

HW plc case study – Draft ideas and solutions for activities

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Activity 1 – Environmental analysis

Suggested solution to HW plc environment analysis activity

(a) HW plc environmental analysis

The environmental analysis for HW plc will be undertaken using two analytical frameworks - PESTEL and Porter's Five Forces. The PESTEL framework (political, economic, sociocultural, technological, environmental (sustainability), and legal factors) is a useful tool for analysing the general (macro) business environment and its potential impact on HW plc, whereas Porter's Five Forces is a useful framework for analysing the forces that influence the profitability and attractiveness of the industry sector in which HW operates.

Political

HW plc is a global company in that the company operates across six continents. This exposes the company to issues of political stability in different parts of the world and the policies of different political regimes. For example, some countries may adopt a protectionist approach to foreign companies doing business in their country, which could make it more difficult to HW plc to trade on a competitive basis and to expand its overseas business.

The issue of BREXIT and the future of European trading regulations is creating uncertainty and making it difficult for companies to plan, not least the impact that the issue has had on the UK currency (pound sterling). Until there is more certainty about how BREXIT will be achieved it is difficult for HW plc's board of directors to plan effectively for the impact that it will have on the company.

Also, the economic risk associated with trading in different economies cannot be overlooked, as not all economies behave in the same way. In fact not all economies were affected to the same degree by the financial crisis, and certainly the emerging economies behave differently to the more developed economies. The Board of HW plc therefore need to develop regional strategies that fit within the overall strategy of HW plc. In some respects being diversified geographically helps to mitigate the economic risk, as when some parts of the world are not growing, other trading groups may be doing quite well, for example, the recently named TICKs and MINT countries (Taiwan, India, China, Korea and Mexico, Indonesia, Nigeria, Turkey).

Economic

The economic cycle can be at different stages in different countries which, for a company operating in six continents, can be a positive or a negative aspect depending on how well the board of directors manages the situation. HW plc should be able to cope with this situation as it has established subsidiary companies that have a more 'local' responsibility, and therefore it should be possible to develop regional strategies that fit within the overall corporate strategy.

Foreign exchange issues will also influence trade within a global company, particularly where products are sourced from global suppliers, and suppliers

operating locally in different parts of the world. There is an overlap with the political issues as government policies will affect the local economies and trading conditions in local markets. Therefore, the board of directors need to be able to build in some flexibility to their strategic planning in order to cope with any differences in political or economic impacts.

Socio-cultural

The fact that HW plc trades in six continents also opens up significant cultural aspects, such as the product ranges and working practices, which need to be culturally acceptable and adapted to the local consumers and employees. HW plc will not be able to assume a standard product mix across the whole global company, but must tailor it to local preferences taking into account the demographics and culture of each country.

Trends in shopping, such as online shopping, may be more developed in some countries than others and therefore not only the product ranges, but also the mode of operation will need to be adapted. HW plc's board of directors will also need to be aware of the changes within the local demographics and shopping trends to ensure that it's offering remains current and up-to-date. This has implications for marketing research and highlights the importance of taking account of consumer feedback in its local markets.

Technology

Technology affects HW plc in a number of ways. The product ranges include electrical goods which are constantly being developed by the manufacturers and it is important that HW plc is aware of the current trends, and that it is offering an up-to-date product range. This has implications for supplier relations and inventory management, in that whilst it is important to offer the latest models, HW plc does not want to hold excessive inventory of items that are changing at a rapid pace.

The technology utilised in the marketing and sales channels also needs to be up-to-date and take account of trends in the sector, for example, the use of social media advertising, and online and mobile shopping. This requires HW plc to constantly monitor trends in the use of technology by its customer base, and to invest in new technology to support and promote those trends that are favoured by its customers. The development of technology and its increased availability of information flows to the customer, but also from the customer, opens up the possibility of using data mining techniques to discover trends and previously unknown relationships. This comes with the added responsibility of protecting its customers from cyber-crime, and therefore HW plc needs to invest in the security systems that safeguard both its own and customers' data.

Environmental

It is logical to include sustainability within the environmental heading as this is a topic that is very current and has implications for manufacturing, product development, retailing and general operations of companies. As HW plc trades in six continents it is important that they operate a strong ethical code, and adopt a corporate code of practice that provides a framework for all decisions, wherever

they are taken within the world. Used positively this can support the corporate brand values and ethical standards stated on the corporate website.

Sustainability issues impact on supplier relationships and HW plc have in place policies relating to quality and the operating standards of its suppliers. The company has also adopted a strong ethical stance which it is important to maintain and promote as part of its corporate image as a responsible company. There has recently been an increase in media attention on corporate behaviour, partly due to the number of corporate scandals that have received significant publicity, and it is important that the board of directors are aware of the growing significance placed on this by the general public.

Legal

The board of directors need to be aware of the legal issues surrounding consumer trading in all of the continents in which it operates. The subsidiary companies will be key to ensuring that they are trading within the law on all continents. Copyright and patent law is also significant for its product and brand protection, and issues such as the copying of designs and technology that are prevalent in some countries need to be monitored to ensure that the HW brand is not devalued.

As HW plc operates a credit card, legislation relating to consumer credit needs to be monitored, as does labour laws, planning regulation for new stores, and health and safety. Some of these elements can be quite complex when operating in many different countries and therefore HW plc would be advised to have a separate legal department, if it does not already have one, which can monitor and advise on legal issues affecting the company.

Porter's Five Forces

The five forces of threats of new entrants, buyer and supplier power, availability of substitute products, and competitive rivalry are discussed below.

Threat of new entrants

HW plc operates in a very competitive industry which is dominated by large companies who are capable of exercising buyer power and enjoy significant economies of scale. This would tend to reduce the potential for new entrants. The marketplace, however, is quite diverse in that there are a large number of independent companies and specialist shops that operate in part of the marketplace, that is, companies selling reduced product ranges and on a more local geographic basis. This indicates that, although the number of independent retailers has been reducing in recent years, there is still plenty of scope for new entrants on a smaller scale, or for medium sized companies to scale-up and compete. HW plc cannot be complacent about the threat of new entrants, even though the threat may be quite low and difficult for companies to compete on a similar scale as HW plc and its current direct competitors. In fact the threat is more likely to come from existing competitors increasing their global reach by expanding into markets where HW plc already has a presence.

The pressure from concessions companies could also be a way for new entrants to gain access to the market place or at least more control over the sale of their products, which could have an impact on the profitability of concessions for the large retailers such as HW plc.

Supplier power

When retailers are so large it is often the case that the power is in the hands of the larger retailers. This can be due to the economies of scale giving them buyer power, and the strategic importance they present as a customer of smaller suppliers. In the vast majority of cases this is probably true, however, exclusive brands may have considerable power in negotiations if the retailer is keen to stock their products in order to offer the leading brands to the public. The balance of power in negotiations often comes down to the power of the brand. Suppliers are keen to make their products available on a global basis, and therefore would benefit from the global company stocking their products, and the retailer is keen to be seen to offering the leading brands. HW plc has adopted a policy of working closely with suppliers for mutual benefit and therefore should be able to mitigate any supplier power that exists, meaning that it is probably quite low.

Buyer power

In retailing it is difficult to say that the buyer has much power on their own. The very fact that there is a considerable degree of choice to the consumer means that competition for their custom is very high amongst the retailers. Therefore, it is the degree of competition created by consumer choice, and low switching costs of the consumer, that keeps the downward pressure on the prices rather than any significant buyer power.

Substitute products and services to the output of the industry

The fact that HW plc and many of its competitors offer convenience as one of its key selling points tends to mitigate any substitutes that might be available. There are indeed many different products that a customer can buy, but this is more to do with competitive rivalry, that is, buying a competitor product rather than an HW plc product. The threat from substitute products is quite low in the case of HW plc.

Competitive rivalry

It is possible to conclude that the key driving force that affects the profitability of the industry is probably competitive rivalry. As explained earlier, the main threat of new entrants is probably from existing local competitors becoming more global. Buyers have low switching costs and a large variety of choice of retailer which impacts on the degree of competitor rivalry. There are few substitutes, which again increases competitive rivalry as companies compete for the consumers' attention and suppliers have little power over the larger retailers. Therefore, the biggest threat is the competition for customers and the factors affecting the industry from the PESTEL analysis which will affect the whole industry, albeit some companies more than others.

(b) The major challenges

[The ideas here do not represent the only correct answer, as this is subjective and based on your own cultural background, education and experiences you may have different views. This is something that the board of directors would discuss in order to arrive at a consensus on which to base their future strategy.]

The major challenges being faced by HW plc from the environment includes:

The degree of competition in the homeware market from major competitors as the upward pressure on costs and the downward pressure on prices means that margins are becoming smaller. The increase in globalisation of brands and major competitors is also of concern as this affects all of the markets in which HW plc operates.

Political and economic stability over the next few years, particularly in the light of BREXIT and the effect of changes in political regimes in many countries. This creates uncertainty and the board of directors will need to keep up-to-date on what is happening in the global economy in order to respond.

Technology is changing the way consumers shop and the trend towards online and mobile shopping is something that HW plc will need to ensure that they are aware of in order to retain customers, but also to take advantage of new ways to attract customers.

Environmental and sustainability issues, including fair trade and ethical trade, could be seen as significant for retailing as, not only are consumers becoming more concerned, governments are beginning to legislate to force companies to operate on a more sustainable and socially responsible basis. This could have implications for methods of operation, design of products and supply chain issues, all of which could impact on costs.

(c) How can the accountant contribute to the process of environmental analysis?

The following points could be made in relation to part (c).

Points may include but are not restricted to:

- Assisting in the collection and provision of information on external factors, for example, industry statistics, interest rates, and economic data.
- Evaluating the financial impact of environmental influences on HW plc for example, increased emphasis on sustainable products, BREXIT as more information becomes available, shift from instore to online shopping.
- Linked to the above, assisting in assessing HW plc's ability to deal with changes in the environment to ascertain whether changes are opportunities or threats.
- Competitor analysis for example, assessment of key competitor financial performance for comparison to HW plc.

- Assisting in the development of scenario analysis to evaluate the impact of strategic options and the potential impact on the business environment, for example, expanding operations in emerging economies, rationalising the high street presence and placing more focus on online shopping.

Activity 2 – Portfolio analysis

Suggested solution - HW BCG

Part (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

Answers may include but are not restricted to the following points.

Potential answers could explain the axes of relative market share and market sector growth commenting on how easy or difficult it is to assess both aspects.

Market share requires external info on both market and competitors.

Growth requires an assessment of growth rates which may not be easy to ascertain from available information.

At best the construction of the matrix is based on estimates of the business units position so is not a precise tool but acts as a guide to management decision making.

Answers should mention that the BCG can be used at a corporate level where business units are mapped on the matrix, or at a product level where product groups are mapped. In fact for HW plc the matrix could be used at a store level, mapping market growth in the local area, at a country level, for example, the UK, or at a global level, where countries become the business units being mapped and the growth rate per country becomes relevant. It is therefore quite a powerful tool in assessing the potential strategies that could be employed within the business.

Answer should also include mention of uses and advantages:

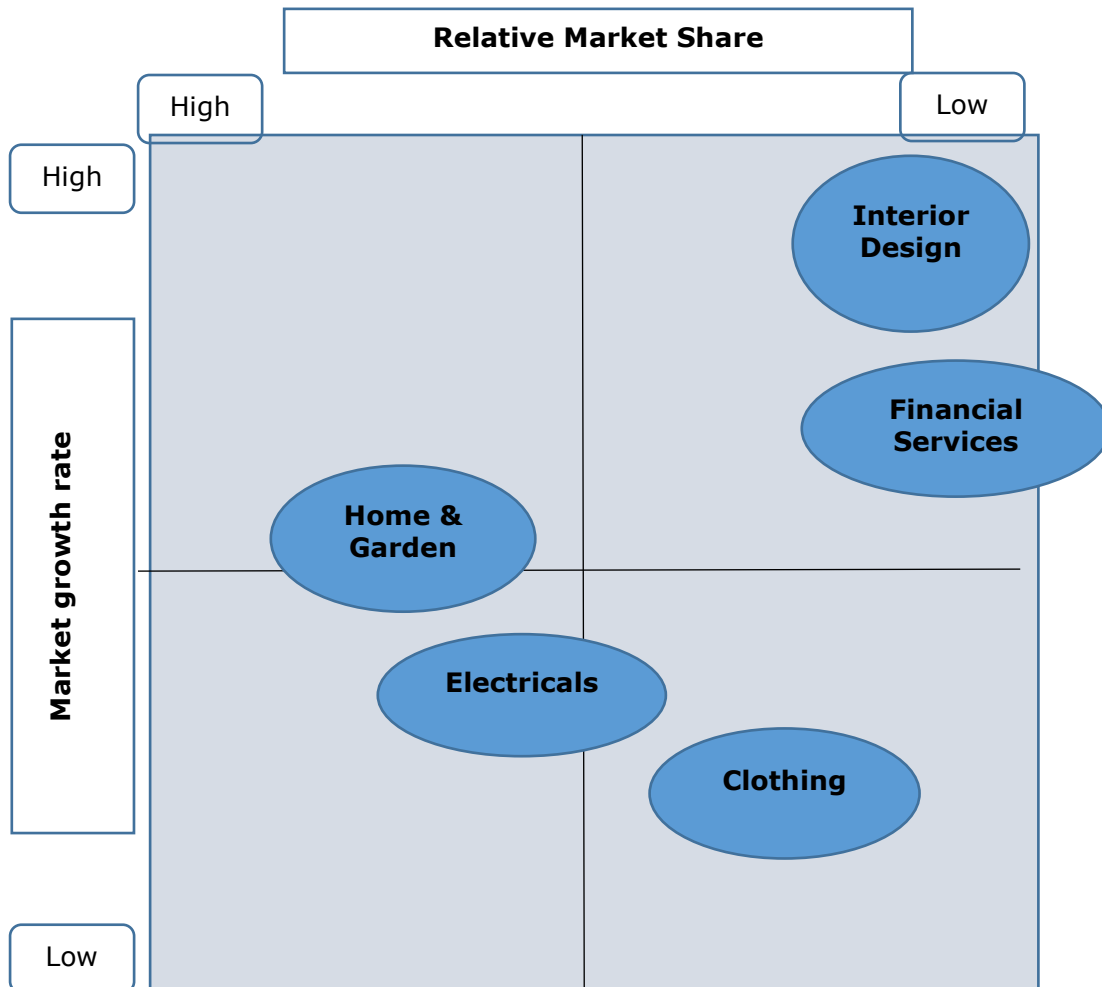
- Internal balance – mix of new products to replace old ones
- Assess trends over time – is the strategy working?
- Evaluate threats from competition – analysis competitor portfolio
- Ascertain the level of business risk and scenario analysis – assessing different strategies

