

Case Study HW plc – activities/questions

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Activity 1 - Environmental analysis

- (a) Utilising the frameworks of PESTEL and Porter's 5 Forces undertake an analysis of the business environment in which HW plc is currently operating.
- (b) What do you think are the key challenges facing HW plc?
- (c) Explain how the management accountant is able to contribute to the activity of environment analysis.

Activity 2 - Portfolio analysis

Boston Consulting Group portfolio analysis

Reece Jones, one of the Non-Executive Directors has suggested that HW plc could utilise the Boston Consulting Group matrix to help assess its strategy at both company and store level. You have been asked to illustrate how the analysis could aid decision making about products and product groups within the company.

You have done a quick analysis and accessed the following information with which you could illustrate the principle behind the BCG portfolio analysis and how it might be used to aid decision making.

HW plc sells goods and services that can be categorised as: Home and Garden, Clothing, Electricals, Interior Design, and Financial Services.

You have worked closely with the marketing team at head office and ascertained that in the UK the sales of HW UK, in relation to the total market, for the various categories in the UK is as follows:

Category of goods and services	HW market share %	Market share of nearest competitor %	Market growth rate %
Home and Garden	15%	10%	12% - beginning to slow
Clothing	7.5%	10%	5% - and continuing at similar levels
Electricals	5%	4%	7% - but becoming very competitive
Interior Design	2%	8%	30% - growth is linked to a trend among middle aged couples
Financial Services	1%	5%	20% - looks as if this will continue but sector could become subject to increased government regulations

Other information provided on business units.

HW plc Retail stores

The retail stores have not been as profitable in recent years as the market has become very competitive, and customers are becoming more sophisticated and demanding in their expectations. One way in which HW plc has attempted to compete is to always offer the latest products. This makes inventory

obsolescence an issue, as judging the amount of inventory to hold so as to satisfy customer demand, without having large inventory write offs, can be difficult. This is a problem in the clothing market where products are seasonal, for example, summer range, winter range and so on. This sector is also one heavily influenced by the latest fashions. However, a new inventory management system is helping with the problem. The growth of the 'click and collect' service is working well and, along with online sales, is set to grow in the future in all product groups.

The use of concessions (companies that effectively rent space in the HW plc stores) also enables HW plc to provide a wide range of products to their customers. HW plc plan to try and increase the number of concessions in the next few years as it shares some of the risks between the partner companies. However, HW plc do not want to diminish the HW brand as they also plan to continue to develop and sell their own brand products. They also wish to retain their manufacturing capability as this provides a useful diversification from retailing and enables more control over quality of certain product lines in which they have a manufacturing capability.

Clothing sales have been slowing in recent years, but the furniture sales are strong. The electrical goods market is very competitive, particularly the audio-visual and kitchen aids ranges. The increased competition in the specialist electrical goods retailers has also hit the departmental stores such as HW plc, along with the need to always be seen to offer the latest products highlighting the need for good inventory management.

HW plc Interior Design

HW plc Interior Design has a range of corporate clients as well as retail customers. The design team cope with a range of projects from single room design such as a new kitchen design for residential customers, to working with property developers and architects on both commercial and residential large scale projects. They source products used in their designs from HW plc and a wide number of other companies. They have a large amount of autonomy over which products to recommend and are not necessarily tied to HW plc, although they always consider HW plc products, and recommend them where they are suitable. This helps the HW plc research and development team, who look after the HW plc product range, as the Interior Design division is able to gather and feedback information about the products of other manufacturers, and also customer trends. The Interior Design team are keen to expand their business and are looking to increase the number of corporate clients. In particular they plan to target the state owned and education sectors over the next few years. In order to do this they will need to expand their design team and recruit additional staff with appropriate experience of those sectors.

HW plc Financial Services

The Financial Services division is seeking to increase the number of credit card customers over the next few years and is also planning to diversify into insurance products. The division already offers extended guarantees and insurance on products sold in the HW plc stores, particularly on electrical goods,

such as fridges, washing machines and TV/computers. The management team are thinking of expanding into life insurance, travel insurance, car insurance, and home and contents insurance. This is a competitive market but they believe that the volume necessary to break-even on these products could be achieved if they can attract existing HW plc customers and build on the reputation of the HW brand. This will then provide a solid platform on which to expand the business in the future.

More recently they have seen the administration costs increase and the management team have highlighted this as an area where improvements could be made, perhaps via a benchmarking exercise. They also recognise that an increase in business will require an increase in qualified staff, and by adding a range of new products it will create the need for additional training of the existing staff.

HW plc Product Development and Manufacturing

This division has seen material costs increase in recent years and they are looking at the supplier relations to see if there are any savings that can be made on the cost of materials. The division does not see a large increase in business over the next few years, but is seeking to maintain volumes at existing levels in order to retain the manufacturing capability, and within this to keep the product range up-to-date. This means replacing existing product designs with more up-to-date designs rather than developing completely new product ranges. They see the next few years as being a consolidation of the division. Control of costs will be important and reviewing manufacturing methods is seen as part of that process, but they are not intending to spend a lot of new capital investment in plant and equipment. They feel that there is scope to improve in areas such as waste management, energy costs, productivity, and inventory management.

Required:

- (a) Critically evaluate the usefulness of using portfolio analysis, such as the Boston Consulting Group (BCG) matrix, in developing strategies to manage diverse organisations such as HW plc.
- (b) Utilising the BCG matrix analyse and comment on the portfolio of product markets in which HW plc operates.
- (c) Briefly outline the financial controls that could be used to monitor and assess products in each category of the BCG.

Activity 3 – Customer profitability analysis

Activity 3 (a)

HW plc has found that a successful strategy of entering new markets and establishing the brand name is via mail-order or online catalogue shopping. This keeps overheads low whilst establishing the brand and testing the market before opening high street stores. HW plc adopted this strategy in some areas of Africa by marketing clothing and accessories via a catalogue and flyers. This worked reasonably well and several stores have since been opened but the mail-order side of the business is still quite strong. However, the operations director has become concerned about the growing marketing, distribution, selling and administration costs of this activity. The management team of HW Africa examined its customer ordering patterns for the past year and identified four different types of customers, as illustrated in the following table. Much of the marketing is based around sending catalogues and flyers to all of its customers several times a year. Orders are taken by mail, over the telephone, and more recently online. However, because of poor internet services in some areas telephone and mail orders are still utilised by a large number of customers. HW Africa maintains a Freephone number for customers to use when placing orders over the telephone and, in keeping with its customer service promise, HW Africa prides itself on the personal attention it provides shoppers who order over the telephone. All purchases are paid for by cheque or credit card. HW Africa has a very generous return policy if customers are not satisfied with the merchandise received. Customers use a pre-paid delivery service to return their unwanted items which is paid for by HW Africa.

For ease of calculation costs are provided in \$ amounts but the local currency applicable to the specific country is quoted on the local websites.

	Customer type 1	Customer type 2	Customer type 3	Customer type 4	Customer type 5
Initial sales	\$1,000	\$1,000	\$2,500	\$3,000	\$1,500
Number of items returned	0	4	2	14	2
Dollar value of items returned	0	\$200	\$500	\$1,500	\$250
Total number of orders per year – note each order is delivered separately	1	6	4	12	2
Number of telephone orders per year included in total above	1	0	0	12	0

	Customer type 1	Customer type 2	Customer type 3	Customer type 4	Customer type 5
Number of mail orders per year	0	6	4	0	0
Number of online orders per year	0	0	0	0	2
Average time spent on dealing with each phone order from customers, that is, time per order	15 mins	0	0	5 mins	0
Number of special deliveries	1	0	0	12	0
Number of regular deliveries	0	6	4	0	2

Prices are set so that the cost of goods sold is on average about 75% of the sales price. Note that returns are made at full sales value so the cost of goods applicable is based on net sales, that is, initial sales less returns. HW Africa pays for the delivery costs of items (a small amount is built into the price of the product to cover the cost of deliveries), so delivery is free to the customer. Normal delivery is within 3 or 4 working days. However, if customers request a next day delivery or a weekend delivery HW Africa makes a charge to the customer equivalent to the additional cost incurred, that is, HW still pays the normal delivery cost, but in these cases any extra cost charged by the courier is passed on the customer. However, HW Africa does still incur an additional processing charge for arranging the special delivery.

HW Africa has developed the following activity cost driver rates for its support costs:

Activity	Activity cost driver rate
Process mail orders	\$5 per order
Process phone orders	\$80 per hour
Process online orders	\$0.5 per order
Process returns (includes cost of pre-paid postage)	\$15 per item returned
Normal delivery costs (incurred by HW Africa on all deliveries)	\$10 per delivery
Additional administration cost to arrange special delivery, that is, costs on top of normal delivery costs	\$4 per request
Maintain customer relations (send catalogue and respond to customer comments and complaints)	Best estimate of \$50 per customer per year

Required:

- (a) Using activity-based costing, determine the yearly profit associated with each of the four customers described.
- (b) Comment on which customers are most profitable and why.
- (c) What advice do you have for HW Africa regarding managing customer relationships with the different types of customers represented?

Activity 3 (b) - TDAB and CPA

The accounting team based in HW's US business has been looking at the budgeting process and has suggested that HW plc should utilise an activity based budgeting approach to some aspects of its business. The team had done some analysis and your boss, the finance director of HW plc head office, has asked you for your opinion. He has provided you with the following data sent over by the US team. Unfortunately his e-mail has the last page of the report missing which included the calculations of the costs and allocations of the customer service activity in one of the major US stores electrical departments.

Under a traditional budgeting system the US business would assign \$800,000 of committed resource costs for customer-service and allocate the costs over activities on the basis of the following information gathered from interviews with customer-service personnel.

