



The Chartered
Institute of
Management
Accountants®

OPERATIONAL CASE STUDY May 2018 EXAM ANSWERS

Variant 5

The May 2018 exam can be viewed at

These answers have been provided by CIMA for information purposes only. The answers created are indicative of a response that could be given by a good candidate. They are not to be considered exhaustive, and other appropriate relevant responses would receive credit.

CIMA will not accept challenges to these answers on the basis of academic judgement.

SECTION 1 - Staff budgets using ABB

The first steps in introducing activity based budgeting are to identify cost pools or activities and to establish a cost driver for each activity. For each of the activities we also need to estimate the time taken to carry out the activity. Each of these have been identified in the attached schedule.

The breakdown of activities and the cost driver for each activity should be analysed in more detail to check that the activities chosen are appropriate and that the cost drivers are a good reflection of the cause of the cost arising.

To confirm the time taken for each activity we could ask our existing stores staff to provide estimates, or we could conduct a work study over a short period of time. The cost of idle time will also need to be included in the budget. There will be periods when not all of the staff will be fully occupied. To a certain extent we need to balance the level of idle time with the ability to offer the level of service expected by our customer. As we are offering a high-quality brand, our customer will expect high-quality service and therefore our level of idle time may be higher than that of other retailers. We also have to take into account lunch breaks and rest breaks. We also need to recognise that experienced members of the sales staff are likely to take less time on an activity than a new member of staff. This will be particularly relevant as all the staff will be new to Mansako, since we have no stores in Eastland at present, although they will more than likely have previous retail experience. The new staff will need training and will go through a learning curve for the different activities that are undertaken.

For each activity, we then need to estimate the number of cost drivers that we expect to be performed within the budget period. For example, for the time spent with customers we would estimate the total number of customers that we expect over a period and then multiply this by the time expected to be spent with each customer, in this case, we would expect to spend 30 minutes with each customer. The estimate for the number of cost drivers could be based on information from other stores of similar sizes and from our sales budgets.

We need to establish the costs per hour for each activity. For example, do all staff get paid the same annual salary or does the salary paid increase with experience? The total time for each activity can be multiplied by the salary cost per hour to give the cost of each activity. We would also need to add any employer related costs to the total cost for all activities.

If the activities do not arise smoothly throughout the budget period, then the costs may need to be budgeted by month. For example, we may take on more staff throughout busy sales periods such as Christmas. We should also be aware of any anticipated pay rises that might arise during the budget period and factor these into the budget.

Capitalisation of expenditure on new stores refurbishment

IAS 16 states that in order to capitalise expenditure incurred, an asset must have been created. There are two criteria that must be met in order to recognise an asset. Firstly, it is probable that the expenditure will result in future economic benefits to our business and secondly, the expenditure can be reliably measured. Both of these are met since the refurbishment of the stores will generate future economic benefits in the form of profit and as the expenditure is cash related it can be reliably measured.

The standard further states that the asset must be held for the supply of goods and services and will be held for more than one accounting period. Clearly, the store refurbishment costs are to enable the display and sales of our products and we are unlikely to refurbish or replace any of the fixture and fittings in the next year.

IAS 16 also states that the expenditure associated with an item of property, plant and equipment can be capitalised if it is either part of the purchase price (including import duties) or directly attributable to getting the asset ready for its intended use.

It is not clear what state the property is in before the refurbishment and it could be argued that the property could already be ready for its intended use. However, the refurbishment of the property is related to bringing the layout, design and decor of the property up to the standard required for Mansako. We sell high quality products and rely on our branding to sell the products. Therefore, the refurbishment of the store is required to get the asset ready for its intended use.

From the schedule, the design costs are directly attributable costs. These costs were necessarily incurred to enable the refurbishment of the stores to take place. The same applies to the building costs relating to preparing the stores to accommodate the shop fittings. Similarly, the other costs in respect of floor covering, lighting and fixture and fittings and the installation costs relating to these, meet this criterion. The redecoration of the stores and the repairs and maintenance of the air conditioning system are also required before the stores can be opened for business.