Criticisms

- Too simplistic – only uses two dimensions
- Neglects synergies between business units/products
- Depends on how you define the market
- Focus is on cash – not profitability!
- Underlying assumption that high share is good – can be dangerous if not understood.
- High market share does not necessarily lead to profitability
- Market share is not the only indicator of success
- Sometimes dogs can generate high levels of cash

- A business with low market share can be profitable too
- May miss small competitors that have high rates of growth
- Requires high volumes of information for large portfolio of products plus problems of obtaining data

Part (b)



The Interior Design and Financial Services have relatively low market shares, but are in market sectors that have a high growth rate. This puts them in the question mark category. The BCG matrix would indicate that these require investment to enable them to grow. However, although HW plc has plans for the development of these product groups they are essentially support products to the main business, and so turning them into Stars may not be the objective, that is, does HW plc really want to compete with major financial services firms. This would require high levels of investment in what is a very competitive market. Plus the potential for increased government regulations may make it a more specialised market that limits future growth rate. Similarly the Interior Design services might be very good operating as a niche area within which HW plc has a presence, rather than trying to compete with specialist firms. HW Interior Design does have an advantage in that it is backed by the HW plc product range and manufacturing

unit, and the board of directors could focus on growing this part of the business, particularly as it appears to be quite profitable. However, the high growth is due to a market trend and it might be worth undertaking some research to determine if this is likely to continue in the future, or if it is just a short term trend. The planned move towards targeting corporate clients might be a good move as it takes the business unit away from a reliance on growth that might only be due to a trend in the consumer market. It will require investment in expertise in the corporate and education sectors.

The home and garden business has a relatively high market share and is in a market with a relatively high level of growth, which puts it in the Star category. The BCG suggests this business unit would require investment to maintain its market share, so that as growth slows it becomes a cash cow. It is also supported by the HW plc product design and manufacturing units with the HW brands and therefore the board of directors need to continue to invest in the manufacturing to support the HW product ranges. They also need to maintain supplier relationships as the supply of a range of other brands is also important in this particular sector.

The electrical product group is very competitive and HW plc has a relatively high market share in a growing, but not a particularly fast growing, market sector. The difficulty in this sector is that some sub-product groups, such as audio-visual, are constantly being developed and keeping the product range up-to-date is significant for consumers. There is also a lot of competition from specialist electrical goods retailers in the high street. Ideally HW plc need to maintain their presence in this market and maintain their market share. Links with suppliers to ensure ranges are up-to-date and supported by good inventory management will be important factors to focus on in this sector. Perhaps the use of concessions might be an option that HW plc could expand in this product group, if not already exploited, as it could help share the risk.

The clothing sector is relatively low growth and set to remain so in the future. Although HW plc has a relatively low market share, and the BCG matrix puts it in the dog category, there is nothing that suggests that HW plc should exit the product group completely. The clothing range could still be making a contribution towards fixed costs and profit. HW plc could consider limiting the space given to the product group, or try to exploit concessions more to reduce the risk and investment in inventory required, particularly with the seasonal nature and fashion led influences of some of the products within this group.

Part (c)

Financial controls for question marks – the key is that HW plc are making investments in the product ranges in this sector and should therefore treat decisions as investment decisions.

- Net present value (discounted cash flow) project appraisal approach to investment
- Strategic milestone targets set

- Target costing/profitability of division and its products
- Control over marketing expenditure
- Competitor analysis important

Financial controls for stars and rising stars – the key here is to continue to invest in the product range to ensure that market share does not slip back below competitors, but also to keep a watchful eye on the actions of competitors.

- Net present value (discounted cash flow) for further investment
- Marketing controls, effect on market share analysis
- Competitor analysis

Financial controls for cash cows – here HW plc needs to try and maximize cash flow and contribution per product and per square foot. It is these products that provide the cash flow to invest in other products within the question mark and star sectors.

- Return on investment/residual income targets to insure position maintained
- Customer account profitability – where possible, or customer segment profitability.
- Contribution per product maximised
- Cash generation targets

Financial controls for dogs – here HW plc are trying to minimise the investment and reduce reliance on the products, perhaps whilst maintaining a market presence.

- Cost controls to minimise costs
- Free cash flows maximisation

Activity 3 – Customer profitability analysis

Activity 3 (a) - CPA mail order suggested solution

(a)

The profitability of each customer type is shown below:

	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
Less goods return at full sales value	0	-200	-500	-1,500	-250
Net sales	1,000	800	2,000	1,500	1,250
Less cost of goods at 75%	-750	-600	-1,500	-1,125	-937.5
Gross profit on sales	250	200	500	375	312.5
Other customer related costs					
Process mail orders (orders x cost per order)	0	30	20	0	0
Process phone orders (Average time spent x number of orders x hourly rate)	20	0	0	80	0
Process online orders (orders times cost per order)	0	0	0	0	1
Process returns (number of returned items x cost per item)	0	60	30	210	30
Normal delivery costs (number of orders x delivery cost)	10	60	40	120	20
Overnight deliveries (number of overnight deliveries x cost per request)	4	0	0	48	0
Total other costs	34	150	90	458	51
Customer profitability	216	50	410	-83	262
Deduct Marketing estimate per customer	50	50	50	50	50
Customer profitability less marketing costs	166	0	360	-133	212
Profit as % of net sales revenue - before marketing costs	21.6%	6.3%	20.5%	-5.5%	20.9%
Profit as % of net sales revenue - after marketing costs	16.6%	0.0%	18.0%	-8.9%	16.9%

Note: as the cost of maintaining customers is a best estimate and it does not vary by customer, and therefore the relative profitability is not be affected by its inclusion, a subtotal has been taken prior to its inclusion. It is recommended that additional investigation into this cost is undertaken, such as identifying the cost of the catalogue separately, and monitoring customer complaints by both customer type and type of complaint, so that a more accurate allocation can be achieved.

- (b) Customer types 1, 3 and 5 are the most profitable types. Type 1 due to the high value order; type 3 due to the good gross profit earned with relatively lower other costs; type 5 as they use the ordering process with the lowest cost, that is, online orders, and accept the normal delivery terms, also their returned items are not excessive.

The type of customer that is the least profitable is type 4 as they return 50% of the orders and always request special delivery. Type 2 is a relatively high volume low order value customer so the 'free delivery' policy is reducing the profitability of this type of customer.

- (c) The costs of each activity could be reviewed to see if they can be reduced by improvements in working practices. Also, a review of policy towards customers may be useful, for example, the management of HW plc could give consideration to the returns policy, as this appears to be encouraging customers such as type 4 to return goods. Even if this is only to ask customers to pay the return postage. However, care has to be taken of the potential impact on other more profitable customers. The special deliveries could be charged to customers in their entirety, as well as increasing the charge to cover the administration fee. This may deter customers from requesting this service every time. Also, consideration to a minimum order value before delivery costs are free could also be considered. It goes without saying that reviewing what competitors charge should be taken in to account to make sure that policy changes do not affect the competitive position.

It would also be worth encouraging customers to use online ordering wherever possible, as this is clearly the lowest cost for HW plc, however, the customer base and access to the internet has to be taken into account. This should definitely be a consideration as internet coverage improves in various countries.

As mentioned above the costs of maintaining the customer could be analysed in more detail – as well as the reasons for customer returns, as this could potentially be reduced by providing more information. For example, if the products are clothes, more detailed information about sizing could be beneficial, or improving the description of items in the catalogue.

Activity 3 (b) - TDABC suggested solution

Part (a)

Calculate the allocation of \$800,000 costs over the activities using the percentages and activity usage provided.

Activity		\$	Activity	Cost driver rate
				\$
Handle customer orders	60%	480,000	6000	80
Process customer complaints	25%	200,000	500	400
Perform customer credit checks	15%	120,000	600	200
Total cost		800,000		

Part (b)

Compute total number of hours available

10 workers, 40 hours per week for 50 weeks = 20,000 hours

Calculate the cost per hour

Time-Driven ABC

Total cost	\$800,000
hours of work	20,000
cost per hour	\$40

Calculate the cost of each activity based on the time taken

	Time taken in hours	Cost per activity \$	Activity	Allocated cost \$
Handle customer orders	1.5	60	6,000	360,000
Process customer complaints	8	320	500	160,000
Perform customer credit checks	5	200	600	120,000
Total cost of activity				640,000
Cost of unused capacity				160,000
Unutilised hours				4,000

Part (c)

Calculate for the revised activity levels

		Time taken in hours	Cost per activity \$	Activity	Allocated cost \$
Handle customer orders		1.5	60	8,000	480,000
Process customer complaints		8	320	600	192,000
Perform customer credit checks		5	200	400	80,000
Total cost of activity					752,000
Cost of unused capacity					48,000
Unutilised hours					1,200

The information from time driven activity-based costs highlights the cost of unutilised activity and therefore aids management decision making in staffing levels and the capacity required by the department. If this is linked to budgeting it enables management to prepare a more accurate assessment of the resources required for a given level of activity and the cost associated with it. This is much more informed than simply allocating the costs of the department based on a percentage estimate. It does however, require management to estimate the level of activity for each process undertaken and for an assessment of the time taken. An added benefit is that it makes management aware of how long the activities take and to see if improvement could be made, for example, why does it take 5 hours to perform a credit check, or 8 hours to fully process the customer complaint? Often it is the detailed analysis required to undertake techniques and methods such as ABC that provides the benefit to management, even if the system is not fully implemented, that is, it raises questions about the processes and associated costs.

Activity 4 – Financial Ratio analysis

Suggested solution to financial analysis

The financial ratios are shown below.

Ratios

	Industry average	2017	2016	2015	2014	2013	2012	2011
Gross Profit percentage of revenue	30.5%	24.8%	25.5%	25.9%	31.1%	31.6%	32.0%	32.1%
Operating profit percentage of revenue	2.5%	-1.0%	1.2%	2.8%	2.0%	1.9%	2.1%	4.4%
Return on Net Assets (Profit for year/Net Assets)	3.5%	-1.1%	2.0%	3.4%	3.0%	2.4%	3.1%	7.0%
ROCE - Operating profit as percentage of Capital Employed (Operating profit/Long term borrowings plus Equity)	6.2%	-1.4%	1.7%	3.8%	3.6%	3.4%	4.0%	9.0%
Asset turnover (Sales revenue/Long term borrowings plus Equity)	2.5	1.4	1.4	1.4	1.9	1.8	1.9	2.1
Non-current asset turnover (Sales revenue/Non-current assets)	3.0	2.0	2.1	1.9	2.5	2.5	2.5	2.6
Gearing percentage (Long term borrowings / Equity)	40%	0.7%	0.7%	4.3%	6.6%	6.3%	6.8%	7.0%
Current Ratio (Current assets/Current liabilities)	2.0	1.9	2.1	1.9	1.9	1.9	2.0	1.7
Stock turnover (Inventory/cost of sales)*365 = number of days stock held	100	109.1	87.5	112.2	84.5	91.8	89.8	93.5
Receivable days (Trade receivables / revenue) *365 = average days to collect	75	76.5	71.6	68.2	45.9	42.5	38.9	38.1
Payable days (Trade Payables / Cost of sales) *365 = average days to pay suppliers	90	124.7	121.7	116.3	86.3	95.9	76.8	96.3

The basic trend of HW plc financial performance over the last six to seven years is one of worsening performance. In nearly all instances it is worse than the industry average. It would be interesting to see if the industry average has also worsened over the last six years or so, as in 2011 HW plc was performing better than the current industry average, but this is over 6 years ago.

The gross profit has reduced from 32.1% to 24.8% and is nearly 6% less than the industry average. This could be due to a reduction in sales prices due to the competition or a rise in the costs of goods sold, or change in mix of sales. There was evidence of increasing competition and upwards pressure on costs in the environmental analysis, but one would expect that this would also be reflected in the industry average if it were an industry wide phenomena. It appears that HW plc has suffered more than others. One of the ratios that organisations attempt to keep constant, particularly in retailing, is the gross profit. Once a drop in gross margin occurs the only way to keep the operating profit level healthy is to reduce operating costs. On the plus side, although the operating profit is less than the industry average and has reduced over the last seven years, the gap between the gross profit and operating profit, that is, the operating expenses, has reduced. In 2011 the gap was 27.7 percentage points, in 2016 it is 24.3 percentage points and 25.8 in 2017. This indicates that at least the management team have managed to contain operating costs for a number of years, but obviously the disappointing aspect is the current loss and project continued loss in 2018.

The comments of the Chief Executive are perhaps relevant here in that he is planning to give reasons for the decline during the last two to three years as being due to the effect of inconsistent store operations across the group, issues with stock availability, an estate of physical stores that is still too large to support the level of sales currently being generated, the increasing trend towards online shopping, and product pricing on some ranges not being competitive in the current market place (see the financial performance section in the case study). The majority of these reasons appear to indicate the big issue is with generating enough sales from the estate that HW plc is operating. This is supported by the asset turnover figure that indicates that HW plc is only generating £1.4 for every £1 of capital it invests, and the non-current asset turnover which indicates that HW plc only generates £2.0 for every £1 of non-current assets, whereas the industry average is £2.5 and £3.0 respectively. This illustrates that HW plc is not generating enough revenue and could point to product range and pricing strategy, as the CEO suggests. With the reduced operating profit percentage over the year and the loss in 2017, this indicates why the return on capital employed is lower, that is, operating profit multiplied by the asset turnover equals the ROCE. In HW's case for 2016: $1.2\% \times 1.4 = 1.68\%$ (or rounded to 1.7%), and 2017: $1.0\% \text{ loss} \times 1.4 \text{ asset turnover} = \text{a negative ROCE of } 1.4\%$, and for the industry average: $2.5\% \times 2.5 = 6.2\%$. Therefore HW plc need to increase the operating profit and the asset turnover.