Activity	Time percentage	Estimated cost driver quantity
Handle customer orders	60%	6,000 customer orders
Process customer complaints	25%	500 customer complaints
Perform customer credit checks	15%	600 credit checks

- (a) Allocate the cost of \$800,000 across the activity based on percentage allocations provided and compute the cost driver rate for each activity using the system.
- (b) The accounting team in the US were proposing to use Time Driven Activity Based Costing. The department has 10 members of staff that work a 40 hour week and the department is manned for 50 weeks in the year. They calculated the unit time for each activity as follows:

Activity	Unit time (Hours)
Handle customer orders	1.5
Process customer complaints	8.0
Perform customer credit checks	5.0

Compute the time-driven activity cost driver rates, the cost assigned to each activity, and the estimated hours of unused capacity as well as the associated costs.

- (c) Suppose that the quantities of activities this period are 8,000 customer orders, 600 customer complaints, and 400 credit checks. Compute the time-driven activity cost driver rates, the cost assigned to each activity, and the estimated hours of unused capacity as well as the associated costs. How does this help the management team in their decision making and control of costs?

Activity 4 - Financial analysis

Financial analysis activity

HW plc is undertaking a review of its future strategy and has obtained figures relating to the industry average in terms of the financial ratios.

Analyse the financial performance of HW plc based on the figures provided in Appendix A of the case study – the income statement (profit and loss account) and balance sheet for HW plc, and compare your analysis with the industry average provided in table 1.

What are the trends arising from the analysis of HW plc? What messages does this provide for HW plc's management?

Is there anything in appendix B of the case study that the management should take into account?

What other aspects of performance would you investigate?

Financial ratio	Industry average
Gross profit percentage of revenue	30.5%
Operating profit percentage of revenue	2.5%
Return on net assets (profit for year/net assets)	3.5%
ROCE - operating profit as percentage of capital employed (operating profit/long term borrowings plus equity)	6.2%
Asset turnover (sales revenue/long term borrowings plus equity)	2.5
Non-current asset turnover (sales revenue/non-current assets)	3.0
Gearing percentage (long term borrowings/equity)	40%
Current ratio (current assets/current liabilities)	2.0
Stock turnover (inventory/cost of sales)*365 = number of days stock held	100 days
Receivable days (trade receivables/revenue) *365 = average days to collect	75 days
Payable days (trade payables/cost of sales) *365 = average days to pay suppliers	90 days

Activity 5 - SWOT activity

- (a) Undertake a SWOT analysis for HW plc.
- (b) Identify what you consider to be the main elements within each heading, that is, prioritise your points in (a) so that you can highlight the **key** strengths, weaknesses, opportunities, and threats.
- (c) HW plc is planning to undertake a rationalisation and refurbishment of stores. This will involve disposing of some of the current stores in areas where sales are particularly depressed and refurbishing those that remain in the portfolio.

The board of directors are planning to undertake this project on a country by country basis and have made some projections about the impact on the UK performance in 2019. The Board have also decided to take advantage of some of the trends in the business environment and are planning to redesign the online shopping website to satisfy the increased demand for online shopping in the UK.

The board of directors have set an objective to increase the ROCE to 2015 levels of 4.1%. The capital employed in the UK business at the end the 2018 financial year was £3,091m and the operating profit in the UK was reported to be £64.9m. It is assumed that this level of profit can be maintained from existing operations.

Assuming that the level of profit will be maintained from last year what would be the ROCE for the UK be at the end of 2019?, that is, will the planned investments close the profit gap in 2019?

Projected impact of initiative in 2019	
	£m
Cost of refurbishment of stores – year 1 – the cost is treated as capital expenditure and is depreciated at 10% p.a. with a full year's depreciation in the year of expenditure. The refurbishments are expected to be completed by the end of the first quarters trading.	3.5
Cost of new marketing campaign highlighting the new look HW shopping experience to commence at the beginning of second quarter.	0.75
Increase in gross profit from additional store sales in year 1	10.2
Increase in gross profit from increased online sales in year 1	20.6
Continued on next page	

Increased investment in on line sales customer facing system, that is, website and online payment systems – treated as revenue expenditure in year 1	0.5
Increased investment in hub and spoke delivery to service online orders - treated as capital expenditure and depreciated at 10% p.a. with full year depreciation in year of expenditure.	1.0
Net saving in operating costs from store closures in year 1	0.6

Activity 6 – Competitive strategies

Competitive Strategies - activity

The main board of directors at HW plc is becoming concerned about the decline in profits of their business unit in Italy. They have asked the managing director of the Italian business to provide a full report outlining the reasons for the decline and a suggested strategy to improve HW Italy's performance for the next year.

While they were waiting for the formal report the finance director at HW plc head office had reasons to contact the managing director of HW Italy about another matter and raised the issue of the declining profits. He made some notes during the conversation. One aspect that interested him is that the problem appeared to be focused on the furniture and Interior Design section of the business. The managing director was adamant that the electrical, clothing and financial services parts were all very profitable but that the furniture section has been hit hard by a new entrant to the market who was undercutting prices. An existing major competitor had responded by matching prices and increasing their marketing expenditure on furniture promotions. The furniture market in Italy had become intensely competitive in recent years as independent manufacturers and retailers had fought against the large chain stores increasing their market share. The main focus of competition in recent years has been on price. Italian consumers, although they were quite sophisticated in their tastes, were also prepared to shop around for the best deal.

There appeared to be different opinions within the local board of directors at HW Italy. The marketing director was suggesting that HW Italy should match the new entrant, and the competitor move, and promote furniture sales and reduce their prices to match. This was based on the idea that the increased volume sales would generate the increased margin to pay for the advertising and increased overall profits, and that the new entrant would be forced out of business restoring the market to the usual competitor companies again. The new competitor was selling a basic design of furniture marketed under the slogan, 'Quality at low prices'. HW Italy was offering a wide range of furniture units of good quality with some leading brands as well as the HW own brand. Although HW Italy offered a wide choice of product ranges, the difference was in the style rather than the price, that is, units were of a similar price bracket and sales each year were fairly consistent in terms of the mix of units sold.

The operations director felt that the production cost of the furniture was too high for them to compete and that they should reduce the inventory items of furniture, and move the focus more on to clothing and electricals. The cost of the HW branded furniture that was manufactured in the HW UK factory and shipped to Italy had increased due to the fluctuating exchange rate against the Euro in recent months and this would only reduce margins even more. Also, the cost of other branded furniture that was sold in the retail stores had increased from their suppliers. However, the performance of the Interior Design services business was good, as they made a net profit of 15% of sales revenue, so the suggestion from the operations director was to reduce the number of furniture

ranges offered for sale, perhaps limited it to a small range of quality styles sold under the HW brand, and promote the Interior Design services. He illustrated his point by commenting that the manager of the Interior Design team had noticed a marked shift in kitchen design, and that customers were not only looking for a good deal but also looking for functionality with style.

He criticised the marketing director's suggestion on the basis that it would reduce HW to a strategy of cost leadership, which would be bad for the image of the company, whereas differentiating on quality and services would enhance this part of the business and give it an edge in the market. Apparently the manager of the Interior Design team is confident that they could increase their sales of design services if they were able to offer a product range that fitted more neatly into the functionality with style category.

The managing director said that the board of directors at HW Italy were preparing a detailed report and that they would forward this as soon as they were able.

During the conversation the managing director of HW Italy had read out some figures relating to the kitchen units sold and the Interior Design business generated from kitchens, which the finance director of HW plc head office had jotted down. The finance director, your boss, has provided the information above and the figures below and asked you for an initial opinion on the implications of the two suggestions.

Indicative figures from the kitchen section.

Year	Total number of Kitchen Units sold	Sales Value of Kitchen Units	Interior Design Sales revenue generated from Kitchen design	Operating profit generated from Kitchen Units and Design together
		€m	€m	€m
2015	2,050	922,500	650,000	162,000
2016	2,700	1,080,000	600,000	144,000
2017	3,600	1,260,000	550,000	107,500

Note: Profit from Interior Design services is normally 15% of the sales value generated from design. The Interior Design services part of the business is not restricted to selling HW branded goods but can select any kitchenware products from the range of manufacturers that HW plc stocks.

All the kitchen units are of a similar size – the design aspect comes from selecting appropriate units which are joined together to create the desired kitchen, for example, base units, corner units, wall units.

Required

- (a) Using the numerical information provided investigate whether a strategy of cost leadership is a viable option for HW Italy.
- (b) Based on what you know about HW plc, and the information provided by the finance director, recommend, with justification, a suitable competitive strategy that HW Italy could adopt. Also highlight any additional information or analysis that you think should be undertaken before a final decision is made.
- (c) It is often useful to gather information about competitors and current trends in the market when deciding on future strategies – what sources of information could HW plc utilise in order to understand its competitors much better?

Activity 7 - Activity-Based Costing

Exercise 7 (a) - ABC Picnic tables

HW plc has been selling a range of picnic tables that are currently being purchased from a supplier in Spain. There have been issues with the quality of some of the products and the operations director wishes to investigate whether HW plc would be better off if the tables were manufactured by their own factory. The factory in Ireland would have the capacity to manufacture the tables and the design team have provided the following information. The accountant has suggested that an ABC approach to costing would provide a better cost on which to calculate a competitive price for the products.

