of inventory needed to sustain operations, and higher cash balances required to smooth over the accelerated pace of activity. Some of the increased needs are provided spontaneously by creditors who are likely to permit the organization to increase its levels of Accounts Payable as business activity expands. This, however, is only of limited assistance in the increased demand for funds. The concern of financial management is the rapid increase in the difference between current assets and current liabilities. This difference is referred to as *net working capital*. As the pace of business activity and profitability increases, net working capital needs also increase and sources of funds must be identified in advance to provide the necessary additional capital to meet the needs of the organization. This requirement is of course identical for both profit oriented and not-for-profit organizations.

To permit the early identification of the need for additional funds, financial management requires close monitoring of the organization's cash position at all times. As is the case for most transactions, the acquisition of cash demands a certain amount of lead time. If deficiencies are identified sufficiently early, then as long as the organization is basically in a healthy financial condition the appropriate sources for funds can readily be tapped. The same potential sources of capital are likely, however, to deny those applications for additional funds that are made under conditions of acute fund shortage. Such behavior signals potential lenders and investors that careless planning and poor management practices are in effect, and does not inspire confidence in the organization's capacity to repay the loans at a future date. Lenders and investors are unlikely to respond to such behavior by providing additional funds.

Conversely, good financial management implies that all funds available to the organization are productively deployed. The accumulation of cash balances in excess of those ordinarily required for the short term needs of working capital expansion deprives the organization of income that could otherwise be earned. Financial management must strive to estimate minimum cash requirements and devise plans for borrowing or investing funds so that the cash balances maintained are neither above nor below the needs of the organization at any point in time.

THE CASH BUDGET

The mechanism for gaining the necessary visibility regarding the availability of cash is the cash budget. Although it bears a resemblence to the Master Budget, it is not oriented toward forecasting operating income and profits but is aimed rather at identifying the cash balances that will probably exist in future periods. The cash budget traces the flow of funds through the organization, identifying likely sources and expected applications of funds prior to their occurrence. By discerning levels of cash balances ahead of time, financial management is in a position to plan borrowing or investment strategies appropriate for the needs of the organization. The cash budget thus becomes the instrument that permits financial management to plan rather than merely to react to emerging situations, and is therefore a key tool of management.

Table 14 presents such a cash budget. While the format is typical, it should not necessarily be adopted precisely as structured. The layout adopted by financial management should facilitate the identification of likely problems and their possible resolution by highlighting those receipts or disbursements that are particularly important to the organization. Clearly, receipts from patients are not of crucial significance to General Motors!

In preparing a cash budget only the receipts and disbursements of cash require forecasting. Other entries are either stipulated, reflecting analysis and judgment of financial management, or represent actual account balances. Thus the entry "cash balances desired" is an example of the former, while the "beginning balance" taken from the cash T-account is the entry that would be reported on a Balance Sheet as of December 31, 1985. Other entries in the cash budget are derived via the cash budgeting process described further on.

Lip service is often paid to the need for the continual updating of planning and control documents, yet in actual practice planning documents are usually prepared in a sporadic fashion, often divorced from near term operational developments. If the cash budget is to serve the purposes outlined earlier it cannot be handled in this fashion. It must be updated continually and revised as new information becomes available. At least at the end of each period, in this case a month, a new forecast should be prepared that will extend the full span of cash budget cycle for the budget cycle – in the given example, for 6 months.

These procedures will insure that the cash budget remains an updated, relevant document. Since its implications are very near term, financial management cannot afford to be guided by forecasts and projections that have become outdated by the pace of events. The cash budget may be compared to a flight plan. Even senior airline pilots will reexamine their preferred flight route in line with latest meteorological conditions, fuel levels, and aircraft weight. They will not accept yesterday's flight plan

Table 14 Hospital Service Corporation cash budget, January–June 1986 (in thousands of dollars)

	January	February	March	April	May	June
Beginning balances	25	79	26	20	107	207
Cash receipts						
From patients	35	63	70	72	78	82
From insurance carriers	228	248	262	275	285	296
From investments	6	7	7	7	8	9
Other	12	5	--	15	10	-
Total receipts	281	323	339	369	381	387
Total Cash available	306	402	365	389	488	594
Cash disbursements						
Wages	72	75	78	71	85	88
Rent	18	18	18	18	18	18
Interest	--	--	1	--		--
Supplies	105	118	175	135	140	162
Capital assets	-	198	--		26	--
Taxes	--	25	5	-	--	28
Miscellaneous	32	22	38	8	12	5
Total disbursements	227	456	315	232	281	301
Cash balances desired	20	20	20	20	20	20
Total cash required	247	476	335	252	301	321
Cash excess (deficiency)	59	(74)	30	137	187	273
Borrowing requirement		80				
Loan repayment			30	50		

without updating the information on which it was based and reassessing the contemplated route in the light of recent developments. In general, the higher the stakes and the more crucial the impact of economic events and customer demand conditions on the organization, the more frequently should the cash budget be updated.

Given the opening cash balance of $25,000 in Table 14, the total cash available during January is estimated by adding the expected total receipts of $281,000 to the beginning balance for a total of $306,000. Total disbursements of $227,000 forecast are developed by adding anticipated cash disbursements expected during January 1986. Note that the focus is on the disbursement of cash. A credit purchase of supplies, for examples, does not entail the outflow of cash although the accounting system will report it as an expense. The desired cash balance is added to the anticipated disbursement, arriving at a total cash requirement of $247,000. Subtracting this amount from the total cash expected to become available indicates excess cash balances of $59,000 for this period. Based on this analysis, financial management can now invest these in short term financial instruments with maturity dates corresponding to the cash needs identified for future periods. Since these short term investments are usually highly liquid and safe they are treated as cash equivalents and recorded as cash. The beginning balance for February will therefore be the total of $59,000 and $20,000, or $79,000.

