FINANCIAL REPORTING | BASIC

Video Transcription: Understanding Inventory Cost Allocation - FIFO and Weighted Average

Hallo there, my name is Jacqui and this video will be focusing primarily on inventory cost allocation methods, namely FIFO and weighted average.

Inventory could include items such as vehicles that can be specifically or individually identified and items such as tins of baked beans that are all identical, in other words each item cannot be individually identified.

Businesses purchase inventory with the intention of reselling them in the normal course of business. At year-end inventory still on hand will be recognised as a current asset on the statement of financial position and the cost of inventory sold will be recognised on the profit or loss section of the statement of comprehensive income.

So, when inventory is sold we recognise a cost of sales expense. Remember, this is the cost of the item sold which is the actual cost at which we recognised the item when we acquired it and at year-end we recognise the cost of the unsold inventory as an asset.

Now let's look at vehicle example:
Let's assume that Vehicle 1 was purchased for R45 000 and Vehicle 2 for R48 000. During the period we sold 1 of the vehicles for R90 000 cash. To record the sale we would DR Bank and CR Sales with R90 000 and we would DR Cost of sales and CR Inventory.

Now, if the person purchasing a vehicle selects vehicle 1, we would recognise a cost of sales of R45 000. If the person purchasing a vehicle however selects vehicle 2, we would recognise a cost of sales of R48 000.

It is important to realise that it is possible for this business to record the cost of sales as the cost of the actual vehicle sold. Why? Each vehicle has its own serial number and can therefore be specifically identified – in other words we actually know whether it was vehicle 1 or vehicle 2 that been sold.

Now let's think about the tins of baked beans, each tin is identical to all of the other tins that have been and will be purchased with the intention of selling. Let's assume that all of the tins we have purchased cost us R4.00 and we will sell them all for R9.00 each. Assume that 6 tins were sold. To record the sale we would DR Bank and CR Sales with R54 and we would DR Cost of sales and CR Inventory with R24.

Now it is important to realise that it is not possible to individually identify which tins of baked beans were sold – but, as they all had the same cost, we know that the cost of sales expense for each tin is R4.00. As you know, the price of products change often and therefore over time businesses are extremely unlikely to continue paying the same amount for the products that they purchase with the intention of selling.

So let's rather assume that the business had paid the following amounts to purchase the tins of baked beans. Now, this information will be recorded on a stock sheet and the stock sheet will provide information relating to the date items were bought, for example the 1st January, the quantity – 4 items, in this example, the price per unit, which is R4 and the total cost which is the number of units purchased multiplied by the price per unit.

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Now, all of these tins are in the warehouse or on the shelves in the shop. So let's assume again that six tins are sold at R9.00. So, how will this affect our recording? To record the sale we would still DR Bank and CR Sales with R54 and we would still DR Cost of Sales and CR Inventory. The issue is determining how much to recognise as Cost of Sales.

We have already identified that the tins look exactly the same, have no serial number or other method to distinguish one tin from the next. Can you see that we are not able identify which tins have been sold, the tins costing R4.00, R4.40 or R4.50.

The business could spend a lot of money developing a system to track each individual item, but the cost of developing and maintaining this system would definitely outweigh the benefit of having this information. Over a period of time all the inventory will be sold and the total cost of the inventory will be recognised as an expense.

However, in the short term we are going to need to recognise the cost of sales expense or the cost of inventory on hand.

So, let's go back to our example:
There are two cost allocation methods that allow the business to reliably estimate the cost of the inventory sold as well as the cost of the inventory still on hand.

It is important to note that these methods are ways of attaching a cost to identical items of inventory, when sold or on hand at year-end, and do not refer at all to the actual physical movement of stock.

So, let's look at FIFO – or first in first out. In this method, the costs allocated to the sold items are the costs incurred in the earliest purchase, then the second purchase, then the third and so on. This process of allocating costs continues until a cost has been allocated to each item sold at any given point. Remember that you cannot tell which actual items have been sold, FIFO is simply a systematic basis for deciding on how to allocate the costs.

If the business was using the FIFO cost allocation method, and sold six items on the 20th January, what amount would be recorded as cost of sales? We allocate the cost relating to the first items purchased first and then the cost relating to the second purchase, so the cost of sales amount includes the 4 items at R4.00 and 2 items at R4.40. The cost of sales amount therefore equals R24.80.

At this point we would recognise an inventory asset amounting to R17, 80. This represents the 2 items remaining at R4.40 each and the 2 items at R4.50 each. In other words, of the total amount of inventory purchased which is R42.60, it is either recognised as COS (R24.80) or it is recognised as inventory on hand of R17.80.

Now, the business could elect to use the weighted average cost allocation method. This method calculates the weighted average cost of the inventory every time the business needs to record cost. So if the business sold inventory on the 20th January the business would have purchased 10 items at a total cost of R42.60. Can you see that the total cost is made up of 4 items costing R4.00 and R4.40 each and only 2 items costing R4.50, this is what is meant by weighted average.

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The cost per unit that will be allocated to each item sold (or each item still on hand) is the total cost at this point divided by the number of items purchased. The cost allocated to each item sold therefore amounts to R4.26. The cost of sales allocated to the six items being sold amounts to R25.56. At this point we would recognise an inventory asset or inventory on hand amounting to R17.04, the 4 unsold items at the weighted average cost of R4.26 per item.

So, a business could either use FIFO or weighted average method to allocate costs to inventory. The choice made by the business would be disclosed in the financial reports and the method would be used consistently each time the business recorded and/or reported information relating to inventory.

Please watch the video on the periodic and perpetual recording system as this video integrates the choice of the inventory cost allocation method with the inventory recording system being used by the business.

Thanks for watching.

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