This could have been a problem over a longer period of time than just the last two or three years to which the CEO is referring. The really worrying aspect is that 2018 looks as if the trend has continued, as results are forecast to produce a loss. The impact this will have on shareholders willing to make further investments cannot be underestimated. The problem does appear to be within the products area of the business.

The interesting aspect of the comparison is that HW plc has very low gearing. Given the low interest rates at the moment it would make sense for HW plc to consider financing any capital projects via loan capital. However, if interest rates

rise, HW plc will need to make sure that the increased operating profits from new investments are capable of covering the interest payments, that is, they need to make sure that they can service the loan in the long term.

The current ratio is not much different from the industry and represents a reasonably healthy position. However, if product obsolescence is an issue inventory management will require special attention. The new inventory management system has helped keep operating costs lower and the average stock days are lower than the industry average, which is encouraging. But HW plc need to make sure that the product ranges it stocks are moving, therefore stock turnover by product category and product line need to be monitored to identify slow moving product lines or where demand is low, or at risk of obsolescence.

The receivable days are about the same as the industry average, but HW plc's are increasing. This need to be monitored carefully to make sure that it does not increase any more. The payable days are also lengthening and HW plc need to be careful that this does not begin to damage its relationship with key suppliers.

The analysis above is based on HW plc as a whole. It is assumed that the industry average includes companies that also trade globally and is therefore a meaningful comparison. HW plc should analyse the business performance over the six continents and within each country. It could be that different parts of the world are performing differently and this would have an impact on the future strategy. The analysis of product groups and business units (Interior Design, Manufacturing, and Financial services) should also be broken down by region.

If possible a comparison with the major competitors rather than the industry should be undertaken. Whilst the industry average is useful it might be more beneficial to make a more direct comparison with companies of a similar size and global operation to that of HW plc.

Investigating the trends in online shopping versus in store and trends in click and collect should also be investigated. This could include an investigation into the efficiency of the hub and spoke delivery system.

An area that is difficult to analyse from the information provided is the effectiveness and efficiency of the manufacturing operations. Presumably this is lost within the products analysis, but it would be useful to investigate whether operating their own manufacturing unit's is still the best option. For example, what is seen to be the strategic advantage of manufacturing HW's own products? Is it possible to gain economies of scale to make it cost effective? Is it control over production and quality, or a strategic understanding of the manufacturing processes in order to be able to negotiate with other manufacturers that provides the strategic benefit?

Activity 5 – SWOT and GAP analysis

Suggested solution for HW plc SWOT analysis

Part (a)

[The SWOT analysis is often done in bullet point format in the form of a cruciform chart. However, for the purposes of the many examinations tutors prefer it if you explain your points. As SWOT, like environmental analysis, can be subjective it is better if you explain why you feel that an issue presents a strength or weakness, etc.]

The SWOT analysis brings together the internal analysis and the external analysis. It provides an answer to the question, where are we now? Or provides a view of the current strategic position of the company. It is sometimes referred to as a corporate appraisal.

Strengths

HW plc offers a wide range of products via a range of marketing and sales channels under the brand values of convenience, quality and price which it uses as part of its market offering. This can be seen as a key strength to be utilised in its competitive strategy.

HW plc is geographically diversified, that is, operates in six continents, and therefore, has some resilience to local economic cycles, but would still be affected by a global recession.

Investment in inventory management systems is helping to reduce inventory levels, and the investment in technology could be seen as a strength in that it will help to retain HW plc's competitive position, and help to reduce costs, which, in turn will help to restore margins.

HW plc has a diverse workforce and invests in training which can be seen as a strength and helps to reinforce its competitive strategy of convenience and quality.

The low gearing could be seen as a strength in that HW plc would be able to raise finance for future strategic initiatives, even if via a loan rather than equity. To raise significant finance via equity would require the confidence of shareholders, so a fully evaluated and convincing strategic plan would need to be put forward to stop the decline and stimulate positive growth.

Weaknesses

The fact that some stores are seen to be in need of refurbishment could be seen as a weakness. This could affect the brand image if the board of directors do not address this – it will need investment in the stores, but could be done in conjunction with the rationalisation of store space, which could also be a weakness, if stores in certain areas are unprofitable, which would have an impact on the overall profitability of HW plc.

Despite the new inventory management system HW plc has experienced occasional stock outs on some products, which could damage customer good will if not addressed. Similarly, in overseas markets, if publicity of alleged corruption is reported and found to be true this could also damage the brand image and require the board of directors to take demonstrative action to show that they take the issue seriously. Also the publicity HW plc has received in relation to the 'non-promotion', or reliance on UK staff, to manage the stores could have a negative effect. The board of directors need to monitor and be aware of media coverage that reflects on the company, but they must not let media coverage drive the strategy, that is, they must not react without giving the matter due consideration to making the right strategic decision.

The poor financial performance of 2017 and the reducing margins in the industry generally is also a weakness. The chief executive has identified the factors leading to this which may indicate poor management decision making. This could affect shareholder relations and their confidence in the board of directors, and make it more difficult to raise finance for future expansion or strategic initiatives that required finance. The fact that shareholders have expressed their concern should highlight the significance of addressing the issue sooner rather than later, that is, the board of directors cannot hope that it is a short term issue that will auto correct itself next year without some form of strategic action on their part.

Opportunities

Opportunities in the form of market development, product development and diversification have already been put forward. These are typical areas for expansion and the board of directors need to use the SWOT analysis to make sure that future strategies are evaluated on whether they build on strengths, address weaknesses, avoid the threats and are consistent with the overall strategic values of the company.

Threats

The economic uncertainty created by issues such as BREXIT and political stability in some parts of the world is probably one of the biggest current threats. This makes developing a strategy more problematic when there is a high degree of uncertainty about the future trading arrangements that could be available. All HW plc can do is lobby government to put forward the board's view of what should happen and to join other industry leaders in pressing for a resolution.

Also, the movement on the pound sterling and currency rates will have an impact on HW plc and its competitors in the UK. This needs to be managed as a short to medium term issue until the issues around BREXIT have some degree of certainty.

Current low consumer confidence in western countries will affect the industry but is also having an impact on HW plc's performance.

The globalisation of suppliers and rising labour costs and material costs generally will be a threat to the whole industry, therefore the board of HW plc will need to address this issue so that it impacts on HW plc less than its competitors.

The increased competitive nature of the market is putting pressure on margins and with low consumer confidence and upward pressure on costs, it is becoming more difficult to maintain margins.

Part (b)

Key strengths

Global reach – as this provides some protection from economic cycles.

Available finance – although recent financial performance has been quite weak (see weaknesses) HW plc does have the ability to raise finance to undertake strategic developments.

Key weaknesses

Recent poor financial performance may put HW plc into financial difficulties. The board of directors could also come under pressure if shareholders decide that they no longer represent a good investment and the recognition that the main cause of poor performance could be due to poor management decisions.

Key opportunities

There is plenty of opportunity to expand the business both via product development, market development and diversification – the board of directors will need to make sure that it does not try to be too ambitious.

Key threats

Increased competition in the market place coupled with low consumer confidence.

The uncertainty surrounding BREXIT will make it difficult to plan for the future.

Part (c)

	£m
Capital employed at start of year	3,091.0
Cost of refurbishment	3.5
Less depreciation of refurbishment year 1	-0.35
Increased investment in hub and spoke delivery	1
Less depreciation of hub and spoke year 1	-0.1
Capital employed at end of year	3,095.05
Profit last year - assume maintained next year	64.9
Depreciation on refurbishment	-0.35
Depreciation on hub and spoke	-0.1
Marketing costs	-0.75
Increase in gross profit from store sales	10.2

Increase in gross profit from online sales	20.6
Investment in customer facing systems	-0.5
Net saving in operating costs	0.6
Operating profit for year	94.6
ROCE	3.1%

The planned investment does not close the gap completely but does contribute to gap closure. Additional initiatives will need to be made in order to reach the target of 4.1%.

Activity 6 – Competitive strategies

Competitive strategy suggested solution

Part (a)

Numerical analysis

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.

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	Profit generated from Interior Design - 15% of sales value for Interior Design	Profit from Sales of Kitchen Units
		€m	€m	€m	€m	€m
2015	2,050	922,500	650,000	162,000	97,500	64,500
2016	2,700	1,080,000	600,000	144,000	90,000	54,000
2017	3,600	1,260,000	550,000	107,500	82,500	25,000

	Average sales price of kitchen units	Average Profit of Kitchen Unit	Average Cost of Kitchen Unit
	€	€	€
2015	450	31.46	418.54
2016	400	20.00	380.00
2017	350	6.94	343.06

The numerical analysis indicates that the increase in volume has potentially been achieved by reducing the price. This is probably a response to the competitive market in Italy. The analysis relies on the suggestion that a 15% profit is achieved

on the Interior Design services and we would wish to check this fact, but it does indicate that as costs are increasing, and prices reducing, a cost leadership strategy could not be sustained, unless HW Italy is able to reduce the manufacturing costs of its own branded products and negotiated prices with other suppliers.

Part (b)

HW's overall strategy is one of convenience, quality and price. However, sustaining a further reduction in price does not look viable, given the rise in costs. There is the added danger that reducing the price could undermine the 'quality' aspect of HW plc's sales proposition.

The managing director of HW Italy made a comment about the Italian customer looking for functionality with style. If the competitive market is moving more towards a focus on price there may be an opportunity for HW to **differentiate** its product offered by placing the emphasis on the quality aspect, or 'functionality with style'. This may justify a slightly higher price in the market place and help to maintain the margin.

This may entail some work on the design of the HW Italy range to ensure that the products meet the 'functionality with style' aspect. It provides the opportunity to look at the manufacturing process to see if it is possible to reduce the costs and still meet customer expectations. A technique known as target costing could be utilised in which the end price, less a profit margin, is used to create the target cost that designers can work towards.

The claim that the Interior Design services makes 15% profit should be investigated, and some marketing research and analysis could be undertaken to test whether the sales of Interior Design services could be increased. Questions need to be asked, such as, what is the state of the current market and the current trends within this area of business? What is HW's current market share and what is the probability that this can be increased? What might the reaction of competitors be? Does HW Italy currently have the capacity to take on additional Interior Design services, for example, will it require additional recruitment and hence costs? What is the lead time for updating the product range?

Part (c)

Sources of competitor information could include any of the following (note the list is not comprehensive but indicative of likely sources):

Recorded data	Observable data	Opportunistic data
Annual reports and accounts	Pricing/price lists	Meetings with suppliers
Company websites	Product range, services offered	Meetings with common customers (e.g., those that dual source)
Press releases	Marketing campaigns	Trade shows
Newspaper articles	Specific promotional activity and advertising	Conferences
Analyst reports/investors section of company website	Public tenders	Sales contact meetings
Reports from regulatory bodies in the industry	Patent applications	Staff recruitment from competitors
Government reports	Reverse engineering the product	Discussion with shared distributors
Reports from organisations with an interest in monitoring corporate activity (e.g., pressure groups, consumer organizations)	Experiencing the service (e.g., mystery shopper)	Social contacts with competitors (e.g., family and friends)
Academic studies	Corporate activities of key personnel (e.g., public image of figurehead personality)	TV or radio discussion program (e.g., business or consumer affairs)

Activity 7 - ABC

Activity 7 (a) - ABC picnic table suggested solution

Part (a) (i) and (ii)

Calculate the basic activity information required for all elements

Activity	Round	Square	Octagon	Total
Machine hours per product	0.75	0.5	1	
Labour hours per product	2	2	2.1	
Cost per labour hour €	10	10	10	
Number of machine hours	1,125	750	2,000	3,875
Number of labour hours	3,000	3,000	4,200	10,200
Number of purchase orders	3	4	6	13
Number of deliveries	10	30	40	80
Number of inspections	150	150	200	500
Production units	1,500	1,500	2,000	5,000

Calculate overhead absorption rates for machine hours and labour hours

Traditional method machine hours	
Total overheads €	159,487
Total machine hours	3,875
Overhead absorption rate per machine hour €	41.16

Traditional method labour hours	
Total overheads €	159,487
Total labour hours	10,200
Overhead absorption rate per labour hour €	15.64

Calculate the selling price using machine hour overhead absorption rate and labour hour overhead absorption rate

Cost and selling price of product			
Using machine hour rate	Round	Square	Octagon
	€	€	€
Material	120.00	105.00	115.00
Labour	20.00	20.00	21.00
Overhead rate per product	30.87	20.58	41.16
Total cost per product	170.87	145.58	177.16
Mark-up on cost	51.26	43.67	70.86
Selling price	222.13	189.25	248.02

Using labour hour rate	Round	Square	Octagon
	€	€	€
Material	120.00	105.00	115.00
Labour	20.00	20.00	21.00
Overhead rate per product	31.28	31.28	32.84
Total cost per product	171.28	156.28	168.84
Mark-up on cost	51.38	46.88	67.54
Selling price	222.66	203.16	236.38

Part (a) (iii)

ABC

Calculate the activity cost driver rates

Rate per cost driver			
	€	Activity	Activity rate €
Assembly	55,998	10,200	5.49
Purchasing	1,989	13	153.00
Delivery	30,000	80	375.00
Machine maintenance	46,500	3,875	12.00
Inspection	25,000	500	50.00
Total	159,487		

Calculate the Overheads assigned to each activity and rate per product

	Round	Square	Octagon	Total
	€	€	€	€
Assembly	16,470	16,470	23,058	55,998
Purchasing	459	612	918	1,989
Delivery	3,750	11,250	15,000	30,000
Machine maintenance	13,500	9,000	24,000	46,500
Inspection	7,500	7,500	10,000	25,000
Total overheads per product	41,679	44,832	72,976	159,487

Production units	1,500	1,500	2,000
Overhead rate per product €	27.79	29.89	36.49

Calculate cost and selling price using ABC

Product cost and selling price using ABC			
	Round	Square	Octagon
Materials	120.00	105.00	115.00
Labour	20.00	20.00	21.00
Overheads	27.79	29.89	36.49
Total cost	167.79	154.89	172.49
Mark-up	50.34	46.47	69.00
Selling price	218.13	201.36	241.49

Comparison table

The following three tables have been provided for ease of comparison

Comparison of overhead costs	Round	Square	Octagon
	€	€	€
Machine hour absorption basis	30.87	20.58	41.16
Labour hour absorption basis	31.28	31.28	32.84
ABC basis	27.79	29.89	36.49

Comparison of total costs	Round	Square	Octagon
	€	€	€
Machine hour absorption basis	170.87	145.58	177.16
Labour hour absorption basis	171.28	156.28	168.84
ABC basis	167.79	154.89	172.49

Comparison of selling prices	Round	Square	Octagon
	€	€	€
Machine hour absorption basis	222.13	189.25	248.02
Labour hour absorption basis	222.66	203.16	236.38
ABC basis	218.13	201.36	241.49

Part (b)

The overhead costs table shows that using the machine hour basis tends to load overhead costs onto the Octagon product, due to the increased machine hours taken and favours the Square product, that is, does not charge so much overhead. The difficulty here is that not all costs are related to machine hours and therefore might overcharge the Octagon product. The labour hour basis tends to even out the overhead costs between the products, as the difference in labour hours is less marked than that for machine hours. This is the key aspect of general overhead

absorption rates in that machine hours tend to penalise those products that are machine intensive, and labour hours penalises those products that are labour intensive.

