

accounting



a smart approach

SECOND EDITION

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Chapter One

The Cash Budget

Sam has a Smart idea

Learning Objectives

At the end of this topic, you should be able to:

- explain the purpose of accounting
- discuss why non-accountants need to understand accounting
- understand the basic terminology of business transactions
- prepare a cash budget
- calculate the gross profit margin of a product and business.

Introduction

Accounting is about the information needed to run a business or organization. Accountants consider what information is required and then communicate it in a meaningful way. This involves providing information to those outside the business or organization, such as investors and government authorities, usually about past events. Managers and employees inside the business or organization will need different information to plan strategies, make decisions, and control performance, often about the future.



Case Study Smart Sports

Sam Smart is 25 years old and a keen sportsman. He is rather frustrated by the future prospects offered by his current job and is tired of working in a large office. He has started to wonder if he could set up his own business and ideally would like to combine his passion for sport with earning an income. He coaches a football team every weekend and has recently purchased a new team kit for them. Because the service he received from the supplier was rather poor, this has given Sam the idea of setting up a business to supply local teams with their kits individually printed and in their team colours. He would need to invest his own savings and would be prepared to sell his car. His mother, Betty, has made it clear that she would be prepared to make a loan to him.

Sam is confident about running the business, but he is worried about the accounting. He has an old university friend, Kim, who is an accountant and will be able to help. But should Sam understand some accounting himself?

4

Why should managers understand accounting?

Managers of any business or organization will have to make key decisions based on accounting information. To make good decisions, they need to be sure that the information makes sense and is reliable. They will want to understand how well the business is doing, so need to be able to interpret the financial and non-financial information properly.

Ponder Point

What key business decisions will Sam need to make, and what accounting information will he need to do this?

Managers need to present clear financial information to people outside the business, which will be difficult to do if they are unsure how the financial plans and

actual results have been put together. As they are often legally responsible for reporting profit for organizations, they need to be able to ask the right questions about how the information was collected.

Ponder Point

Who else might need accounting information about Sam's business, and why?

The cash budget

A good example of internal information needed to make financial decisions is the cash budget. It sets out all the cash receipts and payments that a business expects to make over a period of time. This is usually on a month-to-month basis so that the owners can see what their bank balance is likely to be at the end of each month. This will not only provide information for the managers of the business but also for the bank to assess the short-term financing needs of the business, for example any short-term loans and overdraft facilities that may be necessary.

The cash budget will reflect the receipts and payments Sam expects to make for his business transactions and should not include his personal cash receipts and expenses. His business will be treated as a separate entity. A separate bank account should be used to make payments and receive monies relating to the business.

Accounting concepts

Accounting concepts are basic principles that provide guidance as to how and when transactions are recorded in a business. A key accounting concept is that transactions of a business are recorded separately from the transactions of its owner; this is known as the entity concept. This principle should be followed even if the business is not a separate legal entity. Another key accounting concept is that to be able to record business transactions, these must have a monetary value placed on them; this is known as the money measurement concept.

Terminology

Accounting is the recording and communicating of financial information for both internal and external users.

Capital is the amount the owner has invested in a business.

Drawings is the amount taken out of the business for the owner's personal use.

The **entity concept** recognizes that the transactions of a business should be recorded separately from the transactions of its owner. This principle should be followed even if the business is not a separate legal entity.

Expenses are the costs incurred by the business or organization to enable the business to trade.

The **money measurement concept** recognizes that in order for a business transaction to be recorded, there must be a monetary value attached to it.

Financial accounting is the provision of financial information to external users.

Purchases are the costs incurred by the business or organization in buying the goods it plans to sell to its customers. A purchase is made when the goods or services are received from the supplier.

Sales is the income earned from selling goods or services. A sale is made when the goods or services are invoiced to the customer, which is usually at the point the goods or services are delivered to the customer.

In the cash budget, all receipts and payments are recorded in the period during which they are expected to actually be received or paid.

Demonstration Exercise 1.1

Sam and Kim begin to prepare the cash budget for the first three months of trading. Sam plans to call the business Smart Sports and he will invest his savings of £10,000 to get it started. His mother has offered to provide a loan if it is needed.