Activity	Cost driver	Cost pool €
Assembly	Number of labour hours	55,998
Purchasing department	Number of purchase orders	1,989
Delivery costs	Number of deliveries	30,000
Machine maintenance	Number of machine hours	46,500
Inspection and quality and control	Number of inspections	25,000
Total overhead costs		159,487

There are three styles of table proposed: Round, Square and Octagon

Information relating to the production process is as follows:

	Round	Square	Octagon
Direct material costs per unit	€120	€105	€115
Number of machine hours required per individual product	0.75 hour	0.5 hour	1.0 hour
Number of labour hours required per individual product	2 hours	2 hours	2.1 hours
Number of purchase orders received from HW central purchasing	3	4	6
Number of deliveries to made HW plc warehouse	10	30	40
Number of inspections	150	150	200
Production (number of units)	1,500	1,500	2,000
Mark-up on cost to be applied	30%	30%	40%

Labour is paid at €10 per hour including social charges

Required

- (a) Calculate the selling price of each of the three products using:
 - (i) traditional costing methods using machine hours as the overhead absorption rate;
 - (ii) recalculate using labour hours as the absorption rate, and
 - (iii) recalculate under the ABC method.

- (b) Explain why the three bases of calculation produce different prices and recommend to management, with justification, which would be the most appropriate method to use for pricing products.

Exercise 7 (b) - ABC Furniture factory dining tables

The furniture factory based in the UK has traditionally utilised a single rate of overhead recovery based on the number of units it has produced. The accounting team are currently reviewing whether they should adopt Activity-Based Costing. They have ascertained the following information about two of their most popular ranges of dining room table and are planning to use this as an illustration of the benefits of ABC. The factory 'sells' the products it manufactures to the retail store division and normally adds a mark-up of 25% to the dining room furniture products it makes.

The following information has been provided.

Product	Alpha range	Beta range
Output in units	12,000	14,000
Costs/cost drivers		
Direct materials in total	£240,000	£350,000
Direct labour in total	£168,000	£147,000
Total machine hours	2,100	2,400
Orders executed	150	110
Number of production runs	90	40
Number of shipments	50	15
Number of product returns from retail stores or regional depots	90	40

The production overhead is currently absorbed by using the volume of units produced, and the total of the production overhead for the period has been analysed as follows:

Activity pools	Annual costs £	Cost driver
Production overheads	180,000	Machine hours
Material handling	78,000	Orders executed
Quality enhancing and inspection	130,000	Number of production runs
Delivery	26,000	Number of shipments
Production return management	15,000	Number of returns
Total	429,000	

Required:

Calculate the selling price based on the current traditional method and also using the ABC approach. How does this aid management decision making?

Exercise 7 (c) - TDABC and call centres

HW plc sells many product lines within its stores and prides itself on customer service. Product lines are looked after by product line managers. Typically a product manager will take responsibility for liaison with everything about that product line or product group within the stores. They operate on a national basis, that is, a manager is responsible for a product group within all stores in the UK. A product group could be health and fitness products, audio-visual products, kitchen products, lighting products and so on. For small product groups a manager might look after more than one group.

HW plc currently operates a central service call centre that deals with customer calls for information and complaints. The costs of the call centre are currently allocated based on 10% of the sales value of the product groups.

The manager of product Y is upset because he has just received a report showing the following information relating to the year 2017.

	Product group X	Product group Y
Number of calls for information	5,000	2,000
Average length of call for information	10 minutes	6 minutes
Number of calls registering complaints	1,500	300
Average length of complaint calls	12 minutes	6 minutes
Sales volume	£200,000	£800,000

Product group Y contains products that are simple to use and consumers have little concern about adverse health effects. Product group X contains products that are more complex to use and have quite a few health hazard warnings on their labels and in their instructions for use. The manager of product group Y argues that the current system is unfair as it does not trace call centre usage direct to products. For example product group Y bears four times the cost of group X, whereas group Y, has far fewer calls associated with it and consume less time.

Required:

- What activity cost driver would you recommend to improve the current system of assigning call centre costs to product groups? Why is your method an improvement?
- Suppose that HW plc decides to allocate costs using an activity based method and chooses the basis of minutes of calls as the activity cost driver. Suppose the average cost of handling a call is £1 per minute. Compare the costs incurred by product group X and Y under the new system and the old.
- What actions can the product managers take to reduce the number of calls received by the call centre? What other functional areas might help reduce the number of calls per product?
- Who might resist the implementation of the new activity based cost system?
- From HW plc's point of view how might the ABC system and the value creation system help in the assessment of whether to outsource the call centre activities?

Activity 8 – Cost of quality

Exercise 8 (a) - Quality at HW plc manufacturing and Interior Design

[Adapted from a case study based on Portakabin published by The Times 100 TT100.biz website]

The Interior Design division of HW plc works very closely with the manufacturing unit to provide bespoke solutions (custom made to suit each individual customer's requirements). The Interior Design division has developed an extensive client base and is not just there to provide the retail customers of its stores with a service. On the contrary, the division has developed some prestigious clients in its own right and includes clients such as leading law firms and accountancy practices, as well as designing and equipping the offices of some major companies, not just in the UK but throughout the world.

HW plc Interior Design has positioned the division towards the top end of the market in terms of quality but attempts to offer services at reasonable prices. One of the ways in which it does this is by providing a suite of interchangeable units that keeps production costs down, but provides a vast range of alternative ways of combining the elements to produce a unique solution. Units are available in a variety of styles but the Interior Design division can purchase units from other suppliers if the client wishes, that is, they are not restricted to HW plc stocked products.

Quality is associated with consistency. A customer who is happy with the first buying experience needs and wants to be equally happy on each further occasion. The motto of the manufacturing and Interior Design businesses at HW plc is: Quality – this time – next time – every time.

The senior manager at the Interior Design division of HW plc says that quality relates to 'appropriate use': how well a product does what it is intended to do. The 'appropriate use' quality comes from two sources.

One is internal to the company. The company makes sure that its materials and bought-in products (purchased from other suppliers) comes from quality suppliers controlled under strict codes of practice and highly trained staff in their particular area of expertise targeted to satisfying customer needs and expectations.

The other source of quality control is external, for example, all products and processes comply with the demands of ISO 9001: Quality Management Systems. (ISO is the International Organisation for Standardisation) This is an internationally recognised standard which acts as a form of guarantee that everything the company does is managed to the highest quality standards.

The group's quality systems manager (QSM) is responsible for ensuring that HW plc has in place systems that guarantee quality throughout the group. To manage quality, the QSM has created an electronic system that all personnel computers and mobile devices authorised to access the IT systems, throughout the whole company, can access the quality system. One of the system's key

features is the 1-page quality manual that defines the requirements of the quality management system. This is easy to communicate both within the organisation and also to customers.

Being registered as meeting the requirements of ISO 9001 is very important to HW plc. This is because many of its larger customers will deal only with organisations that can demonstrate they meet this rigorous standard. All of the products that HW plc utilise in its designs and manufacture meet with modern standards and requirements, and this enhances consumer confidence. To reinforce this quality system, HW plc has a 'zero tolerance' quality checking system in place, so that no product may leave the manufacturing unit or the warehouse until it has been checked against, and complies with, demanding customer standards. Furthermore, because of their high quality standards, HW plc also offers quality guarantees in the form of 5 and 10 year warranties.

Any form of design and manufacturing activity involves sets of interlinking processes. HW plc's factory-based production process combines standardisation with customisation. As well as products being designed specifically for a client most will choose from the five ranges of standard products varying in style that the design team, working with the client, put together dependent on the individual customer specifications. This is effective in that it enables HW plc to benefit from elements of standardisation (which helps to keep costs lower) but to still offer each customer a tailored solution.

To ensure that all customers get what they want, HW plc deploys the quality systems approach referred to earlier. A corporate quality team (comprising senior managers) is responsible for ensuring that individual teams understand quality processes. Communication takes place by means of process charts. These are clear illustrations that set out the processes involved, for example, in creating a bespoke solution for a new client. For each customer order a design and build team is established to ensure that the customer requirements are met. This could be a case of ensuring that standard products are provided on time, to designing a completely new solution for a client.

The essentials of the quality system are:

1. Say what you do

By studying the quality manual, teams working on a particular process know what the job requires. If in doubt, they can ask team leaders. This process enables everyone involved to understand and state the process and their role within it.

2. Do what you say

Once they understand the process, team members are able to implement it, for example, by designing and manufacturing the products for a specific client.

3. Record what you have done

Design and build teams record all actions taken, so that all those involved know the current position, what has gone on before and what still needs to be done.

4. Review what you have done

Records are regularly reviewed both to ensure delivery targets can be met and to identify any problem areas.

5. Take remedial action where necessary

If problems or potential problem areas are identified, steps are taken to eliminate or reduce these.