The ABC allocation is probably fairer and more realistic as it not only takes into account the difference in machine hours related costs and labour costs, but also the activity, such as handling orders and delivery to the warehouse. It is therefore more appropriate to use this basis.

It is worth noting for management that the ABC method also highlights the costs of handling orders and delivery, as well as inspection, and these areas could be targeted for further investigation. For example, there may be more efficient ways of operation that could potentially reduce the costs of these activities that could improve the profitability of all products.

It is also worth noting that with ABC if the level of activity changes on the delivery, order handling, inspections and so on, then the costs allocation would also change. It can be dangerous to put too much emphasis on the accuracy of ABC costs as if they are based on previous years, then these are only valid if the activity in the next year is similar. Also, if based on estimates of next year's activity they rely on the degree of accuracy in the estimated activity. ABC provides more detailed information on which to make an informed decision but consideration should also be given to other factors, such as market price.

Consideration could also be given to the mark up applied to the products as the ABC costing takes into account the difference in costs, so is the extra mark-up on Octagon tables something that the market enables HW plc to achieve? It is worth discussing the figures with the marketing department and undertaking some sensitivity analysis around the volumes, as pricing decisions can change the mix of products sold, which may influence the level of activity, such as order handling and delivery, thus affecting the ABC costs.

Activity 7 (b) - ABC dining tables suggested solution

Total overhead = £429,000

Number of products produced = 12,000 + 14,000 = 26,000

Overheads per product based on units produced.

$£429,000/26,000 = £16.50$ per product.

Total cost per product	Alpha	Beta
	£	£
Material (total/units produced)	20.00	25.00
Labour (total/units produced)	14.00	10.50
Overheads (as calculated)	16.50	16.50
Total cost per product	50.50	52.00
Mark-up 25%	12.63	13.00
Selling price	63.13	65.00

Calculate the activity cost driver rates

Total activity	Alpha	Beta	Total
Machine hours	2,100	2,400	4,500
Orders executed	150	110	260
Production runs	90	40	130
Number of shipments	50	15	65
Number of returns	90	40	130

Cost per activity driver			
	£		£
Production overheads	180,000	4,500	40.00
Material Handling	78,000	260	300.00
Quality inspection	130,000	130	1000.00
Delivery	26,000	65	400.00
Production returns	15,000	130	115.38
Total	429,000		

Calculate overhead rate (Activity x cost driver rate)

Overheads per ABC	Alpha	Beta		
Production overheads	84,000	96,000		
Material Handling	45,000	33,000		
Quality inspection	90,000	40,000		
Delivery	20,000	6,000		
Production returns	10,384	4,615		
Total	249,384	179,615	428,999	Rounding
Output in units	12,000	14,000		
Overhead cost per unit	20.78	12.83		

Calculate direct costs per unit, total cost and selling price

Direct costs	Alpha	Beta
Materials	240,000	350,000
Labour	168,000	147,000

Total cost per product	Alpha	Beta
	£	£
Material (total/units produced)	20.00	25.00
Labour (total/units produced)	14.00	10.50
Overheads (as calculated)	20.78	12.83
Total cost per product	54.78	48.33
Mark-up 25%	13.70	12.08
Selling price	68.48	60.41

The use of ABC aids management decision making on pricing and cost control due to the fact that it provides a more informed method of allocating costs. It highlights the costs of various activities based on the current utilisation of resources, and in some cases can highlight where this cost is unusually high. This would prompt management to investigate further to see if the cost can be reduced.

It also provides a more informed basis on which to set prices when using a cost plus method. The activity based costs takes into account the level of activity utilised by each product and allocates costs accordingly. This provides a fairer allocation of costs to products. However, we should bear in mind that activity base costs calculated using historical data may not be relevant for the future and if, as they should be, costs are based on estimates of future activity the cost may be incorrect if the estimates provided are highly inaccurate. However, with modern forecasting techniques there is no reason why future estimates cannot be reasonably accurate. In the case of new products where estimates could be aspirational, that is, marketing hope to sell a given number of products, sensitivity analysis should be undertaken to test the impact on costs and hence profitability. It should also be recognised that volumes can have a significant impact on whether target costs of new products are achieved or not.

It can be seen that under the old method of allocation that of simply allocating costs based on number of units produced, Alpha has a selling price of £63.13, and Beta, £65.00. However, under ABC this is switched so that Alpha is the most expensive at £68.48 and Beta the lower priced of the two products at £60.41. As ABC takes into account the activities involved this is probably a more realistic pricing method.

Therefore so long as management are aware of the potential issues when reviewing ABC costs it can aid their decision making in identifying areas of improvement in the product process and also when making pricing decisions.

Activity 7 (c) TDABC and call centre

Suggested solution

(a)

The main activity undertaken by the call centre is measured in minutes. This is also a measure of its capacity, that is, the number of minutes available during which a service can be provided. Therefore the time driven activity of minutes is the best way to allocate the resources. It will also provide management with information on the utilisation of the resources available.

(b)

	Product group X	Product group Y
Number of call minutes - Information	50,000	12,000
Number of call minutes - complaints	18,000	1,800
Total minutes	68,000	13,800
Cost of resource used	£68,000	£13,800
Cost allocated under old system	£20,000	£80,000

Under the new system the cost is obviously much greater to Product group X

(c)

Under the old system the only way to reduce the allocated costs is to sell fewer products to reduce the sales value, which is not in the best interests of HW plc. However, under the new system the emphasis would be to reduce the need for customers to make calls in the first place.

This could go all the way back to design of the product, which may mean talking to manufacturers and suppliers, if not an HW plc manufactured product. Provision of information about the product could be made clearer. This could include descriptions of products on the website, or in store. Training of sales staff in store to answer questions of customers before and during the purchase decision. Training of call centre staff to deal with calls more effectively or provision of frequently asked questions on the website within the 'contact us' section. This could include web discussion forums in which customers can post reviews or ask questions of other users.

(d)

Call centre staff may resist the implementation as it will enable managers to assess the effectiveness of the call centre in terms of total capacity. If the call centre activity is reduced it may result in job losses. Also we could assume that the manager of product group X will not be in favour of the change.

(e)

The use of a Time Driven ABC system will enable managers to assess the utilisation of the call centre and the resources required to run it effectively. This information could be used in comparing the costs of outsourcing, that is, the charge from an outsourcing company which, more than likely, would charge based on usage, with

the provision of its own centre. It also provides management with a cost of underutilised resources, that is, if not all of the hours available are used there is a cost associated with this. If the cost per minute is adjusted, that is, increased, to ensure that all the costs are recovered, it increases the cost of provision to the product managers, and again raises questions as to whether the service could be provided more cost effectively by outsourcing. It therefore ensures that the best way to provide the service is always kept under review. HW plc also need to make sure that they take into account service levels by an outsourcing company as it is HW's reputation that is the hands of the outsourcing company. Therefore the decision is not purely a financial one.

The value creation system is also useful in the decision as HW can investigate the costs of the activities and decide strategically if the provision of a call centre, which is probably part of the after sales service activity, is a critical activity and how much this adds value to the customer. There could also be a marketing effect of providing the after sales advice which cannot be ignored, plus there may be implications for the support activities, for example, technology and HRM. For example, using technology to provide more information or alternative ways of answering questions, or training of staff may be part of the solution. Therefore the value creation system allows HW plc to see the activity within the context of the whole business, and not just to view the call centre in isolation.

Activity 8 – Cost of quality

Activity 8 (a) – Costs of quality – HW plc Interior Design

HW Interior Design is attempting to differentiate itself in the market by offering a quality product and service at reasonable prices.

<p>Prevention</p> <ul style="list-style-type: none"> • Training for employees in quality procedures and processes • One page quality manual- could be part of the prevention, i.e., having the manual available guides employees in working practices (also appraisal when checking that it has been conformed to) – cost of production and maintenance of manual as standards change • Corporate quality team ensures workers understand process- cost of corporate quality team members • Process charts – work instructions – time to complete • Recording of progress – time to complete • Commando team – cost of team 	<p>Appraisal</p> <ul style="list-style-type: none"> • Conforms to external quality standards i.e., external bodies set some of the standards which they monitor internally – cost of keeping registration and certification up-to-date is a cost of quality • Costs of updating and maintaining/ undertaking quality checks <ul style="list-style-type: none"> ○ Its own quality control procedures ○ One page quality manual ○ Zero tolerance quality checking system ○ Review of records ○ Quality records • Cost of customer survey (also arguably a market research cost but provides valuable information on the quality aspect of its competitive strategy)
<p>Internal failure</p> <ul style="list-style-type: none"> • Anything that goes wrong within the planning, project management, design, manufacture, installation, H & E safety requirements etc. that the customer is not aware of, i.e., it is corrected before the customer gets the product, creating additional costs • Late acquisition of units either from internal manufacture or external supplier that causes extra working time to complete project on time for customer. 	<p>External failure</p> <ul style="list-style-type: none"> • Not living up to their customers' expectations, thus impacting on reputation • Lack of consistency – i.e., not this time, every time. Loss of reputation • Late completion – potential loss of reputation • Fault emerging after installation – cost of rectification • Failure to identify customer needs correctly the first time around, creating additional work and costs

<ul style="list-style-type: none">• Poor quality materials that require replacing• Poor design requiring redesign, e.g., units don't fit snugly together, creating potential delay and additional costs• Take remedial action – costs involved	<ul style="list-style-type: none">• Anything that goes wrong during installation that requires action
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Activity 8 (b) - Costs of quality – suggested solution is time allows in seminar

Note in the following ideas quality has been taken to encompass the customer experience as well as the actual product being fit for purpose. This is quite a broad view of quality.

Answers can also be interpreted in more than one way as the scenario creates a subjective view of the process.

Problems	Cost issue	Corrective action	Classification
Allowed to wander around without being asked if help needed. Could have walked out again.	Potential lost sale.	Training.	Prevention.
Non-committal attitude of sales assistant – not customer focused.	Potential lost sale.	Training.	Prevention.
Time taken to place order.	Poor customer service leading to unlikely repeat sales.	Improve order taking process. Maybe system based issue.	Prevention.
Lead time to order quite long.	Potential for customer dissatisfaction and loss of repeat business.	Working more closely with suppliers to improve customer service.	Prevention.
Time taken to setup and authorise credit card, although this is an important process to get right, so possible expected to take some time.	Number of staff involved in the process of taken and processing and order.	Systems review.	Prevention.
Supplier of cloth.	Delay in process causing loss of goodwill.	Supplier lines should be checked before order taken to avoid disappointing customer later. This could be achieved by online link, or up to date info on stock being made available online.	Internal failure.

Failure of sales staff to realise the implications of credit card being maxed out on first use and £3 insurance taking is over the limit.	Loss of goodwill.	Training of staff.	Internal failure (would also accept external failure as it happened after purchase even though before product delivered). Highlight the impact of external value chain.
Onus placed on customer to arrange a date, not asking customer when delivery date would be convenient. What happens if customer had been away and unable to respond in time?	Loss of goodwill.	Review system to ensure that customer interests considered upfront.	Prevention or internal failure. It depends on whether we consider this to be a system problem or just bad practice.
Wrong chairs delivered and delivery staff unaware of product range.	Inconvenience to customer, loss of goodwill. Cost of redelivery and collection of incorrect chairs. Possible repercussions for its supplier. Supplier may well have to manufacture chairs if not held in stock – can it resell the incorrect chairs.	The order needs to be checked before despatch, plus incorrect info provided, train delivery staff on product range, or in customer handling skills.	Inspection and External failure as the error reached the customer.
Incorrect info given by company and supplier.	Loss of goodwill.	Need more contact with supplier to progress chase orders so that they can answer customer queries. Customer should not have to	Internal failure and also external failure as customer knew about the mistake and was left to sort it out with supplier.

		contact their supplier. They made the sale it is their responsibility.	
Failure with supplier systems not being customer focused. Poor telephone approach. Non response to customer.	Time of telephone call – if no complaints received - no costs incurred in dealing with them. Costs of redelivery. Inconvenience of customer and loss of goodwill.	Control of supplier needs improvement as it is affecting goodwill of HW plc.	Internal failure and external.
Delivery of sofa is way outside 6 weeks expected.	Loss of goodwill.	Systems review, up to date info required so that more accurate promise can be made.	Internal failure and external.
Sofa damage and lack of trust shown to customer.	Cost of repair. In this case loss of sale and goodwill. Cost of collection of product and as made for customer may not be resalable.	Careful onsite checking of goods delivered. Training of staff in dealing with irate customers – it would have been useful if the customer account had been flagged as a customer having complained as this could have indicated the delicate nature of the call.	External failure.