Initially, he plans to use his garage to store purchases, print the team kits, and perform all the office work necessary for the business. Research, and a good deal of negotiation, has led him to anticipate that the following sales can be made and what the likely costs will be.

a) In January 2015, Sam will purchase a computer and software for use in the business for £2,900, payable on delivery.

b) Sam expects to sell the following football kits:

January	£6,000 to Superstars
February	£2,000 to United
March	£3,000 to the university team.

c) Sam expects to make the following purchases of football kits over the next three months:

January	£4,200 for Superstars' kits
February	£1,200 for United's kits
March	£1,650 for the university team's kits.

d) All sales and purchases will be made for cash.

e) Sam has decided to buy the team kits from a supplier but will print them himself with team logos and team names. He will need to hire a fabric printing machine at a cost of £100 per month, payable monthly. The cost includes all the colour dyes he will need.

f) Sam has agreed to pay Kim £125 per month for his advice and preparation of accounts.

g) Other expenses have been estimated as follows:

£75 on delivery costs per month, payable at the end of each month.

£375 on telephone costs per quarter, payable at the end of the quarter.

£300 on other expenses, such as electricity and insurance, payable at the end of each month.

h) Sam will need to withdraw £600 per month to cover his personal expenses.

Using Table 1.1, complete the cash budget for Sam's first three months of trading from January to March 2015. The cash budget for January has been completed.

Table 1.1

Smart Sports				
Cash budget for the three months ended 31 March 2015				
	Jan £	Feb £	Mar £	Total £
Receipts				
Capital	10,000			
Receipts from customers	6,000			
Total receipts	16,000			
Payments				
Computer	2,900			
Payments to suppliers	4,200			
Printer costs	100			
Accountant's fees	125			
Delivery costs	75			
Telephone				
Other expenses (electricity, insurance)	300			
Drawings	600			
Total payments	8,300			
Net receipts/(payments)	7,700			
Balance brought forward	–	7,700		
Balance carried forward	7,700			

The **balance brought forward** is the balance at the beginning of the period.

The **balance carried forward** is the balance at the end of the period.

To calculate cash balances

$$\begin{aligned} \text{Cash balance brought forward} + \text{total receipts} - \text{total payments} \\ = \text{cash balance carried forward} \end{aligned}$$

Demonstration Exercise 1.1—solution

The solution is given in Table 1.2.

Table 1.2

Smart Sports				
Cash budget for the three months ended 31 March 2015				
	Jan 2015 £	Feb 2015 £	Mar 2015 £	Total 1st quarter 2015 £
Receipts				
Capital	10,000			10,000
Receipts from customers	6,000	2,000	3,000	11,000
Total receipts	16,000	2,000	3,000	21,000
Payments				
Computer	2,900			2,900
Payments to suppliers	4,200	1,200	1,650	7,050
Printer hire	100	100	100	300
Accountant's fees	125	125	125	375
Delivery costs	75	75	75	225
Telephone			375	375
Other expenses (electricity, insurance)	300	300	300	900
Drawings	600	600	600	1,800
Total payments	8,300	2,400	3,225	13,925
Net receipts/(payments)	7,700	(400)	(225)	7,075
Balance brought forward	–	7,700	7,300	–
Balance carried forward	7,700	7,300	7,075	7,075

Timings of receipts and payments

In the first three months, Sam received cash when he sold his customers their team kits, and he paid cash for his purchases as soon as he received goods from his suppliers.

Once businesses become more established, cash sales will occur more rarely, as customers usually negotiate credit terms that mean sales are made before the resulting monies are received. Conversely, businesses will expect to be allowed credit terms for purchases made so that goods will be received before the resulting payment has to be made. It is vital that the cash budget reflects the timings of cash

movements as accurately as possible so that the overall cash position of the business can be estimated.

Terminology

Cash sales are made when the cash is received at the same time as the goods or services are delivered to the customer.

Credit sales are made when the goods or services are delivered before payment is received from the customer.

Cash purchases are those purchases for which cash payment will be made at the same time as the goods or services are received.

Credit purchases are those where the goods or services have been received by the business but for which payment is made at a date after the goods or services have been delivered.

10

Demonstration Exercise 1.2

Sam sets about planning the cash receipts and payments for the next three months, taking into account the different timings that will arise from sales and purchases being made on credit.

a) Sam expects to sell the following hockey kits:

April	£2,400 to Rovers
May	£4,000 to Tigers
June	£5,000 to Panther Cubs.