6. Then start the process again

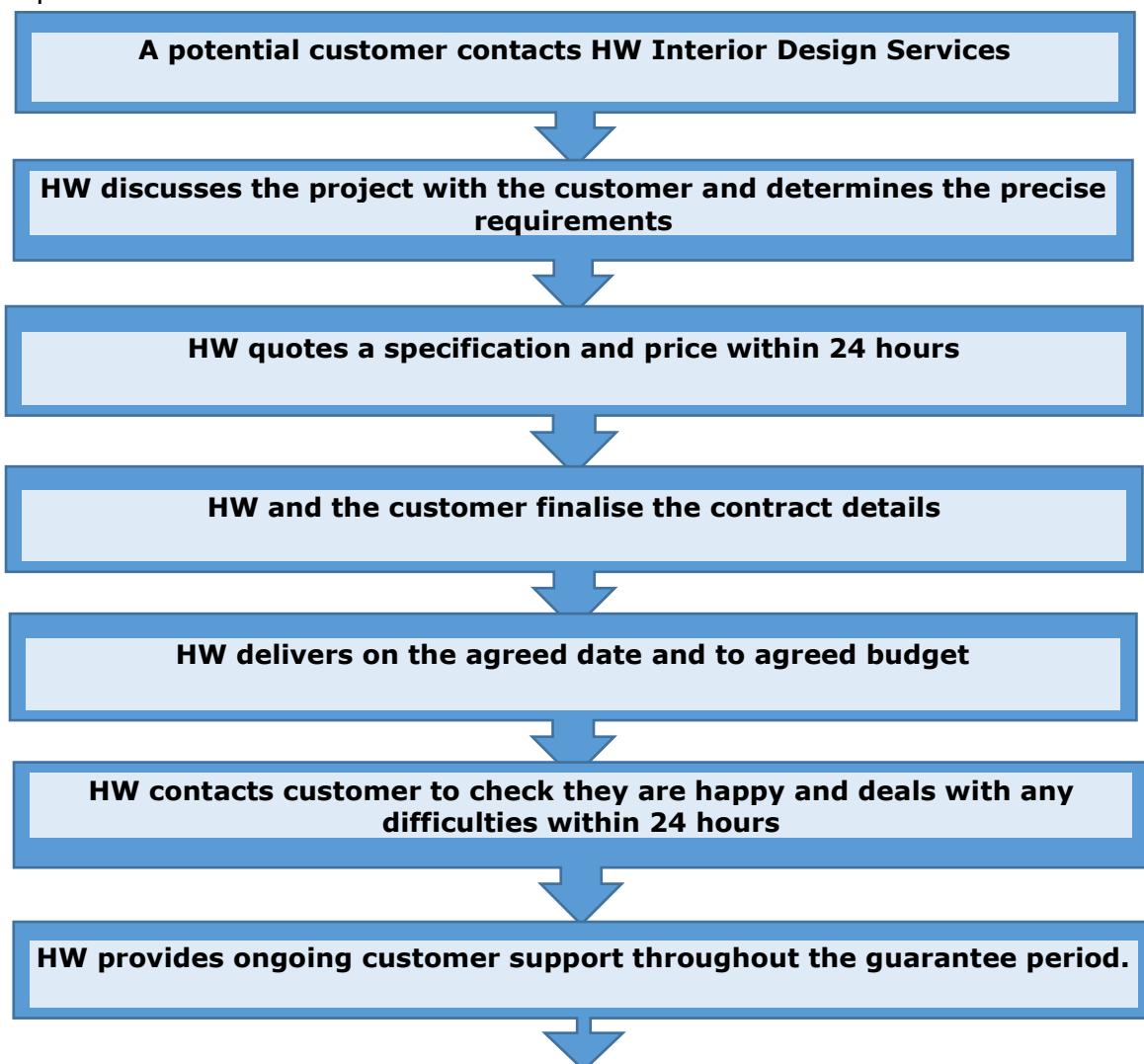
This procedure is followed for each stage in each process to ensure that everyone benefits from solutions to problems, which have already been devised.

An essential part of improving quality is to identify problems as and when they occur. These can then be addressed and resolved immediately. This is what HW plc mean by 'zero tolerance'. To address any issues, HW deploys a 'commando team' as part of its quality team. This team scrutinises products and processes from the customer's viewpoint. On one occasion the team found that units were not fitting together as they should, a quick 'alert' to the manufacturing team led to the fault being eliminated before it became a problem for the customer. Teams complete quality reports with the purpose of:

- fixing the immediate problem
- identifying its cause
- making changes to prevent the problem reoccurring.

Quality service

Providing customer service is another vital part of quality management. See steps 6 and 7 in the chart below.



The company believes that providing exceptional levels of customer service is as important as the quality of the products it makes or purchases from other suppliers. To support this commitment, it has developed a number of initiatives aimed at continuously improving service.

HW plc:

- guarantees to complete projects on time and on budget
- operates a customer charter that sets out minimum standards that customers of its Interior Design division can expect to receive. This charter includes the pledge where HW plc will recompense the customer if it fails to deliver a project on time
- offers a complete plan, design and installation service
- runs a comprehensive customer satisfaction survey every month.

Conclusion

In a competitive market, businesses stay ahead by offering products that are different and/or superior in ways that matter to customers. HW plc’s Interior Design division has positioned itself in the quality end of the market, whilst at the same time providing value-for-money products that fully meet key standards set out in ISO 9001. The most recent external audit of HW plc’s practices showed that the company is meeting the required standards in all aspects of quality. This outcome is the result of a great deal of thought, careful planning and ongoing education and training of a skilled and dedicated workforce.

Required

Based on the description provided above identify the costs of quality relating to the Interior Design business unit. Make bullet point ideas using the four headings of the costs of quality.

Prevention	Appraisal
Internal failure	External failure

Exercise 8 (b) – Costs of quality

Furniture from HW plc Guildford store

The following letter was red flagged and created a major alert at the HW local retail store and the head office who demanding an immediate investigation into what went wrong and what was going to be done to stop it happening again.

Dear Sirs,

In December I purchased a new house ready to begin working at my new job in Nottingham in January.

On the last Saturday in December I decided to go shopping at one of your stores in the town where I currently live in Guildford, Surrey. I decided I would need a new dining table and chairs, sofa and arm chair, as my current furniture had seen better days.

I arrived in the furnishings department in your Guildford store at 9:10 a.m. in order to beat the rush. I wandered around the department sitting on chairs, sitting on chairs at various dining room tables, sitting on sofas and armchairs, and looking through material sample books for 20 minutes, before deciding to go off in search of an assistant. At the 'Pay Here' desk I found someone and asked if anyone was available to help in the furnishings department.

'I could find someone for you' the assistant replied with a degree of reluctance.

Someone was found – a person I had previously seen walking through the department several times. They very kindly offered to help and began to take my order. It took about 15 minutes to place the order on the computer system, which included several aborted attempts to find the order code for the items I required. I was left not feeling confident that what I had wanted was actually what was processed. All the furniture had to be made to order and would take about 6 weeks to arrive.

When it came to pay I had to go to the pay desk. A different assistant asked if I had a HW plc credit card, as this would allow me a 10% discount. I replied No, so I was persuaded to apply for a HW plc credit card in order to benefit from the discount. The application was processed at the till, credit check performed and card granted. This took about 10 minutes as a manager had to be found to authorise the application. As the order for the sofa and armchair, and dining table and chairs came to more than £1,000 – the limit allowed on a new card application, I was told I could put £1,000 on the new card, which I duly did, and used my HSBC card to pay the balance – they very kindly allowed the 10% discount on the whole purchase. I was also persuaded to take out insurance offered with HW plc credit card costing £3 to protect the purchase. This was then automatically added to the HE plc credit card bill.

2 weeks later I received a telephone call saying that the supplier of the sofa had a problem with their supplier of cloth, and it would take another three weeks for the furniture to be made. I would be contacted when it was ready.

3 weeks later I received a letter from the legal department of Visa Card Services, who apparently manage the credit card for HW plc, telling me that the card was overextended by £3 and unless this was cleared immediately it would be stopped and legal action taken to recover the debt. The letter also informed me that the account would be charged with £15 for the administration costs. Apparently the insurance had been charged to the credit card automatically, so with the £1,000 towards the purchase of the furniture the total charged to the card was £1,003. This seems to me to be unreasonable as it was an error on the part of the store employee. I have written to Visa Card Services explaining the situation and have paid the £1,000 and suggested any additional charges be reclaimed from HW plc. I have also asked Visa Card Services to cancel the card with immediate effect.

I also received a letter saying that my dining room table and chairs would be delivered on 21st January. There was a contact phone number to use if the date was inconvenient, if however, no communication was received it would be assumed that the date was acceptable. I telephoned to arrange a more convenient date.

When the dining room table and chairs were delivered the chairs were of a slatted back version, and not leather backed, as had been ordered. The delivery staff were unhelpful, commenting that they had never delivered any leather backed chairs with that style of table before and did not think that the company sold them. They did however leave the incorrect chairs so that I could sit down and suggested that I contact their administration office.

I contacted HW plc who said that the supplier was at fault and gave me a number to contact the supplier. I contacted the supplier, and was told that the wrong chairs had been loaded on the van - I would be contacted with another delivery date. After two days I contacted them again and spoke to a different person, and this time I was told the chairs were being made for me.

Four weeks later I received a letter saying that the chairs would be delivered on 3rd March. I telephoned again to say that the date was inconvenient - 'Thank you - I will cancel the delivery,' the girl answered and put the phone down. I wrote to you to lodge a complaint stating that if they were not delivered before the end of March I would cancel the order, demand the return of the money, and purchase chairs from another source. No response was received. But I did receive another letter with another delivery date for 24th March - I rearranged work to enable me to be at home when they arrived. The chairs were delivered on that date and the delivery staff kindly took away the incorrect chairs, and left the new ones in their place.

On 16th March I was contacted by HW plc to say that the sofa and the armchair were ready and that a delivery date could be arranged. You were unable to deliver them on 24th March, when I had arranged to take a day off work to take delivery of the dining chairs, but a date was arranged for April.

When the sofa and chairs were delivered in April (I had taken another day off work so that I was at home when they were delivered), the chairs were fine, but there was a snag on the sofa which was very visible as it was on top of the back rest. The delivery driver noted this and advised that they would leave the sofa but that I should contact the administration office to see what they could do about replacing the sofa.

As the delivery van was driving away, and I was picking up the phone to contact the administration office, I noticed that there was also a mark on one of the seat covers that looked like oil. I pointed this out when I was in contact with the office. The lady from the office was very apologetic and I was told that the sofa would be replaced. However, the next day I was told that the head rest element could be replaced but that I would have to pay for the seat cover, as this was not recorded on the delivery document as being at fault.