Your raised concerns about how we treat expenditure in our existing stores. Subsequent expenditure on an asset after initial recognition can only be capitalised if it:

- enhances the economic benefits provided by the asset (for example, extension of useful life; increasing of productivity; reducing material costs) or
- are incurred as part of a major inspection of the asset for faults and the carrying amount of the previous inspection is derecognised or
- replace a component of an asset and the carrying out of the component replaced is derecognised.

Any other expenditures on day-to-day servicing (repair and maintenance and small parts) are immediately expensed.

Therefore, expenditure on ongoing repairs and maintenance of our existing stores would not meet the criteria for capitalisation since it would not improve the future economic benefits and doesn't relate to major inspection or replacing a component. It is therefore correctly treated as revenue expenditure and expensed.

SECTION 2 – Limiting factor analysis

Approach

Our total fixed costs will not be affected in the short-term by the mix of products groups sold and therefore for short-term decisions, such as this, it is appropriate to focus on contribution per unit. We could decide to base our product mix on the product groups with the highest contribution per unit. However, we have a shortage of space which is limiting the products which we can display in each store. Each of our product groups will require a different number of square metres of display area and therefore we should maximise the contribution per square metre and not the contribution per unit.

We can calculate the contribution per square metre by dividing the contribution per unit by the number of square metres required for each product group. We would then need to rank the product groups on the basis of the contribution per square metre. The product group with the highest contribution per square metre would rank 1st and the product group with the second highest contribution per square metre would rank 2nd and so on. We would then determine our inventory requirements for each store based on this ranking and the number of square metres available.

Limitations of this approach and other factors to be considered

- The analysis is based on the contribution per square metre however this may not turn out to be the most profitable product mix. An inventory item which is selling more frequently may ultimately, despite having a lower contribution per square metre, be more profitable.
- Basing our inventory in store on this type of analysis may result in the decision not to stock a particular product group in certain stores. In this case, for example, we can clearly see that our range of technology items has the lowest contribution per square metre. A customer visiting a store to purchase a technology item may be disappointed. Whilst we would expect the sales staff to persuade the customer to purchase the item online or to try a different store, this may not happen and may result in a lost sale.
- Within each of the product groups shown in the table, there are a number of different product items. The limiting factor analysis is based on an average figure for both contribution and square metres. It may be more appropriate to look in more detail at the individual product items. For example, within 'technology' we have mobile phone cases and tablet cases. It may be that mobile phone cases, since they would require a much smaller display area, have a significantly higher contribution per square metre.
- It may also be preferable, rather than stocking the full range of a particular product group in all the different colour options or designs, to stock a smaller range of this product group and use the additional space to display different items.

IFRS 8 Operating Segments

There are two aspects to consider, firstly whether the stores in Asia would represent an operating segment of the business and, if so, whether they would be classified as a reportable segment.

IFRS 8 defines an operating segment as a component of an entity:

- a) that engages in business activities from which it earns revenues and incurs expenses.
- b) whose operating results are regularly reviewed by the entity's chief operating decision maker to make decisions about resources to be allocated to the segment and to assess its performance.

and

- c) for which discrete financial information is available.

The stores in Asia satisfy a) as they will certainly earn revenue and incur expenses. They will also satisfy b) since, as stated in your email, they will be treated as a separate division and we will produce budgets for this division and will therefore review divisional performance. The outcome of these performance reviews will support any decisions about allocating resources. They will also satisfy c) since we will be producing budgets for the division, we will need to collect actual sales and cost information separately for the division. The stores can be separately identified as can the costs of refurbishing the stores. It would also be possible for us to separately identify the accounts receivable and accounts payable for the division. It is not clear whether it is our intention to do this. However, if we wish to give the divisional manager autonomy and measure divisional performance, it would be better if we separately recorded the division's assets and liabilities.

A segment should be classified as a reportable segment if it contributes more than 10% of the total of any of the following:

- revenue
- profitable segments
- loss making segments
- assets

Based on the estimated sales revenue of L\$24 million and the likelihood that the Asian stores will contribute more than 10% of total sales revenue it would therefore be classified as a reportable segment.