He has agreed that Rovers and Tigers will pay for their kits at the end of the month following the sale, but the Panther Cubs will pay cash on receipt of the kits.

b) Sam expects to make the following purchases, still payable in the month in which he takes delivery:

April	£1,500 for Rover's kits
May	£2,000 for Tiger's kits
June	£4,000 for Panther Cub's kits.

c) Sam intends to buy a second-hand printing machine for £5,500 in May with payment made in the same month so that he can save printing costs in the second half of the year. He will continue to pay £100 per month for April, May, and June for the hire of the old machine.

- d) Kim will receive the same fee of £125 each month, and Sam will continue to pay the telephone costs as for the first quarter. He expects delivery costs to increase to £100 per month from May and other expenses to rise by £100 per month from May.
- e) Sam will need to withdraw £600 per month to cover his personal expenses.

Using Table 1.3, prepare Sam's cash budget for his second three months of trading from April to June 2015. Using this information, does Sam need to ask his mother, Betty, for a loan or should he arrange an overdraft? If so, what size loan or overdraft should he request, and by when does he need it?

Table 1.3

Smart Sports				
Cash budget for the three months ended 30 June 2015				
	Apr 2015 £	May 2015 £	Jun 2015 £	Total 2nd quarter 2015 £
Receipts				
Capital				
Receipts from cash sales				
Receipts from credit sales				
Total receipts				
Payments				
Printing machine				
Payments to suppliers				
Printer hire				
Accountant's fees				
Delivery costs				
Telephone				
Other expenses				
Drawings				
Total payments				
Net receipts/(payments)				
Balance brought forward				
Balance carried forward				

Overdraft facility

When a business anticipates that its bank balance will be in overdraft in the next year, then it needs to arrange an overdraft facility with its bank. The overdraft facility is a limit set in advance by the bank. If the business exceeds that limit, then the bank can choose not to honour any further payments made by the business and/or to charge significant fees and a higher rate of interest.

Ponder Point

In order to agree an overdraft facility, what sort of information might a bank require from a business?

Calculation of the gross profit and gross profit margin

12

The cash budget provides key financial information for managing the cash flow of a business. As can be seen in Chapter 2, cash is different from profit, and it is lack of cash that causes businesses to fail. While it is important for sufficient cash to be generated within the business, it does not provide much useful management information about the profitability of its products. One simple method of assessing profitability is to calculate gross profit margin. The gross profit is the difference between the selling price and the cost of goods sold. The gross profit margin is the relationship between the gross profit and selling price of the goods or services sold, expressed as a percentage.

$$\text{Gross profit margin} = \frac{\text{Gross profit}}{\text{Sales}} \times 100$$

In January, Sam hopes to sell for £6,000 the Superstars team kits, which will have cost him £4,200. The gross profit made on this transaction would be £6,000 – £4,200 = £1,800, and a gross profit margin of 30% would be made.

$$\text{Gross profit margin} = \frac{1,800}{6,000} \times 100 = 30\%$$

Ponder Point

Why might different products achieve different gross profit margins?

Demonstration Exercise 1.3

- Calculate the gross profit margin on each of the football kits that Sam plans to sell between January and March 2015.
- Calculate the overall gross profit margin that would be made on the three football kits.
- Calculate the gross profit margin on each of the hockey kits that Sam plans to sell between April and June 2015.
- Calculate the overall gross profit margin on the three hockey kits.
- Comment on your findings.

Demonstration Exercise 1.4

During the first six months of the business, Sam is confident of making a large sale each month to a football or hockey club with whom he has already been negotiating. From then on, Sam hopes that sales will start to come in as a result of recommendations and advertisements he plans to place in match programmes.

- He anticipates that sales during the six months to 31 December 2015 will be made at a gross profit margin of 40%. He estimates they will be as follows:

Forecast sales

	£
July	2,400
August	2,400
September	3,000
October	3,000
November	3,400
December	3,800

- In addition to making purchases to meet sales, Sam plans to purchase in July 2015 a stock of shirts for £2,000, so that he can meet any unexpected one-off orders.
- Sales and purchases will be made on one month's credit terms.
- Costs payable in cash will be as follows:
 - Telephone costs: £400 per quarter, payable in arrears.
 - Electricity: £650 per quarter, payable in arrears.
 - Accountant's fees: £125 each month.
 - Other expenses will amount to £110 each month.