I would now like my money back for the sofa and matching chair, and you can collect the sofa and chair at your earliest convenience.

I look forward to hearing from you and thank you in advance for your kind assistance in this matter.

Yours faithfully

Required

What are the problems or failures in the above scenario and how could they be overcome?

What are the costs for the company associated with the scenario outlined above?

Activity 9 - Methods of growth, investment appraisal and stakeholders

HW plc expands into out-of-town stores in China JV

HW China is currently planning to expand its operations in the country. As in most countries the trend towards out-of-town shopping is still popular and in some cases this is being supplemented by 'Shopping Villages'. These are out-of-town single story retail outlets where consumers are able to buy discounted top-quality brands. Luxury goods retailers have embraced the concept and are utilising them to sell old product lines that have been replaced in their high street stores. This gives consumers who are less wealthy the chance to buy luxury goods, and the retailer a chance to dispose of surplus stock and end-of-season product lines.

The Shopping Villages tend to be managed by their owners and management companies, who operate the sites quite aggressively in that they offer short term leases, and can change the mix of companies represented depending on current trends. This however, can be quite attractive to retailers where high street leases are typically much longer, so the Shopping Villages offer a lower risk in which to test the market. HW China has operated a small outlet in a Shopping Village near Beijing which has shown some promise. The short term lease is coming up for renewal and HW China are now investigating the opportunity of closing the small store in the Shopping Village and opening a slightly larger store, more in line with an 'out-of-town' store, on a nearby site in the same area. To minimise the risk HW China is considering entering into a joint venture agreement with a major food retailer. It is felt that this choice of partner would not pose a direct threat to HW China, as the product ranges are complementary but do not directly compete.

However, some of the luxury brands that HW plc stock such as Burberry, Prada, Amani, Abercrombie & Fitch and Hugo Boss were not very happy with the fact that HW China had opened a small store in the Shopping Village, as these major brands have their own outlets in Shopping Villages. The 'gift' culture in China means that these brands do very well in Shopping Villages where goods can be discounted by anything between 30% – 70%. These brands therefore see Shopping Villages as a good way to expand their consumer appeal outside of the large high street stores in which their goods are available. They are not happy about the prospect of HW China opening up an out-of-town store, as they feel that this will confuse the consumer. In retaliation they have indicated that they may not allow their brands to be sold in the out-of-town store.

The proposal for the out-of-town development in joint venture with a food retailer

The cost of the out-of-town development would be split 50-50 between HW China and the food retailer, and the acquisition of land for retail development, construction of the buildings, and provision of parking facilities is estimated at a

total cost of ¥500m (Chinese Yuan Renminbi, CNY). For evaluation purposes the store is treated as having an operational life of 12 years following the completion of construction, and it is estimated that from the time the decision is made to when it is opened it will take 2 years to gain the necessary planning permission, build the facility and undertake final commissioning ready for the operations to begin. It is estimated that 25% of the ¥500m will be incurred in the first year with the rest in the second year. Once built the retail space utilised by HW China will be 40,000 square metres and HW China are targeting a net cash inflow of ¥1,200 per square metre per annum from the commencement of operations. However, market research indicates that this could have an impact on the sales of the HW China's high street stores in Beijing which would reduce the net cash inflow from those stores by the equivalent of ¥200 per square metre per annum. For appraisal purposes the superstore is assumed to have a residual value of zero at the end of the 12 year period of operations. All cash flows are expected to be incurred at the end of the year to which they relate. The cost of capital is estimated to be 6%.

HW China are keen to see the development approved as they are aware that at least two of their main competitors have opened up small scale stores in Shopping Villages on the fringes of major cities, so they are also testing the out-of-town market. The local government are keen to see the development go ahead but there has been some opposition raised from the local community. In addition agreement has been reached to established public transport links to service the operational superstore, but transport providers are now saying that as people will most likely travel in their cars to the site they are no longer prepared to maintain the planned frequent services due to estimated low demand.

The central government has expressed concern recently about the impact that the growth in out-of-town stores and Shopping Villages is having on the high street and city centre shops. It has commissioned research into the social impact of out-of-town shopping to report within the next 6 months. HW China has made no firm commitment yet other than to undertake a feasibility study with the Joint Venture Company.

Required:

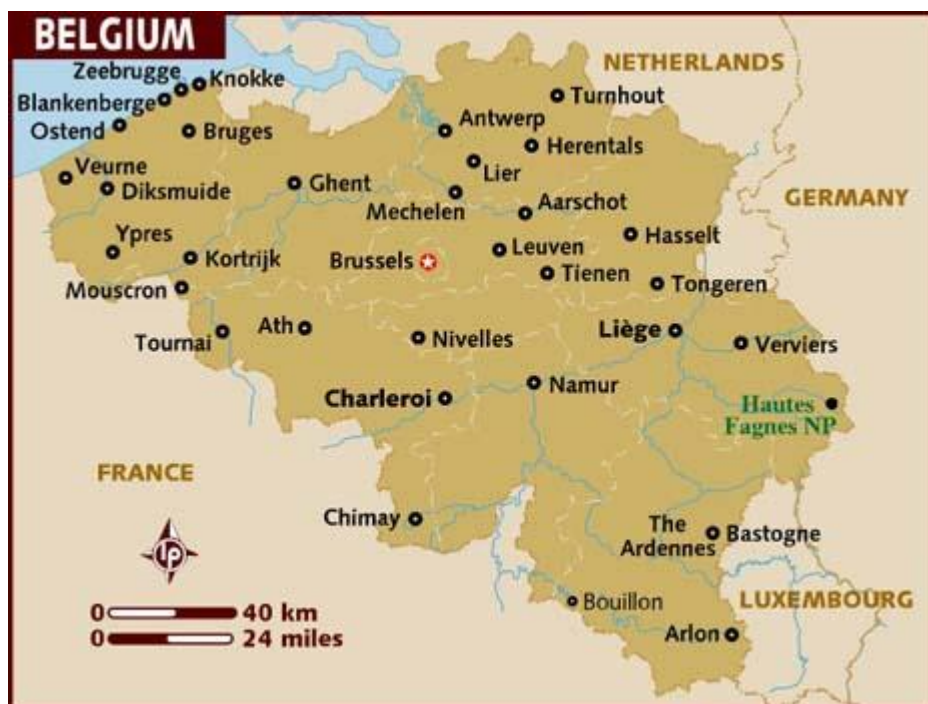
- (a) Prepare and comment on the financial appraisal which HW China utilised to justify the investment. Assume that HW China pays for 50% of the initial investment which is incurred during the planning and construction phase which takes two years. Then, once operational, there are twelve equal annual net cash flows for twelve years.
- (b) Identify the market opportunities and threats which confront HW China if it adopts a strategy of developing more out-of-town stores in the future.
- (c) Undertake a stakeholder analysis in relation to the strategic decision to open the out-of-town store on the fringes of Beijing.
- (d) Discuss the merits and drawback for HW China of pursuing out-of-town developments completely on its own or as a joint development with other retailers. Pay particular attention to the practical aspects and operational difficulties which may arise.

(continued on next page)

- (e) Describe the contribution a management accountant may make to the planning processes of HW China in the areas of project feasibility, evaluation, monitoring, and post implementation audit.

Activity 10 – Investment appraisal and stakeholders

HW plc is considering opening a new warehouse in the North of Belgium. Currently the stores in Antwerp and Aarschot are serviced by a warehouse just outside of Brussels. Building on its expansion programme of opening new stores in Turnhout and Hasselt, and establishing a hub and spoke strategy to its logistics, the local Board of HW Brussels had been asked to investigate the possibility of opening a new warehouse/depot just outside of Herentals.



One of the policies that HW plc has set is that for warehouses/depots to be beneficial they must not cost more than 7% of the revenue generated from goods sold in the stores that it services, and for which goods pass through the depot. They are normally evaluated over a 5 year period based on a net present value calculation using a discount rate of 5%, which represents the relatively low risk attached to such an investment. The main hub is based in Brussels, which is where the current sales from Antwerp and Aarschot are serviced. The management team believe that it would be more effective to establish a spoke so that a regional depot was supplied from Brussels, which then serviced the current stores in Antwerp and Aarschot, and the new stores in Turnhout and Hasselt. The benefit is that bulk deliveries can be made from Brussels to the regional depot and smaller vehicles can then be used to split the bulk for delivery to the local stores.

Current sales in Antwerp are €5.5m per annum and in Aarschot €4.5m per annum. Sales have been fairly constant during the last three years and are expected to remain at that level for the foreseeable future. The stores do good

business but consumers tend to shop locally so, for sales to grow, expanding the number of stores is the best strategy. However, once the new stores are opened it is expected that there will be some cannibalisation of sales, that is, people that visited the stores from Turnhout and Hasselt will now shop in the local stores. It is estimated that the effect will be to reduce the sales in Antwerp and Aarschot by 5%. Forecast sales for Turnhout and Hasselt together are estimated to be €4.5m in the first year, growing by 10% (compound) a year for five years before stabilising.

The cost of the new depot, land and buildings is estimated to be €0.5m – a potential site has been identified that could be ready for operations within a few months of the decision to go ahead being made. Annual running costs are estimated to be €300,000 per annum, rising each year by inflation of 2.5% per annum. There is local unemployment so it is expected that labour will not be difficult to obtain. A manager will need to be recruited at a salary of €25,000 per annum, and 20 workers employed on a shift pattern earning an average of €15,000 per annum – all salary costs are expected to increase by inflation. A forklift truck and 2 stackers (a smaller version of a forklift truck) would be needed immediately at a total cost of €18,000. These will be replaced at the end of five years with no residual value.