SECTION 3 – Quality issues in the Eastland stores

Quality indicators

Customer conversion ratio: this is an important indicator used throughout the retail industry. It is useful to measure the number of customers entering the store (the footfall) but what is particularly important is whether those customers actually make a purchase. The customer conversion ratio will tell us this. If there is a problem with the service given to customers in a particular store and/or if there is a lack of inventory availability, we would expect this ratio to be lower than average for our stores.

Number of customer complaints: this measure would clearly indicate whether there was a problem with customer service. Whilst not all customer who are unhappy with the service would necessary make a complaint, we would be able to see whether there is a rising trend in the number of complaints. We would also be able to compare this to the number of customer complaints received in other stores.

Sales revenue per employee: this would also be a useful indicator. We would be able to compare this figure for each member of staff to identify whether there are particular members of staff with below average performance. This may indicate a problem with the customer service being provided by that member of staff. Alternatively, the measure can be compared with the average for stores in other locations.

Quality costs

Conformance costs are concerned with the costs of achieving quality standards, whilst non-conformance costs are concerned with the consequences of failing to achieve these standards.

The quality problems with the Eastland Stores would have arisen in the form of non-conformance costs as there was a quality failure. Non-conformance costs are further divided into internal failure costs (where there has been a quality failure that has occurred before or during the sale of the product) and external failure costs (where the failure occurs after the goods have been sold to the customer). It seems that there has been an internal failure cost as the customers have not been happy with the service received or there has been a lack of inventory availability. In this case, the non-conformance costs will be mainly intangible in terms of lost sales or lost customer goodwill.

Conformance costs are further divided into prevention costs (incurred to ensure that things do not go wrong) and appraisal costs (incurred to check for quality problems before they lead to failures).

The quality failure may have been avoided had we spent more on both prevention costs such as the training of new stores staff and /or in appraisal costs such as the monitoring of staff performance by the store manager. Quality cost reporting would also have enabled us to take remedial action at an earlier stage. The conformance costs of quality whilst reducing profits can potentially avoid significant non-conformance costs at a later date.

Customer loyalty scheme

Benefits of a customer loyalty scheme

Loyalty schemes have been used very successfully in the retail industry from grocery retailers to luxury goods retailers such as Mansako. Loyalty schemes give customers the option to exchange points earned from previous purchases for new goods and/or offer rewards or treats. Loyalty schemes also regularly send out communications containing discounts and incentives based on what each customer buys most frequently.

Loyalty schemes can strengthen the relationship with our customers. Getting rewarded for purchasing our products will not only encourage our customers to keep purchasing our products, but will also make them feel more valued, even more so if the rewards are personalised.

Loyal customers are more likely to spend than random, sporadic ones, which is why it is important to reward them effectively. Customers who are rewarded appropriately for their loyalty are less likely to be tempted to switch to our competitors. These customers will also promote our products to their friends and families, thus creating new customers for our business.

We can also use the information that we gain from how our customers use their rewards to gain a better insight into their preferences. This is a useful tool for determining which products we should promote and expand.

Rewards will potentially lead to customer retention and encourage new customers to try our products or services. Both of these will ultimately lead to an increase in profits.

How a CRM system enables a customer loyalty scheme

A customer relationship management (CRM) system and a customer loyalty scheme go hand in hand. A CRM system that holds all customer data and uses reliable analytic software is a significant help to our business in identifying our customers' behaviours and habits.

With a CRM system in place, we can track individual customers' transactions and analyse their preferences and spending habits. This knowledge will make it easy for us to reward our customers appropriately for their loyalty. The system will send the customer targeted communications and offers based on this knowledge. Our customers are more likely to take up offers that cater specifically to their preferences.

SECTION 4 - Sales variance report for handbags July – September 2018

Sales volume profit planning variance

The sales volume planning variance is adverse for all stores meaning that the original sales volume budget was set too high. There are three main factors that have contributed to the planning variance: the opening of the competitor store next door to the flagship store; the delayed opening of the flagship store and the damage to the shipping container. All of these factors are external factors which are assumed not to be within the control of the operational managers. All four of the stores would have been affected by the damage to the shipping container with the consequential lack of availability of inventory however the flagship store has been affected by all three factors hence the particularly high planning variance for this store. The effect of the competitor store opening next door and the lack of inventory availability is difficult to quantify and therefore the split of the variance between its planning and operational elements may not be accurate.