This brings out several points.

Reliance on supply chain members to fulfil their part in the value chain so that customer is happy.

Many factors affect customer goodwill so main cost is loss of potential sales.

Marketing maxim that if we like a product we tell on average 3 people about, if we don't like a product, on average we tell 11 people about it.

However, tempered by, a customer that has complained and had their complaint satisfactorily dealt with is happier than a customer who has not complained. [This is a marketing reason behind the no quibble refund policy of some high street retailers].

Activity 9 – Methods of growth, investment appraisal and stakeholders

HW expands into out of town stores suggested solution

Part (a)

The financial appraisal is a net present value calculation over a time frame of 14 years.

The initial investment occurs over 2 years followed by 12 years of net cash flows. As the cash flows for years 3 – 14 inclusive are the same we can utilise the annuity value (cumulative present value) for 6%, being the cost of capital. As the cash flows were deemed to be incurred at the end of the year, and the planning and construction take 2 years, we can use year 1 and 2 for the construction period.

The figures provided suggest that HW China would finance 50% of the planning and construction cost, that is, 50% of ¥500m = ¥250m, but that the revenue figures provided relate to HW China's store only.

		¥m	Discount factor 6%	Present value ¥m
Year 1	25% of ¥250m	-62.5	0.943	-58.94
Year 2	75% of ¥250m	-187.5	0.89	-166.9
Year 3 - 14	¥1,200 - ¥200 = ¥1,000 per square metre x 40,000	40	7.462	298.5
	Net Present Value			72.67

The basic calculation shows that the project has a positive NPV of ¥72.67m. If the discount factor is doubled to 12% the NPV is a small negative value. This indicates that the Internal Rate of Return is just under 12%.

			12%	
Year 1	25% of ¥250m	-62.5	0.893	-55.81
Year 2	75% of ¥250m	-187.5	0.797	-149.4
Year 3 - 14	¥1,200 - ¥200 = ¥1,000 per square metre x 40,000	40	4.938	197.5
	Net Present Value			-7.73

			11%	
Year 1	25% of ¥250m	-62.5	0.901	-56.31
Year 2	75% of ¥250m	-187.5	0.812	-152.3
Year 3 - 14	¥1,200 - ¥200 = ¥1,000 per square metre x 40,000	40	5.269	210.8
	Net Present Value			2.197

The Internal rate of return is in fact 11.42% (see calculation below) and the Board will be able to judge whether this an acceptable return or not, given the risk. It would be useful to undertake some additional sensitivity analysis to test how robust the estimates are.

$$6 \% + \left(\frac{72.667}{72.667 - -7.73} \times (12 \% - 6 \%) \right) = 11.42\%$$

There is a financial case for pursuing the opportunity given the figures provided. It might be unrealistic to assume that net cash flows remain constant. There is no account taken of potential growth in sales at the store or conversely of competitor responses. Also economies of scale and operational efficiencies may be possible once HW China has gained experience of operating an out-of-town store. However, other non-financial factors will need to be considered before the final decision is made.

Part (b)

Opportunities

There is the opportunity for HW China to expand its reach and appeal to consumers who cannot afford the latest high street fashions and furnishings. Therefore an out-of-town store may be attractive to aspirational customers if HW China's products become more attainable. However, HW China need to be careful of their strategy as the concept of the Shopping Villages appears to be based on a small outlet selling quality products, but at a lower price due to the fact that they are end of season or overstocked items. HW China need to be careful that this concept will work on a large scale, or it risks undermining the high street shops even more than estimated. It could confuse the customer if the out-of-town store stocks exactly the same items, are the same price as the high street store, but is in close proximity to the Shopping Village that already has shops under the name of the tops quality brands. The fact that the top brands are threatening not to allow sale of their brands in out-of-stores may undermine the whole concept.

The link with the food retailer, if of a similar strategy, that is, convenience, quality and reasonably priced, could attract more customers to HW China if on the same site. Customers of the food retailer may enter the HW China store whilst they are on site doing their regular food shop. This could increase footfall (number of customer entering the shop) for HW China.

The threat of competitor action will always be an issue and it is unlikely that, if seen as being successful, HW China's competitors will not react, which could reduce the sales generated from the new store, and possibly other HW China stores.

The central government is concerned about the impact of out-of-town stores on the high street and city centres, so may take action that is detrimental to out-of-town shopping, which could impact on the future profits of the stores. Similarly the local opposition from the local community, and also the change of heart from the local transport providers, may make the venture unprofitable, and could potentially damage the image and reputation of HW China if the story is picked up by the national media.

Part (c)

Stakeholders

Shareholders potentially have power over the board of directors, but as this is a fairly small decision in the overall context of HW plc it is unlikely that the shareholders will be that interested at the moment. They may be aware of the proposal via the communications with the board of directors on strategy but the board will need to monitor the performance of the strategy, if implemented, and judge the reaction of the shareholders to future performance. For now, they may be categorised within the 'minimal effort' box of Mendelow's stakeholder mapping matrix – low power, low interest. [Note that this is subjective as shareholders might be seen as having high power, therefore, a category of high power, low interest – a 'keep satisfied' category - might also be appropriate.]

Employees and management of HW China, both potential employees of the new stores and existing employees of current stores, in Beijing are all stakeholders with an interest in the project. The new store will presumably provide new employment opportunities, but the existing employees may be concerned about the impact on the stores. Employees would be very interested and could potentially disrupt the strategy but this may be short term, therefore they could be categorised as 'keep informed' – high interest but low power.

Customers could potentially be pleased with the decision as it makes the products more available, but if the out-of-town strategy is seen as a move down-market it could damage the quality image and the brands that HW China sells. HW China need to be very careful about how this decision is communicated and the rationale for the new out-of-town strategy. The board of directors need to consider whether this will be seen as a natural expansion of retailing, or whether out-of-town stores are seen as quality outlets, that is, is there such a thing as a 'high street' brand image and an 'out-of-town' image in China, or do customers make no distinction. Customers are probably in the keep informed category, in that they are very interested but have no direct power in relation to HW's decision.

Suppliers may well welcome the opportunity to sell more products via HW China and make their products more widely available, however the views of luxury brand owners appears to suggest that they feel it may be downgrading their image

to a permanent discount store and resist their brands being sold by HW China in the out-of-town store. This could undermine the whole strategy. Suppliers, particularly of key brands, are therefore in quite a strong position and may become key players.

Government, both central and local, have a degree of power to disrupt. Indeed the local government has the ability to stop the planned development by not granting permission and so would be in the key player category.

Other suppliers such as the transport companies could make it difficult to implement the strategy, but may not be able to stop the development if permission is granted. If customers are local, and others arrive via car, the store may still be successful without the public transport. It largely depends on how critical the provision of public transport is to the planned development. If not critical then they are probably in the minimal effort category.

The local community is quite significant because if the development does not have their support they could create on-going difficulties throughout the construction and bring unwanted negative media attention. This will also impact on the local government who may turn against HW China. Bad publicity will also influence future local governments and communities for any other planned sites in the future, therefore it could be seen as important for HW China to involve the local community and come to a compromise so that they have their support. After all, some of them may be future customers of the store, so could be key players.

Part (d)

The issue of whether to undertake projects on their own or as a joint venture with a partner is largely down to control and risk. If HW China undertakes the development on its own then it is in total control of the project but will be carrying all of the risk. However, if undertaken as a joint venture it will be sharing the risk, but may have to make compromises in order for the partnership to work. The terms of the contract are critical to the success as any disagreement later could risk dissolving the partnership and leaving HW China in a difficult position.

The collaboration may attract more customers to the site and increase the footfall for HW China, that is, customers of the food retailer may enter the HW China store whilst they are on site doing the regular food shopping. However, HW China need to make sure that there is a match between strategies and the customer demographic targeted. Whilst it is sometimes useful to attract a different demographic it could, in this instance, undermine HW China's brand image if the food retailer targets a different demographic profile of customer.

As they are on the same site as the food retailers the sharing of services, facilities and security arrangements could produce economies of scale and efficiencies, but agreement needs to be made as to how this will work in practice.

Marketing strategies need to be similar and the approach to promotions and pricing would need to be acceptable to both parties, as this could set up expectations in the minds of the customer if one retailer ran a different strategy

to the other. Also, as staff are on the same site in close proximity, staff policies will become known, and this could create difficulties if there are large differences in the way the companies treat their staff. Rumours and feelings of fairness can affect employee morale if not managed carefully.

Part (e)

The management accountant in particular could contribute to the financial aspects of the initial feasibility study, as well as the strategic aspects. The overall assessment of the feasibility of the project should include a financial appraisal, and at a later stage, as more detailed information becomes known, and costs and revenue projections become more accurate, this can be updated. The comparison of actual performance against the plan is an obvious area for the accountant to be involved – this can also aid the learning process for future project appraisals as experience is gained of the style of business, that is, future out-of-town developments could be based on the actual experience of this one. Knowledge of evaluation techniques and the evaluation of alternative courses of action will be invaluable as the board of directors make their final decision. Incorporating risk assessment and sensitivity analysis into the evaluation can also provide valuable information to the board of directors.

The accountant could assist the legal team in agreeing the terms of the joint venture by providing detailed financial estimates and allocation of costs.

The provision of estimates and forecasts/budgets, as well as establishing monitoring systems and reporting of actual performance, is another area where the accountant can make a significant contribution. Also, providing support to non-financial managers in the operation of the store. This does not relate just to the on-going operations but also to the control of construction costs and the final outturn costs of the project. Also, ensuring that the finance is available when required and that the financing of the project is managed effectively to meet stage payments.

Activity 10 – Investment appraisal and stakeholders

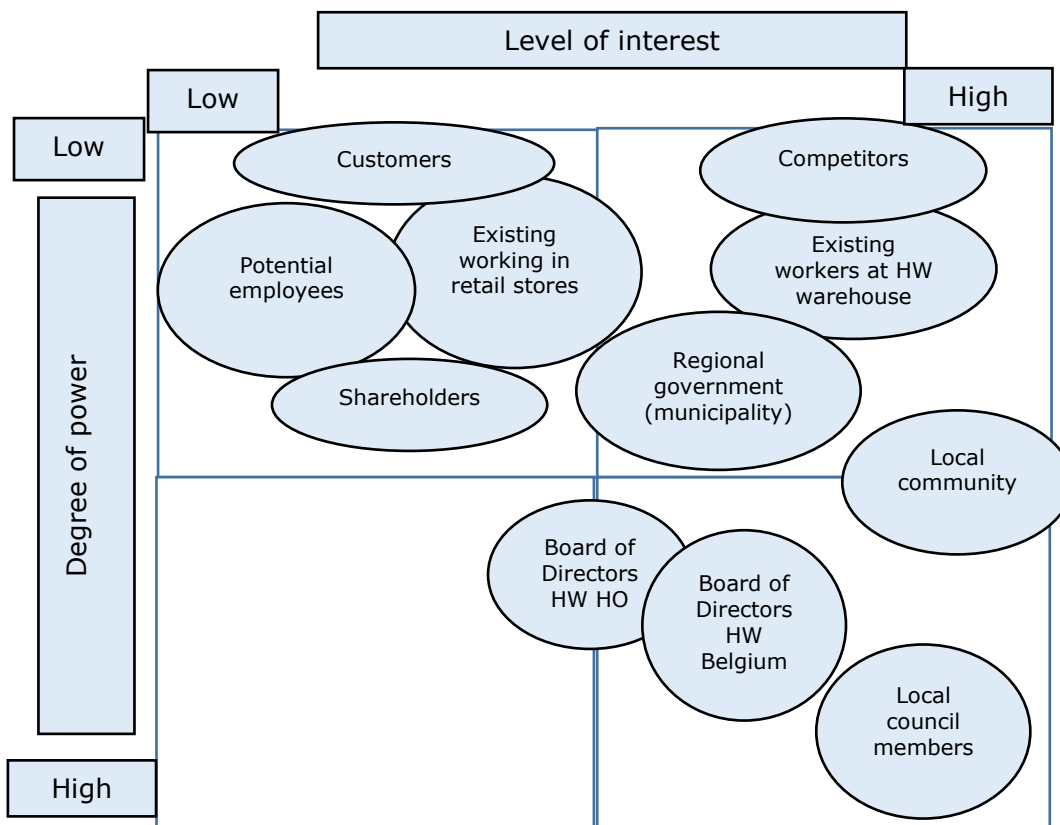
Year	0	1	2	3	4	5
Description	€,000	€,000	€,000	€,000	€,000	€,000
Sales of Antwerp and Aarschot		10,000	10,000	10,000	10,000	10,000
Reduction of 5%		(500)	(500)	(500)	(500)	(500)
Sales of Turnhout and Hasselt		4,500	4,950	5,445	5,990	6,589
Total sales revenue		14,000	14,450	14,945	15,490	16,089
7% of sales revenue		980	1,012	1,046	1,084	1,126
Costs						
Land and buildings	(500)					
Fork lift truck and stackers	(18)					
Lorries	(250)					
Annual running costs of depot		(300)	(308)	(316)	(324)	(332)
Manager		(25)	(26)	(27)	(28)	(29)
Workers 20 x €15,000		(300)	(308)	(316)	(324)	(332)
Drivers 10 x €18,000		(180)	(185)	(190)	(195)	(200)
Net cash flow from 7% sales revenue less costs	(768)	175	185	197	213	233
Discount 3%	1.000	0.971	0.943	0.915	0.888	0.863
Discounted cash flow	(768)	170	174	180	189	201
Net present value						146

The Net Present Value is €146,000 and therefore would appear to satisfy the requirements that the costs are no greater than 7% of revenue served from the depot.