A fleet of 10 vehicles will be attached to the depot. A deal can be done with a local dealer and the fleet of medium sized box trucks could be acquired immediately on a five year lease rental, at a total cost of €250,000, covering the whole 5 year period, which would include maintenance for five years and all operating costs, subject to a maximum mileage of 100,000 miles for each vehicle within the five year period. HW plc would need to supply the drivers, who are each expected to earn €18,000 per annum – one driver per vehicle, The existing drivers have raised some concerns as they see this as potentially reducing their earnings due to the fact that they will be making fewer trips and the possibility of earning overtime could be reduced. However, the board of directors of HW Belgium felt that opening the depot would be better for the health of the current drivers, and that there is less chance of them going over the maximum driver hours allowed in any one day imposed by the EU.

The main HW plc board of directors are keen to expand in Belgium and are fully behind the hub and spoke policy of distribution. There is some concern about the impact of BREXIT, but the board are keen to go ahead anyway. The local bank is more than prepared to offer a competitive loan to finance the purchase of land, buildings, lorries, and forklift trucks at an annual interest rate of 3% as the bank is keen to expand its business with international companies. This cost of finance is not included within the current cost of capital of 5% that HW plc typically uses to evaluate investment opportunities. The local board of directors of HW Belgium feel that this would be the cheapest way to finance the depot and would only use the finance for this project. They therefore, suggest that the marginal cost of capital of 3% should be used for evaluation purposes.

The local board of directors are also aware of local residents who have lodged a protest against the proposed site due to the increased number of lorries on the local roads that will result from establishing the depot. Half of the

members of the local government (the local council in the Herentals town) are keen to see the development go ahead as it will help with employment. There is a re-election process due within the next 6 months so HW plc are keen to push for a decision before the local elections. A few councillors have suggested that they would press for traffic restrictions to be put in place, that is, no early morning or late evening deliveries. The regional authorities (the municipality) are keen to see companies expanding in the area that have potential to stimulate the local economy and are likely to support the proposal, providing the traffic issue can be resolved. The municipality oversees the local government but traditionally has not involved itself too deeply in local decisions. For the development to go ahead HW Belgium need approval from both the local council and the regional authority. Several of the competitor stores are not so impressed, and are likely to try and make life difficult for HW Belgium stores to establish themselves in the new locations as the competitors try to hold on to their market share.

Required

- (a) Undertaken a net present value calculation to establish whether the planned depot meets the requirements of the HW plc board of directors. Also state any assumptions you make and indicate any other form of analysis that might be useful.
- (b) Undertake a stakeholder analysis for the strategic decision to establish a depot in Herentals. State the stakeholder group, their expectations and degree of power they may have in relation to the strategic decisions.

Activity 11 – Critical success factors and performance management

HW UK is planning to expand its stores in the north of the country. The board of directors of the HW UK subsidiary believe that there is scope to increase its overall sales by tapping into some of the UK Government's initiatives to stimulate the northern economy and, as the regional politicians call it, create a northern power house.

Currently HW UK is very strong in the south of the country and, based on their experience, the board of directors realise that finding the right strategic location is a key part of success on the high street. Also enjoying economies of scale from the size of operation can aid the cost management, and having the backing of a large parent company, which can provide finance, also aids success.

Intugroup is a retail company that owns nine of the top 20 retail locations in the UK. HW UK has a store in the Intu owned shopping centre in Intu Eldon Square, Newcastle upon Tyne (see map at end of this section) and also in the Intu Braeland, Glasgow (Scotland) centre. HW UK has been in talks with Intu and understand that Intu are also keen to expand their presence in the north, as well as expanding its overseas locations. Currently Intu has locations in Spain. Intu offer shopping amenities that generate high footfall (the numbers of shoppers that enter a particular store) and long dwell times, that is, encouraging potential customers spend a long time in the shopping centre due to the other amenities that are on offer, such as food, and leisure activities. Both footfall, as well as purchase conversion rates, (which is the number of shoppers that enter the store who actually purchase products) are key to retail success, particularly when competitor stores are also present in the retail centres. This is highly likely as the shopping centres occupy huge sites with thousands of square feet of retail space. Intu offer security, cleaning, environmental and technical services to their retail tenants and are proud of their occupancy rates, that is, they have a very high percentage of retail units occupied in their shopping centres. It does not look good or inspire customers if the shopping centre has lots of empty retail units. The centres are equipped with the latest CCTV technology that monitors people entering and leaving the centres, and movement around the centres and into and out of stores, so that statistics are available to the retailers. Marketing research indicates that store layout is also a key factor in selling goods and Intu can help with advice to new retailers.

HW UK has commissioned some marketing research to identify key factors that will help the success of a store. The marketing research company has provided a preliminary report which included some interesting measures that they had identified.

The marketing research company has looked in detail at one of the successful HW UK stores in the south of the country. The store in question is located in Bournemouth, a seaside town. This is because the marketing research company had done some research for the local authority in Bournemouth and already had some general data about the area. They also did a detailed study of

the HW UK store in Newcastle and also of a major competitor of HW UK, which has a strong presence in the North of the UK. The competitor does not have a store in Newcastle so a store in Manchester was used as the comparison site.

Measure	HW Bournemouth Located in the High Street in a building owned by an independent property company	HW Newcastle Located within the Intu Newcastle shopping centre	Typical major competitor store located in the Intu Trafford centre Manchester
Customer satisfaction score out of 10	7.8	6.7	8.0
Passing trade – average number of people entering the shopping centre per day	10,000	15,000	20,000
Footfall – average number of people of entering the store per day	1,500	2,000	4,000
Point of purchase – average number of purchases made in store per day	400	450	1,000
Annual sales from store	£8.76m	£8.0m	£9.7m
Annual cost of goods sold from store	£6.12m	£5.92m	£6.79m
Average value of click and collect sales per annum	£0.087m	£0.16m	£0.388m
Closing stock value at end of last financial year	£1.04m	£1.776m	£1.058m
Number of employees in store	292	316	275
Square foot of retail space in store	40,000 sq ft	45,000 sq ft	50,000 sq ft
Average number of product ranges stocked in store	25,000	26,000	15,000
Annual cost of wages for store staff	£4.38m	£4.538m	£3.947m
Opening hours of store	9:00 - 17:00 Mon – Sat 10:00 – 16:00 Sun	9:00 – 17:30 Mon - Sun	8:30 – 18:00 Mon – Sun
Annual rental cost of property	£10m	£9m	£10.5m
Unemployment rate in the region	1.8%	8.1%	7.4%
Population growth in the region p.a.	1.6%	2%	3.2%
Percentage of population of working age in the town	62.6%	68.5%	66.0%
Average annual income of population in the region	£24,300	£20,862	£21,623
Average family household size	2.18	2.4	2.35

Required:

- (a) What are the critical success factors for new stores?
- (b) Based on the information provided comment critically on the comparisons provided by the marketing research company.
- (c) How useful is the comparisons to the management of HW UK in making the decision about the success criteria for a successful stores in the North of the UK? Are there any reservations, concerns or questions you have about the comparisons provided? What could HW UK do to improve the performance of its exiting store in Newcastle? When undertaking this activity don't be afraid to use your own experience of shopping centres or common sense reasoning in thinking of ideas.

Map of UK – note location of Bournemouth, Newcastle upon Tyne and Manchester.



Activity 12 – Balanced Scorecard

Timothy Kinder (Non-executive director) has suggested that the Balanced Scorecard, as developed by Kaplan and Norton, would be an appropriate model with which to monitor the performance of the company in the future.

Required:

- (a) Critically evaluate how the Balanced Scorecard model, developed by Kaplan and Norton, will assist the Board of Directors of HW plc in evaluating the company's performance.
- (b) Illustrate for each business unit described below suitable objectives, performance measures, and initiatives that could be utilised as part of a balance scorecard approach to performance management. [Note that you don't need an initiative for every objective. Usually one per perspective is appropriate to illustrate your understanding].

HW plc Retail stores

The retail stores are mostly high street stores, although HW plc is planning on opening an out-of-town store in China where it has already been relatively successful with a small store in a 'shopping village'. A shopping village is an out-of-town location where retailers have small outlets that are often devoted to selling end of season goods and disposing of surplus inventories. These are normally sold at a discounted rate to the latest products available in their high street stores.

The retail stores have not been as profitable in recent years as the market has become very competitive, and customers are becoming more sophisticated and demanding in their expectations. One way in which HW plc has attempted to compete is to always offer the latest products. This makes inventory obsolescence an issue, as judging the amount of inventory to hold so as to satisfy customer demand, without having large inventory write offs, can be difficult. This is a problem in the clothing market where products are seasonal, for example, summer range, winter range and so on. This sector is also one heavily influenced by the latest fashions. However, a new inventory management system is helping with the problem. The growth of the 'click and collect' service is working well and, along with online sales, is set to grow in the future in all product groups.

The use of concessions (companies that effectively rent space in the HW plc stores) also enables HW plc to provide a wide range of products to their customers. HW plc plan to try and increase the number of concessions in the next few years as it shares some of the risks between the partner companies. However, HW plc do not want to diminish the HW brand as they also plan to continue to develop and sell their own brand products. They also wish to retain their manufacturing capability as this provides a useful diversification from retailing and enables more control over quality of certain product lines in which they have a manufacturing capability.

Clothing sales have been slowing in recent years but the furniture sales are fairly strong. The electrical goods market is very competitive, particularly the audio-visual and kitchen aids ranges. The increased competition in the specialist electrical goods retailers has also hit the departmental stores such as HW plc, along with the need to always be seen to offer the latest products highlighting the need for good inventory management.