Sales price operational variance

The sales price operational variance is partly due to the decision to allow managers to discount selling prices. It could be argued that this should be shown separately as a planning variance. The standard selling price should have been based on the average discounted price and not the normal selling price.

All of the stores with the exception of Store B have an adverse sales price operational variance which suggests that discounting has been higher, or may have been offered more often, than was authorised. This may have been in response to price competition in the market although it is interesting that Store B did not offer the same level of discounts but still managed to achieve a sales quantity higher than budget. The variance in the flagship store is particularly high and suggests that the store manager has reduced selling prices in the majority of sales transactions. This may be due to severe price competition from the competitor situated next door.

Sales volume profit operational variance

The sales volume operational variance is adverse for both Stores A and C. The lower sales volume in Stores A and C may, at least partly, be due to the poor customer service considered earlier. It may also be due to the fact that the stores were understaffed for the first few weeks. It can be seen that for both Stores A and C, staff numbers were below budget. However, the number of units sold per employee was also below budget suggesting inefficiencies. This combined with above normal discounting as reflected in the sales price operational variance has resulted in sales revenue per employee being below budget. The lower than budgeted staff numbers may have impacted on the efficiency of the staff and the standard of service offered to customers. The sales volume operational variance for the flagship store is favourable which means they have sold more than the revised budget. The staff numbers were below budget but the staff have sold more units than budgeted however this has been achieved through heavy discounting as reflected in the sales price operational variance and the lower sales revenue per employee. The figures for Store B are significantly better than the other stores. The sales volume profit operational variance is favourable and whilst the sales per unit for each employee is slightly lower than budget, the sales revenue per employee is higher than budget as a result of lower discounts being offered. This is reflected in the favourable sales price operational variance.

Staff incentive schemes

Benefits of staff incentive scheme

An incentive scheme that links reward to improved performance can be effective in giving clear direction to employees on where their efforts are most needed. Clear communication of objectives and a financial reward system, based on achieving these objectives, can increase employee commitment, motivation and engagement. Employees who are more committed and motivated will also be more productive which is clearly of benefit to the company. We need however to consider which type of scheme would be deemed fairer by our staff. An incentive scheme will be a motivational factor in itself and a badly designed scheme may have the effect of reducing rather than increasing employee motivation.

Type of incentive scheme

We need to consider whether an individual or group scheme would be more effective for Mansako in improving morale and motivation.

An incentive scheme based on individual performance is motivational to the employee as they can see their own efforts and achievements being recognised and directly rewarded. We could for example, set a sales target for each employee in terms of number of items sold and/or total sales revenue. However, this may encourage selfish thinking whereas we would prefer to encourage our staff to work together to satisfy the customer. There can also be difficulties in determining an individual's performance level where for example, another member of staff was instrumental in finalising the sale or encouraging the customer to purchase an item. This results in performance assessment being subjective and can lead to a notion of bias.

A group incentive scheme, is based on the performance of an identified group (for instance the store achieving or exceeding their targets). Collective team work might be a successful outcome of a group scheme but we need to be careful that high performing employees are not penalised by their rewards being dragged down by an average that includes the efforts of less able/hard working colleagues.

A scheme based on the organisation's overall performance or perhaps in this case, the Asia division's performance (usually measured by meeting or exceeding a target profit) encourages employees to work together across different departments and parts of the organisation as they are all working towards the same goal. This type of scheme can prove very popular when times are good but can be the cause of resentment when the company is not doing well. Employees may perceive that they have contributed significantly and achieved their objectives but it is another part of the organisation, or external forces, that have meant that the overall target has not been achieved.

Recommendation

My recommendation would be to consider a combination of the two schemes – an element of incentive for an individual's performance, against carefully prepared and agreed objectives, and a further element based on the overall performance of the store in order to encourage team working.