

## **Productivity Analysis On Company XYZ Using The Production, Organization, Sales, Product, Arbeiter, Capital (POSPAC) Method**

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### **Abstract**

*XYZ company experienced raw material failures that did not meet the company's quality standards from February to December 2024, resulting in a 10.1% decrease in production and the company continues to suffer losses. This study aims to: (1) measure the level of productivity in production, organization, sales, products, labor, and capital; (2) analyze the factors causing the low productivity index; and (3) provide improvement recommendations to increase the company's productivity. The Production, Organization, Sales, Product, Arbeiter, and Capital (POSPAC) method is used to measure productivity, while the fishbone diagram is applied to identify and analyze problem causes. The results from January to December 2024 show the greatest decline occurred in the sales element in March -39.430, while the smallest decline was in the product element in January -0.230. The key factors contributing to low productivity are inconsistent raw material quality, absence of quality control, lack of training and competency development, and no HR development programs related to finance. To enhance productivity, the company should establish raw material standards (color, aroma, moisture content), create a coffee quality control SOP based on these standards, conduct training to improve competencies in production, finance and assess the quality of raw materials.*



**Keywords:** fishbone diagram, productivity index, arabica coffee, POSPAC.

## INTRODUCTION

In the business world, productivity is one of the key success factors for companies in running their operations effectively and efficiently. Low productivity reflects a waste of resources that can reduce the competitiveness of the company (Pangaribuan, 2021). Productivity is important for companies due to growing business competition (Damariandini et al., 2023). Companies must improve the stability of their performance in order to survive in response to fierce competition (Utari et al., 2019). In fact, to stay ahead of the competition, companies try to improve their performance in every period (Mail et al., 2018). Productivity reflects optimizing production lines, reducing cycle time, minimizing waste, and improving overall productivity (Reyes, 2023).

One of the food industries in Indonesia is XYZ company. From 2020 the products produced by XYZ company have received distribution approval from the Indonesian Food and Drug Authority. The XYZ company experienced raw material failures that did not meet the company's quality standards in the period February to December 2024, which resulted in a decrease in production by 10.1% and the company continues to suffer losses, while in January 2024 the raw materials still met the standards. However, in the previous year, the use of energy and costs was relatively the same, namely based on production data in the previous year. In addition, the XYZ company wants to analyze the resources used and wants to measure its productivity. This company was chosen because the relevant parties realized that its productivity was low and unstable, as evidenced by observations in the form of interviews and initial observations which showed that the company normally produced approximately 8,800 pcs of products decreasing to 7,881 pcs in 2024. By increasing productivity, the company can maximize the use of resources, achieve higher performance, and maintain sustainability over time.

The company has difficulty maximizing productivity due to inefficient resource management in the form of raw materials that do not meet the company's quality standards. These inefficiencies lower productivity, reduce production quantities, and increase production costs, which ultimately reduce the competitiveness of the company. Measurement in the company is important to identify the factors that cause non-conformity in production activities (Ronald, 2022).

The methods applied to measure the level of productivity in this study are the Production, Organization, Sales, Product, Arbeiter and Capital (POSPAC) method and the fishbone diagram. The POSPAC measurement method provides partial elements that

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can provide improvements to encourage future productivity improvements and is easily implemented in the company system. The end result of the POSPAC method is a description or information that shows decreases and increases in productivity. The fishbone diagram will identify in detail the sources that may be causing the problem of declining productivity. The most significant problems will be prioritized for productivity improvement actions, and the final result is in the form of improvement recommendations that will be addressed to the company. The results of productivity research become the basis for planning productivity improvements in the company. In addition to the POSPAC method used to measure productivity, there are generally similar methods such as the Total Productivity Measurement (TPM) method, the American Productivity Center (APC) method, the Objective Matrix (OMAX) method, and the Mundel method.

## **LITERATURE REVIEW**

### **Productivity**

Productivity can be defined as a combination of efficiency and effectiveness that can be assessed through measurement methods (Mali, 1978). Kohler (1983) states that productivity is the result achieved through the entire production process involving one or more production factors. Gaspersz (1998) adds that productivity reflects the production capacity of an individual, organization, or company. Meanwhile, Sumanth (1985) introduced the concept of a productivity chain as an effort to continuously improve productivity, which includes four main steps: (1) assessing productivity efficiency, (2) assessing productivity performance, (3) developing a productivity plan, and (4) improving productivity.