HW plc Interior Design

HW plc Interior Design has a range of corporate clients as well as retail customers. The design team cope with a range of projects from single room design such as a new kitchen design for residential customers, to working with property developers and architects on both commercial and residential large scale projects. They source products used in their designs from HW plc and a wide number of other companies. They have a large amount of autonomy over which products to recommend and are not necessarily tied to HW plc, although they always consider HW plc products, and recommend them where they are suitable. This helps the HW plc research and development team, who look after the HW plc product range, as the Interior Design division is able to gather and feedback information about the products of other manufacturers, and also customer trends. The Interior Design team are keen to expand their business and are looking to increase the number of corporate clients. In particular they plan to target the state owned and education sectors over the next few years. In order to do this they will need to expand their design team and recruit additional staff with appropriate experience of those sectors.

HW plc Financial Services

The Financial Services division is seeking to increase the number of credit card customers over the next few years and is also planning to diversify into insurance products. The division already offers extended guarantees and insurance on products sold in the HW plc stores, particularly on electrical goods, such as fridges, washing machines and TV/computers. The management team are thinking of expanding into life insurance, travel insurance, car insurance, and home and contents insurance. This is a competitive market but they believe that the volume necessary to break-even on these products could be achieved if they can attract existing HW plc customers and build on the reputation of the HW brand. This will then provide a solid platform on which to expand the business in the future.

More recently they have seen the administration costs increase and the management team have highlighted this as an area where improvements could be made, perhaps via a benchmarking exercise. They also recognise that an increase in business will require an increase in qualified staff, and by adding a range of new products it will create the need for additional training of the existing staff.

HW plc Product Development and Manufacturing

This division has seen material costs increase in recent years and they are looking at the supplier relations to see if there are any savings that can be made

on the cost of materials. The division does not see a large increase in business over the next few years, but is seeking to maintain volumes at existing levels in order to retain the manufacturing capability, and within this to keep the product range up-to-date. This means replacing existing product designs with more up-to-date designs rather than developing completely new product ranges. They see the next few years as being a consolidation of the division. Control of costs will be important and reviewing manufacturing methods is seen as part of that process, but they are not intending to spend a lot of new capital investment in plant and equipment. They feel that there is scope to improve in areas such as waste management, energy costs, productivity, and inventory management.

Activity 13 – Benchmarking

Required:

- (a) Critically evaluate benchmarking as a technique for improving the profitability of HW plc
- (b) Provide advice to the management of HW plc on the types of benchmarking that could be used. Illustrate your answer with examples of areas of the business or activities that could be benchmarked.
- (c) Provide advice on the stages of conducting a benchmarking exercise in the context of HW plc.
- (d) What other models and frameworks have you studied on the course where benchmarking could be used to aid the analysis.

Utilise the information provided on previous activities for performance management and the balance scorecard to help think of appropriate examples of benchmarking for HW plc's various business activities.

Activity 14 – Divisional performance RoI and RI

HW plc

(A case to compare ROI and RI measures and the effect on Divisional and Group results. This is based on an old exam question from one of the professional bodies).

HW plc Product Development and Manufacturing (PDM) subsidiary division is organised on business units that operate in different countries, that is, they primarily manufacture for the local retail stores in the country, but allows HW plc to source products globally, and to maintain a production capability in most of the continents in which it operates. Where possible they try and supply locally. The management of the division assesses the performance of its business units in different countries on the basis of a target return on investment (ROI) of 10% (having set this target some time ago in the belief that it is a good estimate of the cost of capital in the division). Overall the subsidiary division seldom achieved a 10% return but one of its business units – the Indonesia PDM Business Unit – which is a fairly small unit, has repeatedly surpassed target performance as shown below:

<u>Year</u>	<u>ROI</u>
2017	22%
2016	20%
2015	20%
2014	18%

In more detail, Indonesia PDM Business Unit's results for the most recent year were as follows:

	<u>Rp,m</u>	<u>Rp,m</u>
Revenues		540,000
Cash operating expenses	400,000	
Depreciation	41,000	<u>441,000</u>
Direct Business Unit Profit		<u>99,000</u>
Business Unit Assets:		
Opening balance		450,000

Currency is in Indonesian Rupiah and are shown in millions

Early in 2017 the Research and Development Division of HW plc head office was asked by the Indonesia PDM Business Unit to evaluate the development of a new product range targeted at the Indonesian market. The product has very good prospects and is now nearing the end of its development phase. As further development and introduction of the new product would cost Rp90,000m the HW Research and Development head office team believes that Indonesia PDM should now take the project on board and reimburse the initial development costs amounting to Rp30,000m. However, Indonesia PDM Business Unit management are reluctant to pursue the project further because their

forecasts and computations show that the project is unlikely to produce returns of greater than 20% per annum.

Indonesia PDM estimates confirm that the new product would require an additional investment of Rp90,000m and that this would generate additional revenue of up to Rp150,000m per annum over seven years. Operating expenses are estimated at Rp118,500m per annum and are exclusive of depreciation. HW plc's internal group accounting practice is to depreciate total expenditure on projects (inclusive of development costs) over the life of the project using the straight line method.

Corporate management at HW plc head office are surprised by Indonesia PDM's rejection of the project because of their belief in the market prospects of the new product. In order to advise corporate management at HW plc head office you are required to analyse the situation as follows:

1. Make calculations to confirm (or otherwise) whether the investment in the new product is desirable for HW plc, that is, the company as a whole. Would the Indonesian division take a different view of the cash flows to be included and what might their decision be.
(i.e. Calculate NPV using relevant cash flows, first from the viewpoint of the head office, and secondly from the viewpoint of the Indonesian division).
2. Calculate Indonesia PDM Business Unit's Return on Investment (ROI) and Residual Income (RI) for (a) existing operations, (b) the new product and (c) combined operations.
(Use a table for this purpose with (a), (b) and (c) as column headings, and ROI and RI as rows).
3. Make recommendations to the Board of HW plc head office and comment on the results of the two measures of divisional performance measurement. In particular state which of the ROI/RI methods you would recommend.

Activity 15 - Transfer pricing

Exercise 15 (a) - Transfer pricing Interior Design Extractor

(This based on a question from Drury, Cost and Management Accounting)

The Interior Design business of HW sells its services to customers of HW plc. The division operates as a profit centre and is free to recommend the best furniture, lighting and kitchen units, etc., to suit the needs of the customer. The way it operates is to essentially purchase the units from the other divisions of HW plc, either the factory, or the stores, which it then sells to the customer, adding its own design fee to the total price. There is a particular type of extractor that the UK Interior Design division uses in its kitchen design. This extracts smells as well as steam. The unit is manufactured by a small factory that HW plc acquired last year. Recently a dispute has arisen between the factory and the Interior Design management about the cost that the factory wants to charge the Interior Design division for the unit. The factory is confident that they can sell 100,000 units into the external market and has a capacity of 120,000 per year, so is able to sell 20,000 units to the Interior Design business without affecting its own demand for external sales. However, the Interior Design business would like to buy 30,000 units. The factory believes that because of the superior quality of the product compared to its competitors they will eventually be able to grow their external sales to the full capacity 120,000 units within 2 years.

The factory division has offered to supply the Interior Design division 20,000 units at a transfer price equal to the normal selling price, less the variable selling and distribution costs that it would not incur on this internal order. The Interior Design division responded by offering an alternative transfer price of the standard variable manufacturing cost plus a 20 per cent mark-up on cost. The two divisions have been unable to agree, so the operations director of HW plc has suggested a third transfer price equal to the standard full manufacturing cost plus 15 per cent mark-up. However, neither divisional managing director regards such a price as fair.

The following information relates to the Factory forecast for next year.

	£,000
Sales Revenue (100,000 units at £240.00 each)	<u>24,000</u>
Direct Manufacturing Costs	
Bought-in materials	7,200
Labour	4,600
Packaging	800
Indirect Manufacturing Costs	
Variable overheads	200
Line production managers	600
Depreciation	
Capital equipment	3,000
Capitalised development costs	<u>1,200</u>
Total manufacturing costs	17,600
Sales and Distribution Costs	
Salaries of sales force	1,000
Carriage	400
General Overhead	<u>1,000</u>
Total costs	<u>20,000</u>
Profit	<u>4,000</u>

Notes

- 1 The costs of the sales force and indirect production staff are not expected to increase up to the current production capacity.
- 2 Depreciation for all assets is charged on a straight line basis using a five year life and no residual value.
- 3 Carriage is provided by an outside contractor.
- 4 Note that the factory has a capacity to produce 120,000 units per year.

The information above relates to the factory. The product can be sold in the open market for £240. However, it is used within the Interior Design kitchen designs and therefore has an 'internal market' within HW plc. There is a similar product of inferior quality in the open market that sells at £180. At the moment the division has spare capacity but, as mentioned earlier, the management of the factory believe that they will be able to sell many more in the external market in future years and therefore may not be able to supply all of the Interior Design business needs in the future if capacity remains at the same level.

Required

- (a) Calculate the three alternative transfer prices suggested by the managers.
- (b) Advise management on the transfer price to charge if there is no capacity constraints in the factory, that is, it can satisfy all demand from external customers and from Interior Design.
- (c) Assume that there is now a capacity constraint in the factory and that they can only manufacture enough to satisfy the external customers. What should be the transfer price to Interior Design that would be in the best interests of the company as a whole?