Similar considerations apply to the February forecast. Note that among disbursements capital assets of $198,000 are indicated. This is in contrast with an Income Statement that lists depreciation expense but not the expenditures for the acquisition of fixed assets. Since the focus of the cash budget is on the inflows and outflows of cash rather than on the determination of costs, depreciation expense that does not entail an outflow of cash is ignored while the purchase of a fixed asset must be recognized. This outflow contributed to a cash deficiency of $74,000 during the period, which must be obtained from outside sources such as a commercial bank. Assume that the borrowing agreement entered into with the Hospital Service Corporation's bankers calls for the borrowing and repaying in increments of $10,000. In line with this agreement borrowing requirements are forecast at $80,000, since $70,000 would result in a cash balance of $16,000 which is judged by financial management to be inadequate for meeting the organization's needs. Note that through the preparation of the cash budget this need for outside funds is identified considerably in advance of the time they are actually required, enabling financial management to shop and negotiate for favorable borrowing terms.

The borrowing of funds in February will require disbursement for interest in March. Otherwise receipts and disbursements follow the previously established pattern. Note that tax payments are actual disbursements of funds to tax collectors and not the recognition of a liability as they are on the Income Statement. The cash excesses of $30,000 recognized in March are used to partially repay the $80.000 loan. In view of this. the beginning balance in April is precisely the $20.000 balance desired.

SYNCHRONIZATION OF CASH FLOW

As stated above. the cash budget must be continually updated to reflect changing conditions. This will permit early identification of issues of concern to financial management and the development and execution of appropriate plans. Reacting to unanticipated crises situations is costly and should be avoided. The cash budget is a tool geared to the attainment of this objective.

The cash budget presented here presumes that receipts and disbursements are synchronized within each month. This may not be the case. It is conceivable that for some organizations disbursements are required at the beginning of each month. while receipts may only materialize towards the end of the month. This could create severe cash deficiencies during the month even if the budget indicated excess funds.

Three possible approaches can be suggested to resolve this problem. First. and recommended. is to develop a cash budget on a weekly or even daily basis. This will pinpoint the issue for continued management attention. The second possibility is to shift receipts one period out. while leaving disbursements as originally detailed. This will, in essence, present the worst case – all disbursements at the beginning of the period and all receipts towards the end. The third option is to adjust the desired cash balances upwards to provide additional slack for slippage in cash receipts.

SIGNIFICANCE OF CASH FLOW

The cash budget provides much needed information to financial management. While over the long run the flow of cash and of profits can be expected to be synonymous. considerable divergences may occur in the short run. In accordance with GAAP. acountants have considerable latitude in recognizing income and expenses. Therefore the Income Statement is not a suitable indicator per se on the near term financial health of the organization. The cash flow statement too. is not a sufficient measure of financial health per se. Excess cash can readily be attained in the short run by disposing of corporate assets. which does not necessarily signify financial health or improved business conditions! Clearly. a financial manager must chart his course taking into account all pertinent information, rather than focusing exclusively on one indicator. Ignoring cash flow needs in the short run can bankrupt the organization in spite of a highly profitable outlook for the long run!

The significance of cash flow is worth specific mention. Earnings are generated through investments in financial instruments, fixed assets, and motivated personnel. To acquire any of these requires the disbursement of cash. The larger the cash balances, the greater the opportunity to seek out such investments. Conversely, the greater the net cash flow resulting from an investment, the higher the return that has been achieved. Capital budgeting procedures recognize this by focusing on cash flows as the relevant indicator of returns realized in each period. For these reasons astute managers investors and lenders insist on tracing the flow of cash through an organization in addition to examining the performance results achieved consonant with GAAP.

A widely held misconception regarding cash flow was identified earlier. Depreciation charges are often alleged to generate cash flow. That this is not the case can be deduced from the cash budget in Table 14. Depreciation is not a line item in this budget either as a receipt or as a disbursement of cash. The erroneous belief regarding the role of depreciation in cash flow projections emanates from adjustments that are made to the Income Statement. Recall that depreciation expense reduces reported income from what it otherwise would have been without entailing the actual outflow of cash from the organization. Cash flow resulting from operations is therefore greater than accounting income after taxes. The addition of depreciation to accounting income tries to compensate for this discrepancy. In order to use projected profits as a reliable indicator of cash flow many other adjustments will be required. Although many of these adjustments are less significant individually than depreciation their aggregate impact may be sizable, particularly if different reports are prepared for tax and shareholder accounting. Thus, although addition of depreciation to projected profit may provide a quick estimate of cash flow, it is hardly a reliable estimate. This can only be achieved through the preparation of a cash budget.

Cash flow considerations are of equal importance to profit oriented and not-for-profit organizations. The cash budget provides the vehicle for both to focus on expected cash surpluses and deficiencies. The differences are the avenues open to the organization for raising funds if the need arises. Profit oriented organizations cannot hope for emergency appropriations to relieve sudden deficiencies!

SUMMARY

To assure survival of the organization, financial management must have visibility regarding the near term requirements for funds. Working capital needs are particularly prone to increase at a time of expanded business activity and increased profitability. The cash budget is the document that provides the mechanism for the desired visibility. Only expected receipts and disbursement of funds are listed in the budget. These differ from the definition of expenses and receipts customarily adopted for accounting purposes and ordinarily reflected in reported profit.

The cash budget permits deliberate planning for the efficient acquisition of funds and for short term investments. Lenders view careful cash budgeting as an indication of good management practices. Cash budgeting is of equal importance to profit oriented and not-for-profit organizations.