It would be beneficial to undertake some sensitivity analysis in order to test how sensitive the results are to changes in the estimates that have been made. For example, what happens if the estimates of revenue are lower, or greater? Is there anything that can be done to lower the operating costs? Do drivers wages have to go up in line with inflation? Are 18 drivers and 20 workers needed from the first year if sales are expected to increase, or is the estimate when the depot is operating at full capacity?

Stakeholder analysis

Various stakeholder groups might have an impact on the decision to develop a depot at Herentals.



[There are many possible stakeholders that could be discussed. In strategic decisions a company may take into account a range of stakeholder views, even if they do not have a direct responsibility to the stakeholder group, however, the significance of the analysis is to identify the key stakeholders that the company needs to engage with to be able to implement their strategy. In some cases the argument is subjective and you may have a different viewpoint. This is true in real life where a consensus would be arrived at through discussion, and therefore being able to put your point of view across and argue your thinking is the key to questions such as this. Note how each stakeholder group identified below is discussed as to what their level of interest and power might be.]

The HW plc board of directors – Group HO

Based on the structure of the company it is possible that the main board of directors of HW plc would have the final say on whether the strategy was acceptable or not, but given their approach of allowing the local boards some autonomy they may not have as much say as the local board of directors. They would have a relatively high degree of interest in how the board of HW Belgium were managing the development of the location and have a high degree of power,

being the main decision making body, but may not choose to exercise it, making it clear that the local board of HW Belgium has autonomy to make the decision.

The Local Board of Directors at HW Belgium

It may be seen as odd to include the local board of directors in the stakeholder analysis, as they are body making the decision. It is the board of directors at HW Belgium who would be undertaking the stakeholder analysis, however, there could be differences of opinion on the board itself, so it is worth including them in the analysis for completeness.

Existing workers at HW Belgium in the warehouse in Brussels

The workers would probably be very interested in the decision as it will have an impact on their work, but as they are employed by HW Belgium, they would probably have little power to stop the decision, unless they can act together to create collective power. It would be possible to split this stakeholder group into subgroups as the warehouse workers would probably not see much difference, however, the drivers are more against the decision, as they see more of a direct impact on their existing work. However, based on Mintzberg's ideas of replacement and disruption, any power they hold would be short term disruption, as in the long term they could probably be replaced.

Local government (Council) in Herentals

The local government in Herentals is very interested as they see the potential for jobs, but I suspect might also be cautious about supporting the proposal too eagerly, due to the local community concerns. It might be that some of the local council will have their re-election in mind and so be keen to keep the locals happy. One outcome might be that the proposal is granted but with restrictions placed on traffic flows. HW plc will need to assess whether any restrictions placed on the operation of the site will impact on its efficiency. This puts the local council in a strong position of power over the viability of the site.

Regional government (municipality) in Belgium responsible for Herentals.

The Regional government appear to be supportive and are clearly interested, but as they support the proposal may not wish to exert too much power over the decision. It is not clear exactly how much power the municipality has over the local council but it is suggested that they usually accept the local decisions – therefore we could argue that they have or will exert little power.

Local community close to the proposed site

The local community are concerned about increased traffic and possible impact on their day to day lives. They have lobbied the local council and with the forthcoming re-election of members it puts it in an influential position - possibly more so than the regional government.

Employees in the existing retail stores in Aarschot and Antwerp who are serviced from the warehouse at Brussels

Depending on how involved they feel it could be argued that so long as the retail store gets its products delivered as and when required employees in the existing stores may not be too worried about where the products come from. In fact it might even make their lives a bit easier if deliveries were made from a more local source, and we could assume that they would support the proposal if it improved efficiency, however, in reality they probably have little influence over the final decision. Therefore, as we don't know much about how involved they are, we could treat them as low interest, low power.

Potential workers e.g., drivers and workers who could gain employment

There is very little that this group could do to influence the decision and therefore they could be treated as low interest, low power.

Competitors

HW Belgium will need to bear in mind the potential reaction of competitors as competitors will be interested in what HW Belgium are planning (we could assume that they may spot the proposal lodged with the local council as this would be public knowledge). However the competitors cannot directly influence HW Belgium in their decision, so have little or no power.

Customers

Customers are probably not that interested in the decision and may not even be aware of the plans and certainly have no power. However, it could be argued that HW Belgium is taking into account customers as the rationale for the decision is to improve efficiency. Therefore the customer experience is a factor that HW Belgium take into account, but as a stakeholder group they have very little influence.

Shareholders

When taken into account that HW plc is a large organisation spanning six continents the impact of a decision in Belgium is not likely to be of concern for the shareholders of the HW plc. Shareholder influence is relative, and this could be viewed as a strategic decision for HW Belgium, but not that significant in terms of HW plc's overall results. In fact it is in line with the overall strategy of operating a hub and spoke logistics policy, and if they are aware of the decision, shareholders may simply view this as just a case of implementing company policy.

Strategy to deal with stakeholder groups.

The key players are the stakeholder groups that HW Belgium need to involve in the decision and convince them that it is a good idea. This includes the local council members and also the local community. It can have reputational impacts if bad publicity is generated and the company has to work with the local community, so it would be beneficial for HW Belgium to meet with local representatives to see if a compromise is possible. If the issue cannot be resolved HW Belgium would be advised to look at alternative sites.

Those stakeholders falling within the high interest but low power should be kept informed and a communication strategy should be devised to ensure that they are fully informed of the implications of the decision.

There are no stakeholders placed within the low interest, high power category on the stakeholder map, but if there were any in this category an intervention strategy of explaining the rationale behind the decision should be adopted. It could be argued that the main board of directors at HW plc are in this box and that the local board of directors has to put forward a business case for the new depot in order to gain the approval of the main board, but it is not certain exactly how much autonomy the local Board is allowed.

Those stakeholders falling within the low interest and low power category should be monitored but no specific strategy needs to be developed – they can receive minimal effort but cannot be ignored.

Activity 11 – Critical success factors and performance management

Suggested solution for performance management

Critical success factors include:

- Store location
- Relationship of footfall to passing trade and conversion from footfall to point of purchase.
- Economies of scale and operation
- Good links with suppliers and inventory management
- Store layout and ambiance

Measures provided plus additional calculations

	HW Bournemouth	HW Newcastle	Competitor Manchester
Customer satisfaction score out of 10	7.8	6.7	8
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
Conversion rate – point of purchase as percentage of footfall	26.70%	22.50%	25.00%
Annual sales from store £m	8.76	8	9.7
Annual cost of goods sold from store £m	6.12	5.92	6.79
Average value of click and collect sales per annum included in total sales £m	0.087	0.16	0.388
Closing stock value at end of last financial year £m	1.04	1.776	1.058
Number of employees in store	292	316	275
Square foot of retail space in store	40,000	45,000	50,000
Average number of product ranges stocked in store	25,000	26,000	15,000
Annual cost of wages for store staff £m	4.38	4.538	3.947
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 £m	10	9	10.5
Unemployment rate in the region	1.80%	8.10%	7.40%
Population growth in the region p.a.	1.60%	2%	3.20%
Percentage of population of working age in the town	62.6%	68.50%	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

Extra calculations			
Conversion rate – point of purchase as percentage of footfall	26.7%	22.5%	25.0%
Footfall as a percentage of passing trade	15%	13%	20%
Average sale value per point of purchase £	60	49	27
Gross margin percentage of sales	30%	26%	30%
Percentage of sales as click and collect	1.0%	2.0%	4.0%
Stock turnover based on cost of sales	62	110	57
Average sales per employee £m	0.03	0.025	0.035
Average sales per square foot £	219	178	194
Average gross margin per square foot £	66	46	58
Average annual wage per staff member £	15,000	14,361	14,353

The comparisons between the Bournemouth store and the Newcastle store needs to be reviewed with the fact in mind that they are in different parts of the country with different economic indicators and potentially different demographics. Whilst the comparison is useful in terms of operational indicators, as this could be utilised to help improve the operations of the northern store, the external influences on performance cannot be ignored. For example, the stock turnover is much faster (i.e., held for fewer days) in the Bournemouth store than Newcastle, but the product range could influence this, for example, mix of clothing, home and garden, and electricals. It is also interesting that the average sales per square foot and gross margin are high in Bournemouth than Newcastle, which could be due to store layout. This might also impact on the conversion rate of footfall into purchases being higher. However, factors that might influence this are the average family size and average income levels, as well average age of the population, which could also influence the mix of products being purchased. Other factors to take into account are that the Bournemouth store is 5,000 square feet smaller than Newcastle and stocks 1,000 fewer product ranges, which could impact on the differences in the recorded performance.

The opening hours are also slightly different. Employee numbers vary with the Bournemouth store paying slightly more on average, which may be due to local economic factors, but the sales per employee are higher, even though they are open for slightly fewer hours than Newcastle. Researching the product ranges and demographic of the customers could shed more light on this before any decisions are taken to change the operation of Newcastle. Also the customer satisfaction levels appears to be lower in Newcastle and further investigation as to what is causing this would be useful, for example, is it store layout, helpfulness of staff, opening hours, or other factors, that are causing the difference.

Newcastle is performing poorly compared to the major competitor. Even though they are both in the north, the economic conditions between Newcastle and Manchester still need to be taken into account. For example, the population growth rate is slightly higher in Manchester, as is the average income level. The Manchester competitor is open for longer which may be an option that HW Newcastle could explore, but this will of course need to be resourced, which will

increase wages. Therefore the increased opening hours will need to generate enough sales to cover the cost of the additional wages, plus any additional costs.

The Manchester competitor also stocks far fewer product ranges and has a faster stock turnover. They also have more 'click and collect' sales and have a higher conversion rate, both in terms of point of purchase to footfall and passing trade. Investigating the store layout and window displays to understand what is drawing in the customer in to the store could be useful. One aspect that could impact on this is the actual location of the competitor store in relation to other amenities and stores in the centres at Manchester, for example, being close to toilet facilities or entrance and exit to car parking, lifts and so on, can often increase passing trade. This could be worth investigating for other centres where HW plc might operate. Developing a good relationship with Intu could be beneficial in the long run.

However, taking the point of purchase of sales per day and grossing this up to an annual figure we find that the average value of a sale in the competitor Manchester store is £27 compared to HW Newcastle of £49, and HW Bournemouth, £60, which raises the question as to the competitive strategy and target customer demographic of the competitor Manchester store, and hence whether it is a valid comparison. The store layout would be interesting to investigate in more detail as the store is larger than HW Newcastle and has fewer product ranges, so exploring how the sales space is utilised to generate sales could provide some useful information, even if a different demographic and competitive strategy is being followed.

The Newcastle store could investigate the customer satisfaction level as this might increase sales, and conversion rate. Also, research could be undertaken to find out whether customers would prefer longer opening hours, bearing in mind the associated costs of opening for longer. Inventory/stock management is an area where HW plc is supposed to have improved its management systems, but HW Newcastle is less efficient than the Bournemouth store and the competition in this respect. Also, store layout might be worth looking into to see if improvements could be made to engage the customer more and increase conversion rates.

Activity 12 – Balanced Scorecard

BSC suggested solution

Part (a)

The balanced scorecard is designed to enable management to translate the organisation's vision and mission into a set of objectives and performance measures that will help them achieve the overall mission. It may be particularly useful for HW plc at this time as management will be able to take a fresh look at the business in developing a scorecard that will help turn the company around into a profitable business again.

The four perspectives represent the financial perspective; customer perspective, internal business perspective and the learning and growth perspective. The idea is that management are able to develop a range of objectives and performance measures that means they are measuring more than just the financial measures. If management only use financial measures to monitor the business it can encourage a short term approach, but including internal and external, financial and non-financial, quantitative and qualitative, and leading as well as lagging performance indicators encourages a long term approach. It can also enable the management to ensure that they are addressing the expectations of a range of different stakeholders, for example, shareholders, debt providers, customers, employees, suppliers and so on.

Each perspective has four elements: the objective, the target, the measure and the initiative. The initiative will enable the management of HW plc to review whether there is anything that they could do differently to improve the business rather than just rolling the objective and measures over from year to year. This could be a useful exercise for the management of HW plc given the need to improve performance. Benchmarking exercises can often be utilised to aid the development of initiatives to aid the achievement of objectives.

The linkage between the perspectives also enables management to gain an understanding over time of how performance measures link together, for example, improving productivity and quality controls via staff training initiatives will impact on customer satisfaction and hence improve profits. The linkages between measures are usually shown in a strategy map and is there to help management ensure that all measures actually aid the achievement of the overall vision and mission. This can also be used as a means of communicating the strategy to the employees of HW plc.

HW plc would ideally have a series of balanced scorecards at different levels that would link together. For example they could have one at the level of the business unit, that is, store, manufacturing unit, country, continent, and whole corporate entity. The scorecards can be tailored specifically to suit HW plc. This enables levels of management to focus on their particular area of responsibility and means that the senior management do not have to monitor everything in detail, as aspects of the business are being dealt with at different levels. The concept of critical success factors can be used to ensure that management focus on the key activities that ensure survival of the business.

There are, however, some difficulties that can arise when implementing a balanced scorecard approach. For example, if there are too many measures

management can get confused about where to focus their attention. It is not always possible to establish clear links between measures as sometimes one measure may have multiple impacts. For example, developing new product lines as a learning and growth measure can impact on production aspects, customer satisfaction, and also the finances of the company due to the resources required to develop new products. Therefore, the reason as to why performance targets have been achieved, or not, is not always evident, making it difficult for management to determine the correct course of action to correct any adverse variance. Some measures, such as customer satisfaction and employee morale, can be quite difficult to measure as they are both qualitative and subjective, and as mentioned earlier, can be influenced by a range of different elements.

