## Review Classmates: Module 3 Mini-Project

Review by August 19, 09:59 PM PDT

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| **Reviews** | 5 left to complete |

Standard Costing & Variance Analysis



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### Part 1: Cost Variances

Using the information provided in the Assignment Details section of the **Instructions** tab, respond to the following:

1. For both direct material and direct labor costs, calculate the spending, efficiency, and activity variances. Please provide supporting calculations, label your variances by name, and designate them as favorable or unfavorable. Note: If the given information is insufficient for answering any part of the above question, please denote that clearly, and identify the piece of information you are missing.
2. Provide a brief statement demonstrating your knowledge of the difference between a favorable and an unfavorable variance.
3. Provide at least two potential explanations for each of the variances (i.e., six) that you calculate. If you were to investigate these variances, who would you speak to in order to collect information relevant to your investigation?

***Calculations for table:***  
***Actual Output (AOP)*** = 5500 units **(already mentioned)**  
**Standard Output (SOP)** = 6000 units **(already mentioned)**  
  
**Material Actual Input (MAIP)** = Actual Material used to produce 1 unit of output = 8250 Kgs used / 5500 output units = **1.5 Kg.per O/p unit.**  
**Material Actual Price (MAP)** = Price per KG. = Direct Materials Actual Cost/Direct Materials Used = 22275/8250 = **2.7$ / Kg**  
**Material Standard Input (MSIP)** = Standard Material Usage to produce 1 unit of OP = **1.5 Kg (already mentioned)**  
**Material Standard Price (MSP)** = Standard Price per KG = Standard Direct Material Cost / Standard Material Usage for 6000 units Output  
 =23400/(6000\*1.5) = 23400/9000 = **2.6$ / Kg.**  
  
**Labor Actual Input (LAIP)** = Actual Labor used to produce 1 unit of output = 2850 Hours used / 5500 output units = **0.518 Hrs per o/p unit.**  
**Labor Actual Price (LAP)** = Actual wages per hour. = Direct Labor Actual Cost/Direct Labor Used = 20805/2850 = **7.3 $ / Hr.**  
**Labor Standard Input (LSIP)** = Standard Labor Hour Usage to produce 1 unit of OP = **0.5 Hrs (already mentioned)**  
**Labor Standard Price (LSP)** = Standard wages per hour= **7$ /Hr. (already mentioned)**

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| --- | --- | --- | --- | --- |
|  | **Actual** | **Stdd. Price** | **Flexible** | **Static** |
| **MTL Price** | MAP = 2.7 | MSP = 2.6 | MSP = 2.6 | MSP = 2.6 |
| **MTL IP** | MAIP = 1.5 | MAIP = 1.5 | MSIP = 1.5 | MSIP = 1.5 |
| **MTL OP** | AOP = 5,500 | AOP = 5,500 | AOP = 5,500 | SOP = 6,000 |
| **MTL Total Cost** | 22275 | 21450 | 21450 | 23400 |
| **LABOR Price** | LAP = $7.30 | LSP = $7 | LSP = $7 | LSP = $7 |
| **LABOR IP** | LAIP = 0.518 | LAIP = 0.518 | LSIP = 0.5 | LSIP = 0.5 |
| **LABOR OP** | AOP = 5,500 | AOP = 5,500 | AOP = 5,500 | SOP = 6,000 |
| **Labor Total** | 20805 | 19950 | 19250 | 21000 |

**Answer 1. A. Direct Material Cost Variances** (refer above table to know the calculations)  
Spending Variance = Material Actual Price - Material Standard Price = MAP-MSP = 2.7-2.6 = **0.1$ per unit (Unfavorable)**  
**Efficiency Variance** = Material Actual Input - Material Standard Input = MAIP-MSIP = 1.5-1.5 = **0 Kg.(Neutral)**  
**Activity Variance** = Actual Output - Standard Output = AOP - SOP = 5500-6000 = ***-500 units(Unfavorable)***  
  
***Answer 1. B. Direct Labor Cost Variances*** (refer above table to know the calculations)  
Spending Variance = Labor Actual Price - Labor Standard Price = LAP-LSP = 7.3-7 = **0.3 $ per unit (Unfavorable)**  
**Efficiency Variance** = Labor Actual Input - Labor Standard Input = LAIP-LSIP = 0.518-0.5 = **0.018 Hrs. (Unfavorable)**  
**Activity Variance** = Actual Output - Standard Output = AOP - SOP = 5500-6000 = ***-500 units (Unfavorable)***  
  
***Answer 2.*** *(*brief statement demonstrating favorable vs. unfavorable variance)  
The Spending Variance as seen above is positive and hence unfavorable for both Material & Labor.  
This denotes our Actual Spending per unit is greater than standard budgeted spending,  
Had this been a negative amount, this would be favorable as this would have happened only when our actual spending would have been less than standard budgeted spending.  
  