Exercise 15 (b) - Waste disposal unit transfer price

The following information relates to cost information relevant to the basic waste disposal unit produced by a factory in Kiev, Ukraine. The factory has a good reputation for quality and last year was acquired by HW plc. The factory produces a range of electrically powered devices that appear in the home. It also produces parts for a well-known brand of vacuum cleaners and hand driers (as the managing director likes to say – the bit that makes the noise).

The waste disposal unit is also often utilised by the Interior Design business of HW and now that HW plc has acquired the factory, the manager of the Interior Design business would like to review the price they pay for the units, as he now suggests that it is just an internal transfer price.

The following figures are shown in Ukrainian Hryvnia

	₴.
Variable cost of manufacturing per unit	60
Variable manufacturing overheads per unit	20
Fixed manufacturing overheads allocation per unit	30
Total manufacturing costs per unit	110
Selling costs per unit (includes share of sale force costs and marketing)	10
Distribution – variable costs per unit	5
Total costs per unit	125
Normal profit mark-up of 20%	25
Normal selling price	150

The Ukrainian business would normally offer a 5% discount for volume purchases to external customers.

There is an alternative model available in the market place which Interior Design could buy for a price of ₴125 per unit, but it is not at the same quality standards of the product produced by the Ukrainian factory. The factory is planning to increase the level of sales of its designs that incorporates the unit. Currently the level of sales planned by the Ukrainian factory and demand for the unit from Interior Design business is well within the capacity of factory, but if the external sales grow significantly due to a planned marketing initiative by the

Ukrainian factory, it could mean that they will struggle to keep up with internal demand from the Interior Design business unit, and also supply its external customers.

Required:

- (a) Discuss and critically evaluate the various methods available to HW plc for calculating an appropriate transfer price for the unit to be charged by the factory to the Interior Design business.
- (b) Utilising the information provided above in relation to assuming that factory always has the capacity to cope with all orders, calculate and justify what you consider to be the most appropriate transfer price.
- (c) Utilising the information provided above and assuming that the sales of the Ukrainian factory grow very quickly creating a capacity constraint, that is, they do not have sufficient capacity to supply all of the Interior Design business demands and their own external sales orders, calculate and justify what you now consider to be the most appropriate transfer price.

Activity 16 – Sustainability

Read the following description of a sustainable framework in operation. Identify the aspects of the CSR framework that illustrate that HW plc take CSR seriously and note how the finance department is involved in the process of producing the CSR report.

This is based on the Boots Alliance Group CSR framework - source: <http://csr.allianceboots.mmbbox.co.uk/our-approach/our-approach> Although it is applied and has been adapted slightly to fit the fictitious company, HW plc, the basis of the actual document is taken from the Boots Alliance website – therefore the process below actually happens in a real company. It has been adapted slightly for teaching purposes.]

EXTRACT FROM CSR REPORT 2017

Our flexible framework

The Group's CSR framework of priorities covers four key areas: community; environment; marketplace; and workplace. We call this framework 'the HW plc scorecard' and it is used across our businesses. Each of our businesses' CSR plans are created based on local stakeholder engagement, an analysis of key issues, and meeting the Group's overall priorities. These are presented to the social responsibilities committee for approval and progress against these plans and the scorecard is monitored centrally.

Community

We strive to support the communities that we work in. We provide our people with opportunities to devote their time, energy and talent to support the causes that matter through volunteering and fundraising.

Environment

At HW plc, we are determined to be a leader and an example to others in addressing the threat of climate change. We pursue many practical activities which contribute to the overall reduction of our carbon footprint.

Marketplace

Our mission to make people's lives easier by providing quality products that help with everyday life at reasonable prices comes alive through a range of partnerships and strategic alliances. In addition, we can build on our position of trust to make a positive impact on our industry and our customers' lives.

Workplace

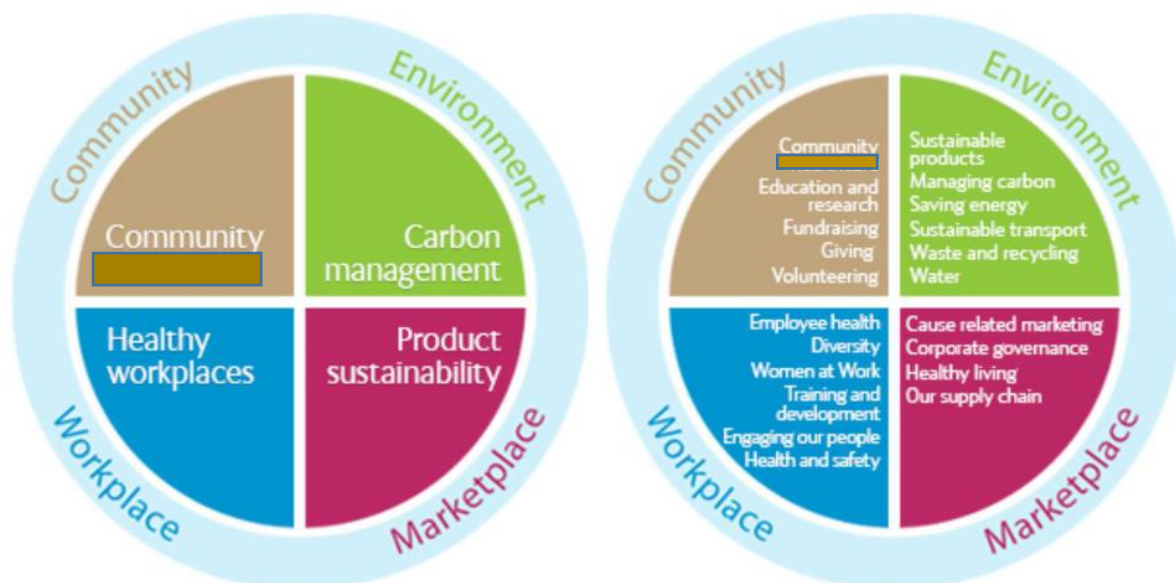
As a Group whose purpose is to deliver products and services that help make people's lives easier and more comfortable, it is second nature to make the health and wellbeing of our own employees a priority. We continue to support our people through training and development, so that they can both grow professionally, and meet the evolving challenges of our industry.

The HW plc scorecard

Every year, after consultation with our stakeholders, we review the Group's priorities and, where appropriate, set new revised priorities within which targets can be set for the year ahead.

Our priorities focus on developing links with the community (community); reducing our carbon footprint (environment); sustainable products (marketplace); and healthy workplaces (workplace).

All of our businesses have their own scorecard based on these four key areas and, consistent with the Group's priorities, set their own programmes and targets as appropriate. There is a range of different strands of activity across each of the four key areas and it is within this framework that plans are made by each business. These priorities are further divided into areas of focus and are apportioned around our 'wheel' structure which is submitted to the HW plc social responsibilities committee for review.



We work across a range of retail product ranges including furniture, garden equipment, electrical goods, clothing, and financial services and interior design, as well as embracing elements of manufacturing and distribution. Our businesses are of varying size and work in different countries with different economic and social circumstances. As such, we have ensured that our CSR framework is robust enough to provide leadership and direction, yet flexible enough to take into account differences in approach for each business working within the context of their local communities and markets. It is necessary to have a support structure which helps each business to develop and take ownership of a CSR agenda that is appropriate to local circumstances, while remaining within the overall HW plc framework.

Our corporate social responsibility management

As part of our CSR programme, we have a 'champion' in each business (country) with responsibility for defining and delivering local CSR priorities and targets in line with the Group's overall objectives. These objectives provide a framework

for our businesses to establish their own priorities and targets that reflect the local business environment. Progress against these targets is monitored quarterly by the Group and a senior business leader is accountable for each target. Each 'champion' works with an 'action group' (which includes senior representatives of relevant business functions) for his or her individual business and the 'champions' hold teleconferences to share initiatives and internally report on their activity. They meet together once a year to share their skills, experiences and ideas with their peers and members of the social responsibilities committee. Formal and informal collaboration between 'champions' helps us to share best practice and ensures that our businesses can benefit from progress made across the Group. For example, HW in the USA has worked in close partnership with HW in the UK on an energy saving campaign for all its sites, including warehouses and support offices.

All 'champions' across HW plc are supported by the Group's CSR Director and coordinator, who provide guidance and additional expertise on working within the Group's CSR framework. In addition, each 'champion' is supported by colleagues from their respective business and a number of Group functions including human resources, communications and finance. In March 2014, we launched an innovative learning and development programme to support our corporate social responsibility 'champions' with training on CSR theory and its practical implementation, developed in conjunction with Birkbeck University, London. This CSR e-learning programme is composed of eight e-learning modules and uses case studies, debates, discussion and real outcomes. It aims to ensure that each 'champion' across the Group has a consistent knowledge and understanding of the CSR agenda, combined with the confidence to manage and collaborate with internal and external stakeholders. The programme continues to thrive within the company with new 'champions' completing the programme each year.

Data management process

We have a Group-wide approach to recording, measuring and reporting on our CSR performance. We have a set of reporting criteria and a set of CSR measures and performance indicators that are applicable across the Group. The CSR data captured is used to inform and assist in the development of each business' individual CSR programme.

The data presented within this report reflects the continuing operations of the Group. Data collected locally is first reviewed by our CSR 'champions' and finance teams at a local level. The data is then signed off by the business Finance Director. This is then reviewed by the Divisional finance teams before being submitted to Group finance, and our central CSR team, for final review. Finally, the data is independently assured by KPMG, before publication in our annual CSR report.



Exercise 16 (b) – Contribution of accountants to sustainable strategy

Consider the following and make notes on ideas you could include within a written answer.

Sustainability has become a 'buzz' word of recent years. Discuss how the management accountant can contribute to HW plc developing and maintaining a more sustainable approach to business.