There is always the behavioural displacement aspect of performance measurement that can impact on the implementation of a balanced scorecard, and for those employees and managers not used to being monitored, it requires support and training whilst it is being implemented. Another danger can be that managers focus on trying to meet the targets they deem to be important and take short term decisions to meet a few targets, rather than taking a long term view in running the business.

The balanced scorecard is also meant to be used as a developmental tool, that is, for measures to be changed and developed as the business develops. Unfortunately many organisations have left the measures unchanged from year to year and not found the scorecard approach helpful. Therefore, the management of HW plc need to ensure that they develop the measures to suit the business. For example, if they expand into new areas of business such as insurance in the Financial Services business unit, or corporate clients in the Interior Design business, there may be new aspects of the business that require careful monitoring.

The balanced scorecard could provide a useful tool for the management of HW plc to refocus its strategy and to communicate this to employees so that they all move in the same direction to help improve performance.

Part (b)

The trick with the performance measures is to keep it as simple as possible. The common mistake is to try and make it far too complicated. For example, if you wanted to try and increase the number of customers, the measure is simple to count the number of customers. If the number of customers is greater than last year then it has increased. Often students try and make a link that is not necessary. For example, for an objective to increase the number of customers, a measure of increase in sales might be suggested. However, this measures sales value and not the number of customers. An increase in sales value could be achieved by the same number of customers buying more, therefore the sales value increases, not the number of customer. So think carefully about what it is you are measuring.

Try and think of one objective and measure under each of the four perspectives, for each business activity. Initiatives can be anything that might help meet the objective, so you can think creatively here. You don't need one per

objective, as often initiatives might help a range of measures within a perspective. For example, introducing a customer loyalty scheme might help increase sales, as well as attracting new customers.

The following are examples and do not constitute the only correct answer. Note how sometimes the objectives and initiatives are complementary across the different areas of the business and how they work together as they are part of the same overall business.

Objective	Measure	Initiative
Retail Stores		
Financial perspective To increase sales per square foot	Difference in sales per square foot in year compared to previous year	Hire specialist consulting firm to review store layout to facilitate flow of customers and display of products to enhance sales volumes.
To increase average profit per retail outlet	Difference in average profit/(loss) of retail outlets in year compared to previous year	
Customer perspective Increase the footfall and conversion rate for in-store purchases	Difference in footfall and conversion rate this year compared to previous year	Hire specialist to review advertising, particularly window displays to attract customers. Link to store layout review above.
Increase repeat customers	Number of repeat use of store card or credit card number this year compared to previous year	Marketing of store card coupled with more targeted mail shot marketing including tailored offers to existing customers where address is known.
Increase customer satisfaction score	Customer satisfaction score based on survey	Undertake customer survey or install polling points at checkouts in stores.
Internal business perspective Reduce average inventory holding time.	Difference in inventory turnover this year compared to previous year	Ensure all staff trained in the new inventory management system to enhance understanding of report outputs from the system and actions to take.
To increase the use of concessions in store	Number of concession operators this year compared to previous year	Encourage concessions in store by offering incentives to operators during 1 st year of operation.

Learning and Growth perspective To develop and launch 5 new product ranges in household furniture (to build on strong market position)	Number of new products launched in year that achieved break-even sales volume	Conduct marketing research to identify customer preferences in household furniture.
To open stores in out of-town shopping villages in three countries	Number of new stores in shopping villages opened during the year and in which countries	Undertake marketing research to identify suitable countries for shopping village outlets.
Objective	Measure	Initiative
Interior Design		
Financial To maintain profit margins from existing business	Gross margin this year compared to previous year	
To increase sales revenue generated from corporate sector	Sales from corporate sector this year compared to previous year	Target marketing campaign at corporate clients.
Customer To increase the number of corporate clients	Number of corporate clients this year compared to last year	
To increase customer satisfaction levels	Increased in customer satisfaction index over previous year	Undertake customer survey.
Internal business To increase the number of orders satisfied using HW manufactured products	Number of orders where HW manufactured products are used compared to previous year	Work with HW R & D to improve HW manufactured product range based on customer feedback and knowledge of other manufacturers products.
Reduce lead time from order to installation of kitchen design (popular re-design)	Time from order to completed installation compared to previous year	Undertake benchmarking exercise, either internal between different countries, or find a suitable external partner willing to participate.
Learning and growth Recruit and train new interior designers with experience of corporate sector	Number of new employees recruited	Establish training programme to familiarise staff with requirements of corporate clients.

Gain at least one new client in the education sector as a starting point	Number of clients in education sector	Target marketing to education sector institutions.
Objective	Measure	Initiative
Financial Services		
Financial Increase revenue generated from insurance products	Sales revenue generated from insurance products compared to previous year	Target marketing to insurance products.
Reduce administration costs	Administration costs compared to previous year (are they less and by how much)	Undertake benchmarking or review of administration processes.
Internal Business Reduce process times for opening credit card account or insurance policy approval	Time take to open credit card account, approve insurance policy compared to previous year	Undertake benchmarking or review of administration processes or undertake additional training.
Reduce time to successfully deal with insurance claims on HW purchased goods	Time taken from notification of claim to successful resolution compared to previous year	Undertake benchmarking exercise.
Customer Increase number of credit card customers	Number of credit card customers compared to previous year	Marketing campaign, free transfer of balance, 0% interest rate offer etc.
Increase number of insurance customers	Number of insurance customers compared to previous year	Marketing campaign.
Learning and growth Increase number of staff qualified in financial services with knowledge of insurance market	Number of staff recruited with relevant experience compared to previous year	Recruitment campaign.
Increase the number of insurance products offered to customers	Number of new insurance products within product portfolio compared to previous year	Engage with consultant firm to undertake research into most popular insurance products an develop competitive offerings to market.

Objective	Measure	Initiative
Product development and manufacturing		
Financial Reduce cost of product development	Product development costs compared to previous year	Work with R & D team to undertake benchmarking exercise with aim of reducing product development time and hence costs.
Reduce cost of materials	Cost of materials compared to previous years	Work closely with suppliers to reduce material content or costs.
Customer Maintain sales value of HW manufactured products in HW stores	Revenue from HW manufactured products compared to previous year	Work with HW retail stores to promote HW branded products.
Increase sales volumes of products to Interior Design customers	Number of products sold to Interior Design customers compared to previous year	Work with Interior Design team to promote HW products – maybe with financial incentive by working with HW Financial Services.
Internal business Reduce energy usage and wastage	Energy usage and wastage rates compared to previous years	Undertake energy audit and waste management study.
Reduce the length of the new product development cycle	Length of new product development cycle compared to previous year	Undertake review of new PD cycle – perhaps with help from consultant firm.
Reduce level of inventory and turnover	Inventory level and turnover compared to previous year	Undertake review of inventory management system.
Learning and growth Develop new products with Interior Design suitable for corporate and education sector clients	Number of new product developed targeted at corporate and education sector clients	Work with Interior Design team and R & D to develop new products.
Identify sustainable material supply suitable for furniture products.	Number of new supply sources of sustainable materials.	Research sustainable materials suppliers.

Activity 13 - Benchmarking

Suggested solution benchmarking

Part (a)

Benchmarking is a means of comparing the performance of an organisation (or individual or subgroup) with another with the aim of learning and making improvements. It is important to note that it is not just a copying exercise as the context in which the improvements are being implemented need to be taken in to account. For example, if HW plc benchmarked against a competitor that was much smaller (or larger) than HW plc, the relative size of organisations may mean that economies of scale are a significant factor, and that the smaller competitor will not enjoy the economies of scale that HW plc can utilise, or conversely that a larger competitor achieves benefits from economies of scale that HW plc cannot hope to emulate. Therefore a meaningful comparator needs to be found.

One of the key advantages of benchmarking is that it can aid in setting aspirational targets that are linked to strategy, particularly if used as part of the initiatives within the balanced scorecard. This could be important for HW plc at this time due to its poor performance in recent years. It can also encourage innovation, something that HW plc might be able to utilise to improve its relative competitive position. It can also help to motivate employees via the use of targets but also because benchmarking involves all employees. It is not a process that is undertaken in isolation but should be inclusive and involve employees at all levels.

There are difficulties, however, that HW plc need to be aware of when undertaking benchmarking exercises. If targets are set and constantly missed it can have the opposite effect of motivating employees, but can demotivate them. Also under certain forms of benchmarking, for example, competitor benchmarking, there is a danger of disclosing confidential or commercially sensitive information in an effort to gain some benefit from the exercise, that is, there may be a temptation to disclose too much information. The danger of just copying what others do is also a temptation without taking the time to assess how best to implement an improvement in HW plc's particular context, that is, management get focused on the benchmark itself rather than learning from what they have found. This could also mean that HW plc becomes like other companies in the high street and loses that extra element that sets it apart from the competition. It also assumes that suitable partners can be found with which to benchmark.

However, used properly, benchmarking can be a very good tool for improving the operations and performance of a business.

Part (b)

There are many classifications under which benchmarking is considered. These include internal and external, formal and informal, as well as others. The typical types of benchmarking that might be appropriate for HW plc are as follows:

- Internal – comparing one operating unit or function with another in the same company, for example, one retail outlet against another, or one production unit against another. It is, however, important to be aware that outlets in different parts of the country, or indeed countries themselves, may be affected by different factors within their local context, although the operations may be the same.
- Functional / activity – internal functions are compared with the best external practitioners regardless of industry, for example, inventory control with a supermarket, or website navigation with organisations that are in business of providing information and advice online.
- Competitor – with direct competitors, including reverse engineering techniques, that is, direct competitors of HW plc, but again we need to be careful that it is a meaningful comparison. This tends to be appropriate for aspects that can be benchmarked via publically available data, for example, product ranges, prices and so on.
- Strategic – aimed at strategic action and organisational change, for example, launching new product range, or product development. Even benchmarking against companies that have successfully turned around a loss making position to one of profitability could be a possibility for HW plc.
- Industry – there may be some industry standards that can be utilised, for example, general statistics on footfall, conversion rates and staffing levels in the retailing sector.

Part (c)

There is no one definitive process for benchmarking but a typical series of stages that HW plc could follow is outlined below:

1. Establish benchmarking objectives – it is important to have a clear idea of what it is HW plc wishes to achieve and what aspects of the business they are benchmarking.
2. Establish mixed skills benchmarking team – benchmarking is inclusive and is not undertaken just by accountants. A team of people with a mix of skills and knowledge of the particular area is usually required. This also facilitates a sharing of knowledge and understanding within the company.
3. Develop relevant KPIs – it is important that the performance indicators are developed prior to collecting data as this determines what data is required.

It is also important to recognise that the data has to be available from both parties if benchmarking with another organisation.

4. Choose organisation or business unit against which to benchmark – choosing an appropriate benchmarking partner is important as the benchmark has to be meaningful and one from which HW plc can learn. Also, if external, the partner will wish to learn from the exercise as well, that is, mutual benefit – this process can take time to find a suitable partner.
5. Measure own and partner's performance – the obvious stage of measuring performance of both parties on a comparable basis.
6. Analyse data & discuss results – once collected the data needs to be analysed. It should also be recognised that the reason why there are differences in performance needs to be discussed as this may not always be apparent, that is, HW plc need to understand the 'why' behind the difference.
7. Implement change – any improvements that could be made need to be implemented which brings into play change management issues as employees need to be included in the process.
8. Monitor improvements – the impact of changes needs to be monitored and often this is not immediately apparent as to why performance has or has not improved. Particularly if a number of things have been changed. There may not be a direct link.
9. Publish success – an important step often overlooked is to publish the success of the exercise as this can act as a motivating factor for employees.

Part (d)

Benchmarking can also be utilised as a means of developing new initiatives that can be implemented as part of a balanced scorecard approach to performance management. Also, in relation to competitors it can aid the determination of strengths and weaknesses as part of the corporate appraisal or SWOT analysis and therefore the process and outputs of benchmarking exercises can be utilised in conjunction with other techniques to aid the development of strategy and the achievement of objectives.

Value chain activities can be benchmarked to identify critical activities in the industry, or sources of strengths and weakness, as mentioned above. Costs of quality is another area where benchmarking is particularly useful, as well as in target costing as a means of making improvements to processes or functionality, design, and so on, in order to meet the target cost.

Activity 14 – Divisional performance

HW PLC divisional performance suggested solution

Looking at this from the viewpoint of HW PLC

- Decisions should be made based on DCF (NPV) calculations.
- In this case there is a Rp90,000m initial investment and a Rp31,500m net cash flow (150,000 - 118,500)
- As the cash flow is the same amount per year we can use the cumulative discount factor
- DCF Calculation:
- Rate - 7 Years at 10% = 4.868
- $-90,000 + [(150,000-118,500) \times 4.868] = \text{Rp}63,342\text{m}$

Therefore the decision would be that this project is one that we should pursue.

Note that we have used the Rp90,000m (assumed to be incurred in year 0) essentially ignoring the initial development costs as these are sunk costs, and for NPV we are concerned with future cash flows. Whatever happens HW plc won't get the Rp30,000m initial costs back. However, when undertaking RoI calculations we would include the total investment as we are interesting in the return on total investment rather than the timing of future cash flows.

However, if you take the viewpoint of the Indonesian division the head office wants them to reimburse the initial development costs.

Looking at this from the viewpoint of the Indonesian division

- DCF Calculation:
- Rate - 7 Years at 10% = 4.868
- $-120,000 + [(150,000-118,500) \times 4.868] = \text{Rp}33,342\text{m}$

We can see that it is still a positive number, but it highlights a difficulty where two parts of the business see the decision as being something slightly different. Therefore care needs to be taken when reviewing divisional performance and if you work for a head office, always take into account how the division might view the proposed project, as they might take a different viewpoint. It also highlights the significance of who bears the costs in joint developments with head office as this can influence decision making in surprising ways.