**Answer 3.** (2 potential explanation for each(six) variance & point of contact for investigation)

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | ***LABOR*** | ***Potential Explanation 1*** | ***Potential Explanation 2*** | ***Point of Contact for Investigation*** |
| **Spending Variance** | $0.30 | Labor wage incresed seasonally | Labor shortage | HR Manager |
| **Efficiency Variance** | 0.018 | Bad weather caused flu to people | Old tools make labor inefficient | Factory/Floor Manager |
| **Activity Variance** | -500 | Inefficient Labor | Inefficient Machinery | Production Manager |

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|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | ***MATERIAL*** | ***Potential Explanation 1*** | ***Potential Explanation 2*** | ***Point of Contact for Investigation*** |
| **Spending Variance** | 0.1 | Taxes increased by govt. | High Demand, Less Supply | Buyer/ Purchasing Deptt. |
| **Efficiency Variance** | 0 | Recent maintenance done | Latest machinery purchased | Factory/Floor Manager |
| **Activity Variance** | -500 | Inefficient Labor | Inefficient Machinery | Production Manager |

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Read the response to Part 1 and assign points below. Be sure to see the detailed rubric on the Instructions tab before assigning points

* 0 pts - 0 points: No answer, completely irrelevant answer.
* 5 pts - 5 points: Insufficient answer, incomplete, lacks supporting evidence.
* 7 pts - 7 points: Passing, meets expectations.
* 9 pts - 9 points: Well above average, exceeds expectations.
* **10 pts - 10 points: Superior performance, excellent.**

### Part 2: Revenue Variances

Using the information provided in the Assignment Details section of the **Instructions** tab, respond to the following:

1. Calculate the revenue variances (sales price, sales mix, and sales activity) for both the Standard and Super models. Please provide supporting calculations, label your variances by name, and designate them as favorable or unfavorable. Note: If the given information is insufficient for answering any part of the above question, please denote that clearly, and identify the piece of information you are missing.
2. Provide at least two potential explanations for each of the variances (i.e., six) that you calculate. If you were to investigate these variances, who would you speak to in order to collect information relevant to your investigation?

**Given Data:**  
**2 products : Stdd. & Super**  
  
**Budget**

|  |  |  |
| --- | --- | --- |
|  | **Selling Price ($)** | **Sales Volume(Units)** |
| **Stdd** | 300$ | 3200 |
| **Super** | 850$ | 800 |

***Actuals***

|  |  |  |
| --- | --- | --- |
| **Stdd** | 325$ | 3500 |
| **Super** | 840$ | 1500 |

Budgeted CM per unit for Standard Product = 210$   
Budgeted Cost of production of 1 Standard Product Unit = 300-210=90$  
Budgeted CM per unit for Standard Product = 550$  
Budgeted Cost of production of 1 Super Product Unit = 850-550=300$  
  
Now, assuming that Actual cost of production remains same as as Budgeted  
Actual CM per unit on Standard Product = 325-90=235$  
Actual CM per unit on Super Product = 840-300=540$  
  
This shows Super is more profitable product.  
  
**Answer 1:**

We make following Revenue Variances Table for calculation from above

**i. Standard Product**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | Actual | Budgeted Price | Flexi | Budgeted |
| Price | 325$**(A1)** | 300$**(A2)** | 300$**(A3)** | 300$**(A4)** |
| Mix | 0.7**(B1)** | 0.7**(B2)** | 0.8**(B3)** | 0.8**(B4)** |
| Quantity | 3500**(C1)** | 3500**(C2)** | 3500**(C3)** | 3200**(C4)** |
| Revenue | 796250 | 735000 | 840000 | 768000 |
| Sales Price Variance | 25 (A1-A2) | Favorable | Actual SP> Budgeted |  |
| Mix Variance | -0.1 (B2-B3) | Favorable | Sold  Less % mix of Less Profitable product |  |
| Quantity Variance | 300 (C3-C4) | Unfavorable | Sold More Quantity of Less Profitable Product |  |

**ii. Super Product**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | Actual | Budgeted Price | Flexi | Budgeted |
| Price | 840**(A1)** | 850**(A2)** | 850**(A3)** | 850**(A4)** |
| Mix | 0.3**(B1)** | 0.3**(B2)** | 0.2**(B3)** | 0.2**(B4)** |
| Quantity | 1500**(C1)** | 1500**(C2)** | 1500**(C3)** | 800**(C4)** |
| Revenue | 378000 | 382500 | 255000 | 136000 |
| Sales Price Variance | -10 (A1-A2) | Unfavorable | Actual SP< Budgeted |  |
| Mix Variance | 0.1 (B2-B3) | Favorable | Sold more % MIX of more Profitable Product |  |
| Quantity Variance | 700 (C3-C4) | Favorable | Sold More Quantity of More Profitable Product |  |

**Answer 2**  
  
**Standard product**  
Quantity Variance  
300  
Unfavorable  
Since, We Sold More Quantity of Less Profitable Product !  
  
This may hae been due to increasing demand of a flagship product of the company.  
The brand identity of the company might have been associated with sale of this product and we cannot afford to sell this below a level.  
To investigate, i could reach out to Marketing Manager & Production Manager.  
  
**Super Product**

|  |  |  |  |
| --- | --- | --- | --- |
| Sales Price Variance | -10 | Unfavorable |  |

This is unfavorable because we Actual Selling Price is less than Budgeted Selling Price.  
However, the overall mix & Quantity variances are favorable and it clearly shows that by reducing sales price of a costly item by 10$, the company was able to sell almost double the quantity in the market.  
  
I would reach out to the Marketing Manager & the Sales Manager to investigate and appreciate them to increase our overall CM.

Read the response to Part 2 and assign points below. Be sure to see the detailed rubric on the Instructions tab before assigning points.

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Please provide any overall feedback that you have for the author of this assignment. What is one strength of the submission? What is one area of improvement that you would like to suggest?

Submit Review

very details and calculate all necessary figures with explanation.

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