### **Production, Organization, Sales, Product, Arbeiter and Capital (POSPAC)**

There are several methods that can be used to analyse productivity. One of them is the Production, Organization, Sales, Product, Arbeiter, Capital (POSPAC) method, which has the advantage of providing comprehensive partial elements for calculating partial productivity, as well as enabling immediate improvements if a decline is detected in a unit (Prabowo & Aditia, 2020). In addition to POSPAC, other commonly used methods include Total Productivity Measurement (TPM), American Productivity Center (APC), Objective Matrix (OMAX), and Mundel (Waluyo, 2008). The TPM and APC methods require comprehensive historical data and complex analysis to measure productivity holistically. Objective Matrix (OMAX) is a method used to assess the extent to which a company's production level is influenced by ratios or criteria that include key factors and

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components of the company's output (Prakoso, 2022). According to Ervil & Rhamadan (2021), in calculating productivity using the Mundel method, the input and output variables used are energy, depreciation, labour costs, raw materials, and maintenance, while the output variables include product price and production quantity.

### Fishbone Diagram

Identifying productivity declines can be done using a fishbone diagram, also known as a cause and effect diagram or Ishikawa diagram. The fishbone diagram graphical method is used as a new approach to identify, analyze, and explore various causes of an event, particularly in tracing the sources of innovation such as general-purpose technology (Coccia, 2020). According to Gartlehner et al. (2017) In a fishbone diagram, the “head” represents the balance of benefits and risks of an action, while the “bones” represent important outcomes that help balance the two, with their proximity to the head indicating their level of importance. The fishbone diagram can identify some of the problems that underlie the constraints in decision making (Sakdiyah, et al., 2022)

### METHODS

The following is a data processing method using the POSPAC partial approach. According to Fradinata et al. (2023) there are stages of data processing so that measurements can be made on partial productivity, namely as follows:

#### 1. Productivity measurement using POSPAC method

Productivity measurement analysis is carried out by applying the POSPAC method to determine the level of productivity achieved by XYZ company every month for 12 periods, namely from January to December 2024 (for one year). The calculation form of the POSPAC method is as follows:

#### 1. POSPAC productivity measurement consists of:

##### a. Calculation of Production Productivity Level

$$\text{Production Productivity} = \frac{\text{Sales Result}}{\text{Cost of Goods Sold}} \dots\dots (1)$$

##### b. Calculation of Organizational Productivity Level

$$\text{Organizational Productivity} = \frac{\text{Value Added}}{\text{Administration Cost \& General}} \dots\dots (2)$$

##### c. Calculation of Sales Productivity Level

$$\text{Sales Productivity} = \frac{\text{Gross Profit}}{\text{Cost of Sales}} \dots\dots (3)$$

##### d. Calculation of Product Productivity Level



$$\text{Product Productivity} = \frac{\text{Gross Profit}}{\text{Direct Product Cost}} \dots\dots (4)$$

## e. Calculation of Labor Productivity Level

$$\text{Labor Productivity} = \frac{\text{Gross Profit}}{\text{Labor Cost}} \dots\dots (5)$$

## f. Calculation of Capital Productivity Level

$$\text{Capital Productivity} = \frac{\text{Sales Result}}{\text{Total Capital}} \dots\dots (6)$$

## 2. Calculation of Value Added

$$VA = LC + CC + GP$$

Notes:

VA = Value Added

LC = Labor cost

CC = Capital cost

GP = Gross profit

## 3. Calculation of Productivity Index (IP)

$$IP = \frac{\text{Productivity during the measurement period}}{\text{Productivity during the base period}} \times 100\%$$

## 4. Calculation of Productivity Index Change (PIP)

$$PIP = \frac{IP_n - IP_0}{IP_0} \times 100\%$$

Description:

PIP = Change in productivity index

 $IP_n$  = Productivity index in the n-th period $IP_0$  = Productivity index in the base period

## 2. Identification of Productivity Decline Fishbone Diagram

Identification of productivity decline can be done using a fishbone diagram, also known as a cause-and-effect diagram or Ishikawa diagram. According to Holifahtus et al. (2022), in the process of identifying causes, the Fishbone Diagram uses the 4M and 1E categories, namely Man (people) related to users, Method (methods) related to procedures or systems implemented, Machine (machinery) as equipment used, Materials (materials) which include materials used or misused, and Environment (environment) which refers to the conditions or situations that occur. According to Gartlehner et al. (2017) in this diagram, the "head" represents the balance between the benefits and risks of an action, while the "bones" symbolize relevant critical outcomes, with their position indicating the level of



importance to decision-making. As such, fishbone diagrams can help formulate accurate and comprehensive action plans to address productivity declines and prevent similar problems in the future.