Return on investment

	Current	New Project	Combined
	Rp,m	Rp,m	Rp,m
Sales	540,000	150,000	690,000
Less			
Cash operating expenses	400,000	118,500	518,500
Depreciation	41,000	17,143	58,143
Divisional profit	99,000	14,357	113,357
Return on investment	$99,000/450,000 \times 100 = 22\%$	$14,357/120,000 \times 100 = 12\%$	$113,357/570,000 \times 100 = 20\%$

Note depreciation of new project/ $(90,000 + 30,000)/7 = 17,143$

We know the organisation should want to take this project forward but the manager would refuse to do this if they are judged on ROI. So using Residual Income

	Current	New Project	Combined
	Rp,m	Rp,m	Rp,m
Divisional profit from above	99,000	14,357	113,357
Capital charge at 10% of capital employed	-45,000	-12,000	-57,000
Residual income	54,000	2,357	56,357

Capital charge is calculated as:

Capital charge at 10% of capital employed	$450,000 \times 10\% = -45,000$	$120,000 \times 10\% = -12,000$	$570,000 \times 10\% = -57,000$
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Under the RoI method the divisional management may view the project as reducing their overall average RoI and hence not be that motivated to undertake the project, even though it is yielding a percentage return above that required by the head office.

The Residual Income method increase the residual income and therefore would encourage the division to undertake the project. Therefore the RI is a preferable method. It is similar in a way to the NPV calculation in that it produces an absolute value and therefore if it is positive it encourages acceptance, whereas

if negative it discourages acceptance. There may be instances when a project with a negative NPV is strategically advantageous to undertake, but the principle is the same.

However, a difficulty is in establishing the cost of capital, as with the NPV, if a higher cost of capital is used in the calculation it will reduce the resultant value of the RI or NPV. We could also argue that the depreciation rate chosen will impact on the RI, as it does with RoI, whereas NPV works on cash flows, so the fact that RI uses accounting information, and historical asset values, could mean that a true evaluation is not being undertaken. As with RoI it also depends on the size of the return in relation to the investment. Is it 1,000 on an investment of 1,000,000 or 10,000? Although both produce a positive RI we would probably argue that 1,000 on 10,000 is much better, and that 1,000 from 1million is not that good. It might mean more if RI is expressed as a percentage! For example, 0.1% compared to 10%.

RI is said to be a better measure to use as it takes away some of the motivational influences of the RoI percentage, but for new investments the NPV should always be undertaken, as this ignores the accounting policies issue.

Activity 15 – Transfer pricing

Activity 15 (a) - Transfer pricing to Interior Design for Extractor

Part (a)

Calculate each transfer price described in the scenario.

Factory Offer		£
	Normal selling price	240.00
	Less: variable selling and distribution costs Sales force salaries are fixed so VC = carriage $\text{£}400,000/100,000$	4.00
	Adjusted selling price	236.00
Interior Design Offer	Standard variable (direct) manufacturing costs $(7,200 + 4,600 + 800)$ $\text{£}12,600,000/100,000$	126.00
	Variable manufacturing overheads $\text{£}200,000/100,000$	2.00
	Variable manufacturing costs	128.00
	PLUS 20% profit margin	25.60
	Variable manufacturing costs plus mark-up	153.60
Op Directors suggestion	Full manufacturing cost plus 15% based on 100,000 units $\text{£}1,760,000/100,000$	176.00
	Plus 15%	26.40
		202.40
	Full manufacturing cost at full capacity of 120,000 which could also be utilised to arrive at the fixed costs	
	Variable costs $\text{£}12,800,000/100,000$	128.00
	Fixed overheads $600 + 3,000 + 1,200 =$ $\text{£}4,800,000/120,000$	40.00
		168.00
	Plus 15%	25.20
		193.20

Part (b)

Where there is spare capacity the only extra cost to the Factory of producing and selling one extra unit is the variable manufacturing costs. Therefore the Factory would be willing to supply at anything over the variable manufacturing cost, that is, below this they would lose money from selling to the Interior Design business.

However, it would be good for the Factory to make a profit on their sale for motivational purposes.

The Interior Design Business (ignoring issues of quality for the moment) would not wish to pay more for the product than they could obtain an alternative product for in the external market, that is, £180. As the Factory product is of a better quality than the Interior Design business should be willing to pay up to at least the external alternative as it is getting a better product for less money.

When there is spare capacity the transfer price could be negotiated between £128.00 and £180.00.

Part (c)

When there is no spare capacity the situation changes for the Factory as to sell a product to the Interior Design business means it cannot make an external sale and it loses the contribution on that sale (note we say contribution as it will still incur the fixed costs whether it sells a product or not, so when it sells a product it is making a contribution towards fixed costs and profit).

This is where the opportunity cost becomes useful. The opportunity cost is the benefit foregone from the next best alternative course of action.

In the first instance where there is spare capacity we could say that the next best alternative is not to produce a product at all in which case the Factory saves the marginal or variable costs of manufacturing, i.e. £128.00. Therefore this is the opportunity cost of producing the extra unit. However, when the external sale is made the Factory incurs the variable cost of manufacturing and makes a contribution, so if the chance of an external sale is lost by selling to the Interior Design business, HW plc actually loses the contribution as well. Therefore the contribution lost in this instance when there is no spare capacity is the selling price less the variable manufacturing costs (£240.00 - £126.00 - £2.00) £112.00. Therefore the opportunity cost of producing one extra unit and selling to the Interior Design business is the variable manufacturing cost plus lost contribution. £128.00 + £112 = £240. (Note that this could be adjusted by the distribution costs not incurred which would leave us with the adjusted selling price).

The key point is that if we use the opportunity cost of £240 as the transfer price then this actually deters the Interior Design business from buying from the Factory which is the right decision from HW plc's position, as if an external sale is lost, then the company as a whole loses money. This is the basis of a contention that if the opportunity cost is used, the correct decision is always made for the benefit of the company as a whole.

The obvious decision to follow up with is whether it is worth investing to increase the capacity of the Factory which is a different, but related, decision.

Activity 2 - Transfer pricing waste disposal unit – outline suggested solution

Discuss and critically evaluate the various methods available to HW plc for calculating an appropriate transfer price for the Ukrainian factory produced unit to be charged to the Interior Design business

Methods that can be included are:

Marginal cost only	}
Marginal cost plus a profit element	
Full cost only	}
Full cost plus a profit element	
Market price	}
Adjusted market price	
Negotiated price between parties involved	
Opportunity cost	

Each of these should be explained briefly – see chapter 9 of Management Accounting in Support of Strategy.

Utilising the information provided above in relation to assuming that the factory always has the capacity to cope with all orders, calculate and justify what you consider to be the most appropriate transfer price.

Note the argument below as to the potential transfer prices. Where there is spare capacity, that is, the factory can sell to all external and provide all internal requirements without any problems then the marginal manufacturing cost is the lowest price, anything above that could be negotiated.

Options might be:

Marginal cost price i.e. variable costs	
Variable manufacturing costs	60
Variable manufacturing overheads	20
Suggested transfer price	80

However it could be argued that adjusted market price might be appropriate

Adjusted market price	
Selling price	150
less distribution (assumed to be variable)	-5
adjusted selling price	145

This could be a potential transfer price however:

As the fixed costs will be incurred anyway it could be argued that the price should be the adjusted selling price as above, less the fixed costs as these will be incurred anyway, so:

Adjusted selling price	145	
Less manufacturing fixed costs per unit	-30	-
Less fixed selling costs	<u>-10</u>	
Transfer price	105	

The transfer price could be between 80 (the variable costs) and 105 depending on how the profit is to be shared between the two internal parties, i.e., marginal costs is the lowest price. It could be argued that the highest price might be the alternative product market price of 125. However, the 105 recognises an element of profit could be shared. i.e., the equivalent of the marginal manufacturing costs and the normal profit element, 80 plus 25.

Note there are various ways of arriving at the same answer. So produce a convincing argument and it doesn't matter how you arrive at the figures.

Utilising the information provided above and assuming that the external sales of the factory grow very quickly creating a capacity constraint for the factory, i.e., they do not have sufficient capacity to supply all of the Interior Design demand and external sales orders, calculate and justify what you now consider to be the most appropriate transfer price.

Opportunity cost

Under normal conditions there is no opportunity cost as the factory can sell units in the open market

However, if the factory has to sell to the Internal Design business internally and loses a potential 'external' sale, then there is a loss of contribution toward fixed costs and profit.

Marginal manufacturing costs	80
Lost contribution 150-80	<u>70</u>
Opportunity cost	150
Less saving in variable distribution	<u>5</u>
Adjusted selling price	145

The recommendation is always opportunity costs. However we could reduce this by the saving in selling expenses.

Activity 16 – Sustainability

Activity 16 (a)

The following elements indicate that HW plc take CSR seriously (remember that this is based on a real company, so the activities actually take place in a global company).

HW plc has a group CSR framework – therefore this guides the behaviour of all subsidiary companies.

Each business creates its own CSR plans based on local stakeholder engagement. This provides some autonomy and ensures that each part of HW plc engages with their local stakeholders, but within the group guidelines, as the plans are submitted to the CSR committee. This also ensures local buy-in to the plan as they created it and it is not imposed by the head office.

HW plc allows employees time to contribute to the local community. The company is therefore committing resources to the CSR strategy.

Training is provided and HW plc also have a qualification developed for their CSR champions. The knowledge gained by these champions is also shared around the group.

The CSR policy sets targets around sustainability issues and are divided into four main areas: community, environment, marketplace and workplace.

The local champions provide commitment and local input, together with the support network provided, enables and encourages the sharing of experiences and ideas around the group to develop a form of organisation learning. The action group ensures that something is done rather than just talking about issues. Champions are supported by the group CSR director and coordinator. This provides a mechanism to ensure that good practice is shared, but also demonstrates the head office commitment to CSR and its process within the group.

The finance department are heavily involved in both gathering, analysing and preparing the information for CSR report, as well as providing an audit check on its accuracy. This is probably due to the fact that the report is published and therefore accuracy needs to be checked in case it leaves the company open to criticism later.

Activity 2 - Suggested solution

Sustainability

Sustainability is defined as environmental, economic and social sustainability and sustainable development is concerned with ensuring that actions are taken with due consideration being given to future generations.

Accountants are often involved in preparing the annual CSR report which many companies now produce in order to demonstrate and report on actions they are taking to ensure that they act in a responsible manner. In a way this has increased the degree of accountability and transparency in managing and reporting on organisational performance, something that accountants are always involved in by way of the stewardship and corporate governance roles within an organisation.

One way accountants can contribute to sustainability is in the area of performance management. The balanced scorecard approach to performance management can be a useful way of capturing sustainability aspects of performance. There is some debate about the best approach to include these, for example, should sustainability be incorporated within the organisational balanced scorecard, or should there be a separate sustainability scorecard. An argument to suggest that it should be incorporated within the organisational scorecard is that if a separate scorecard is created it can have the effect of marginalising the sustainability scorecard. In the case of HW plc it would perhaps be best if they implemented a single scorecard approach incorporating sustainability elements within the normal perspectives. I would recommend this as HW plc does not make a virtue out of sustainability, that is, it does not seek to use it as a competitive advantage, and therefore would not really benefit from having a separate scorecard.

The accountant can also contribute by assisting in monitoring the environment for changes in industry standards that might require a more sustainable approach by industry members, for example, the current concerns about energy usage and recycling of products, using sustainable sources of materials, exploitation of low paid workers in developing countries to manufacture clothes. Accountants would not necessarily look for these aspects in particular, but when monitoring economic factors and business related media reports the accountant may come across items that they can share, or at least make sure that someone in HW plc has seen the item. Large organisations often channel such information through their communication department, if they have one, who is responsible for making sure that the relevant management are up to date with issues in their area of responsibility. This could be seen as contributing to social sustainability.

An obvious area where accountants can contribute is in the development of controls, particularly the diagnostic controls, typically plan or budget versus actual, which in accounting terms is budgetary control and part of economic sustainability. Also, encouraging the use of interactive controls, whereby employees are encouraged to take control action and a culture of learning is created – benchmarking exercises also aid this perspective and the use of

initiatives on the balanced scorecard, so that employees are encouraged to challenge the way things are currently done. Accountants can contribute to training programmes by increasing the financial awareness of all employees and thus contribute to the development of staff, not just as an employee, but also in broader terms to develop as a person, which contributes to social sustainability.

Specific costs can be monitored such as energy costs which do not only have sustainable aspects but also benefit the company in achieving economic sustainability by reducing and managing costs more closely. If this reduces energy usage it also contributes to environmental sustainability. For example, one of the aspects of the HW plc stores is the ambiance to which lighting is a key part. 'Bright and airy' is often used to describe the interior of the stores – this could be viewed as an unnecessary use of energy by some and therefore ensuring that this is achieved in an energy efficient way could be significant, not just in cost terms but also for public image. Similarly reducing wastage (costs of quality) in the product or improving efficiency/effectiveness of manufacturing processes in the factories. The use of the value chain analysis linked to ABC can aid this process and highlight areas where significant improvements can be made which also increases the sustainability of HW plc.

As mentioned above, specific techniques can be utilised to aid the improvement of sustainability best practice. Benchmarking exercises can be useful as a means of identifying the sustainable practice of other companies that can be implemented within HW plc. Also when developing new products the concept of lifecycle costing would consider the recycling of product elements at the end of their useful life as well as the cost of design and manufacture. This could provide savings across the industry. Target costing could also be employed to aid sustainable product development.

HW plc is in the process of conducting a future potential review and will therefore be making strategic decisions and accountants are in a good position to evaluate strategic options by way of a cost benefit analysis, and including the tangible and intangible costs and benefits. For example, considering the impact on employees within the rationalisation of stores is considering the social aspects of the decision. Therefore HW plc need to take into account the sustainability aspects of the decision when evaluating various options.

Overall the management accountant is able to make a significant contribution to the sustainability of businesses. Even contributing to halting the decline in profits of HW plc is contributing to the economic sustainability. After all, if a company is not profitable it won't be around long enough to contribute to the sustainability of the planet. Hence the 3 P maxim: profit, people, and planet.