- e) Sam plans to make drawings of £600 each month.
- f) In July 2015, Sam's mother, Betty, will make a loan to the business of £12,000. The loan will carry interest at 6%, which will be payable annually in arrears, with the first interest payment being due on 30 June 2016. Sam plans to use £10,000 of the loan to buy a van later in the year, probably in October. Delivery costs will continue at £100 per month for July to September.

Prepare the cash budget for Smart Sports for the six months ended 31 December 2015.



Summary of Key Points

- Every business and organization needs accounting information to plan, control, and make decisions. Different users, both internally and externally, will require information for a variety of purposes.
- All managers should appreciate the fundamentals of accounting as they will need to use the information and be able to interpret its meaning.
- A cash budget is a forecast of all the cash receipts and payments that the organization expects to make.
- A cash budget is a tool for identifying cash shortfalls or surpluses so that managers can make decisions about arranging financing for future needs or investing surplus cash.
- The gross profit margin is a method of assessing the profitability of products sold by a business.

Smart Questions: a wider perspective

1. What assumptions have to be made in preparing a cash budget? Will they be based on judgements or facts?
2. What risks might affect the accuracy of these numbers?
3. What are the consequences if these judgements and assumptions turn out to be unrealistic?
4. Where might a business find additional funding if needed?



Questions

True or false?

For each of the following statements determine whether it is true or false:

- A** The cash budget for a business should include business transactions plus all personal cash receipts and expenses.
- B** Capital is the amount the owner has invested in the business.
- C** Drawings are the salaries paid to staff of the business.
- D** A sale is made when the order for goods or services is received.
- E** Gross profit margin is calculated by dividing gross profit by sales and multiplying by 100.

Practice questions

1. Maris

Maris is preparing a cash budget for her new business. She expects her sales for the first six months to be:

January	February	March	April	May	June
€4,000	€4,400	€5,000	€5,400	€5,600	€6,000

Maris expects that 25% of the sales will be paid for immediately, while 50% will be paid for in the month following the sale, with the remainder paid for after two months.

There is no inventory, as Maris expects to purchase what she sells in the same month, but she makes her purchases on one month's credit. Maris makes a 25% gross profit margin on sales.

REQUIRED:

1. Calculate the purchases Maris will need to make each month.
2. Calculate how much cash she will receive from sales each month from January to June.
3. Calculate how much cash she will pay out for purchases each month from January to June.

2. Hugh

Hugh set up a business on 1 January 2016 making organic dog treats.

REQUIRED:

- a)** For each transaction, decide whether it should be included in the cash budget for the business; prepare a cash budget for the three months ended 31 March 2016.
1. Hugh invested £5,000 cash in the business on 1 January 2016.
 2. Hugh plans to make drawings of £1,200 each month.
 3. Hugh plans to purchase a computer for his own personal use at a cost of £550.
 4. Hugh plans to purchase a computer in January for use by the business at a cost of £650 cash.
 5. Hugh plans to buy a van for £2,500 cash on 1 March, for use in the business.
 6. Hugh estimates that his business will make the following sales:
 - January £2,500
 - February £2,800
 - March £3,000.
 7. Sales are made 40% for cash and 60% on one month's credit.
 8. Purchases will be made for cash as follows:
 - January £1,500
 - February £1,680
 - March £1,800.
 9. Other expenses are estimated as follows:
 - Electricity £275 payable at the end of the quarter
 - Telephone costs of £100 per month, payable at the end of each month by cash.
- b)** What advice would you give as to the level of bank overdraft that Hugh may wish to negotiate?
- c)** What other costs might Hugh expect to incur that have not been included in the cash budget?
- d)** How might Hugh be able to reduce his forecast costs?



Online Resources

Scan here to access more practice questions (Pierre Blanc, Sean, Manuel, Ben Lee, Sue) and test your understanding, or find them via the Online Resource Centre at

<http://global.oup.com/uk/orc/busecon/business/carey2e/01student/questions/>



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