

CASH BUDGETS

A company needs to produce a cash budget in order to ensure that there is enough cash within the business to achieve the operational levels set by the functional budgets

Consider the following sales figures for a newly formed company that makes metal boxes:

	January (\$000)	February (\$000)	March (\$000)
Sales	300	400	550

These figures are based on orders that customers have already placed with the company after considerable hard work by the sales team. **However, sales revenues do not necessarily equal cash inflow.** In order to secure the orders the sales team had to negotiate payment terms with the customers. Only 10% of customers agreed to pay immediately for the metal boxes. Of the remaining customers, 60% agreed to pay after one month and 40% after two months. Within the metal box industry it is known that 2% of credit customers never pay (because they go out of business or dispute the invoices) the metal box company has made the decision to reduce the budgeted cash inflow from the credit customers who should pay after two months to reflect this fact (making the percentage who pay after two month 38%). Once the metal box company knows these payment terms and the estimated irrecoverable debt it can produce a cash inflow budget from the sales budget as follows:

	January (\$000)	February (\$000)	March (\$000)	April (\$000)	May (\$000)
CASH SALES					
(10% of total sales)	30(w1)	40	55		

CREDIT SALES

After one month

After two months

After one month			216	297	
After two months		162(w1)	103(w1)	137	188

TOTAL CASH

RECEIPTS

RECEIPTS	30	202	374	434	188
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w1 Of the \$300 total January sales, \$30 pay cash immediately therefore \$270 are credit sales (no cash in for at least one month) of this \$270, 60% will be received one

month later, ie in February and 38% two months later, ie in March. Remember the 2% irrecoverable debt will never be cash flow.

So now the company can see that while the sales revenues figures may be healthy *there is a delay between making the sale and receiving the cash*. Why does this matter? It matters if the company needs to pay cash out in order to keep trading. For example, expenses such as labour, materials and overheads may have to be paid out before the cash from the sales arrives. This can lead to serious liquidity issues if not managed properly.

If the metal box company has a labour cost equal to 20% of the sales value a materials cost equal to 25% of the sales value and an overhead cost equal to 15% of the sales value, then the *functional* budget would be as follows:

	January (\$000)	February (\$000)	March (\$000)
Sales	300	400	550
Labour (20%)	60	80	100
Materials usage (25%)	75	100	138
Overheads (15%)	45	60	83
GROSS PROFIT	120	160	219

The company can see that there is a 40% gross profit margin, which is considered good for the metal box industry *but a healthy profit does not necessarily mean a healthy cash flow*.

Consider that labour is paid weekly one week in arrears and that there are four weeks in both January and February and five weeks in March. The cash outflow for labour would be:

	January (\$000)	February (\$000)	March (\$000)	April (\$000)
Labour	45	75	108	22

The material supplier will not allow the metal box company any credit as because it is a newly formed company, it has no track record of paying its debts. The supplier of materials is also aware that new companies often fail and go out of business thus creating irrecoverable debt. Therefore, the supplier is insisting on cash at time of delivery for all materials purchased. However, the metal box company has to buy the materials before they can be made into boxes (therefore the material purchase budget differs from the material usage budget). Half of the materials required for production must be purchased and paid for in the month prior to sale the other 50% can be purchased and paid for in the month that the metal boxes are manufactured and sold. Thus, the cash outflow for material purchases would be:

	December (\$000)	January (\$000)	February (\$000)	March (\$000)
Materials	38	88	119	69

Month prior to use	(75 x 50%)	(100 x 50%) +	(138 x 50%) +	
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Month of use	(75 x 50%)	(100 x 50%)	(138 x 50%)	
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Now let us consider the overhead. Overhead is paid for in the month in which it is incurred. Included in the overhead figures above is a \$10,000 monthly charge for depreciation. **Depreciation is a non-cash item** and should not be included in the cash flow. The company will pay cash out when the non-current asset is purchased and may receive cash when the non-current asset is sold, but depreciation is a book adjustment in the accounts and is not a cash flow that has to be paid out. Therefore, the cash outflow for overheads is:

	January (\$000)	February (\$000)	March (\$000)
Overheads	35 (45 – 10)	50 (60 – 10)	73 (83 – 10)

The metal box company can now put all of the elements of the cash budget together. We will consider the first three months of trading only. At the start of January the metal box company will have \$150,000 cash in the current account.

	January (\$000)	February (\$000)	March (\$000)
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CASH INFLOWS

Sales	30	202	374
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CASH OUTFLOWS

Labour	45	75	108
Materials	88	119	69
Overheads	35	50	73

NET CASHFLOW	(138)	(42)	124
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OPENING CASH

BALANCE	150	12	(30)
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CLOSING CASH

BALANCE	12	(30)	94
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WHAT USE IS THE CASH BUDGET?

The metal boxes company now knows that although both the sales forecast and profit margin are healthy during the first three months, in February it will suffer a cash deficit.

The company directors can now consider in advance, how this deficit can be financed. In March the company will have quite a substantial cash surplus and the directors will consider investing this cash to maximise the benefit to the company. For example, if the company needed to buy a \$60,000 non-current asset during the first three months it would ensure that it could be paid for in March and not February.

The cash budget can also be used to help prepare the budgeted statement of financial position, part of the company's master budget. We already know that the cash balance is budgeted to be \$94,000 at the end of the first quarter's trading but the metal box company can also calculate the material inventory, trade receivables and trade payables closing balances. A proportion of materials are purchased before they are required for manufacture and therefore there will be a material inventory at the end of March equal to 50% of April's sales requirements. If April's sales are forecast to be \$700,000 then the material inventory will be \$87,500 ($\$700,000 \times 0.25 \times 0.50$). Receivables at the end of March are expected to be \$621,900 (\$136,800 still due from February's sales plus \$297,000 and \$188,100 due from March sales) the trade payables will be zero as the company pays cash for all of the purchases.

Finally the cash budget can be used to monitor and assess performance. If the metal box company has \$780,000 of outstanding receivables at the end of March as compared to the \$621,900 that was budgeted, then this would indicate that customers were taking longer to pay than their agreed terms (assuming that the sales revenues were as budgeted) this in turn may indicate that the person responsible for collecting the debt are less efficient than they should be.

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