### 3. Developing Productivity Improvement Recommendations

Identifying the decline in productivity using the fishbone diagram done earlier, it will be able to see the cause of the decline of a partial productivity. To take corrective action to increase productivity, it can provide improvement proposals for partial productivity improvement. Proposed improvements using the POSPAC method and fishbone diagram involve including the director/owner of the company and the person in charge of production. The proposed improvements are designed based on the root cause analysis identified through the fishbone diagram and productivity data from the POSPAC method from January to December 2024.

## RESULTS AND DISCUSSION

### Productivity Level and Index of XYZ Company

The level and index of productivity include several elements, including production productivity, organizational productivity, sales productivity, product productivity, labor productivity, and capital productivity. The level and index of productivity for each component can be seen in table 1 to table 6 .

#### 1. Production Productivity Level and Index

**Table 1. Level and Index of Production Productivity of XYZ Company**

| Month     | Sales Result (IDR) | Cost of Goods Sold (IDR) | Production Productivity Level | IP (%) | PIP (%) |
|-----------|--------------------|--------------------------|-------------------------------|--------|---------|
| January   | 31,000,000         | 39,040,700               | 0.794                         | 100.00 | 0.00    |
| February  | 31,200,000         | 39,825,100               | 0.783                         | 98.66  | -1.34   |
| March     | 32,600,000         | 49,732,300               | 0.656                         | 82.55  | -17.45  |
| April     | 32,100,000         | 43,654,900               | 0.735                         | 92.60  | -7.40   |
| May       | 32,000,000         | 44,386,300               | 0.721                         | 90.79  | -9.21   |
| June      | 30,600,000         | 42,336,900               | 0.723                         | 91.02  | -8.98   |
| July      | 31,800,000         | 45,959,900               | 0.692                         | 87.14  | -12.86  |
| August    | 32,400,000         | 44,522,500               | 0.728                         | 91.65  | -8.35   |
| September | 32,900,000         | 44,412,900               | 0.741                         | 93.29  | -6.71   |



|          |            |            |       |       |        |
|----------|------------|------------|-------|-------|--------|
| October  | 32,300,000 | 44,963,100 | 0.718 | 90.47 | -9.53  |
| November | 31,700,000 | 44,468,900 | 0.713 | 89.78 | -10.22 |
| December | 32,800,000 | 43,233,500 | 0.759 | 95.55 | -4.45  |

Source: Data Processing (2025)

XYZ company production productivity from January to December 2024 shows a declining and unstable trend. All PIP values are negative, indicating no improvement over the base period (January). The largest decline occurred in March, indicating serious disruptions in the production process from both the input and output sides. The smallest decline occurred in December, although better than the previous few periods, it still does not indicate a significant recovery.

## 2. Level and Index of Organizational Productivity

**Table 2. Level and Index of Organizational Productivity of XYZ Company**

| Month     | Value Added (IDR) | Administration Cost & General (IDR) | Organizational Productivity Level | IP (%) | PIP (%) |
|-----------|-------------------|-------------------------------------|-----------------------------------|--------|---------|
| January   | 49,900,000        | 6,860,507                           | 7.274                             | 100.00 | 0.00    |
| February  | 50,050,000        | 6,811,007                           | 7.348                             | 101.03 | 1.03    |
| March     | 66,800,000        | 10,862,507                          | 6.150                             | 84.55  | -15.45  |
| April     | 50,400,000        | 7,037,507                           | 7.162                             | 98.46  | -1.54   |
| May       | 49,850,000        | 6,905,007                           | 7.219                             | 99.26  | -0.74   |
| Juni      | 50,700,000        | 7,046,507                           | 7.195                             | 98.92  | -1.08   |
| July      | 48,700,000        | 6,970,507                           | 6.987                             | 96.06  | -3.94   |
| August    | 50,800,000        | 6,893,507                           | 7.369                             | 101.32 | 1.32    |
| September | 51,400,000        | 6,965,507                           | 7.379                             | 101.45 | 1.45    |
| October   | 50,400,000        | 6,861,007                           | 7.346                             | 100.99 | 0.99    |
| November  | 50,500,000        | 6,930,507                           | 7.287                             | 100.18 | 0.18    |
| December  | 51,400,000        | 6,919,007                           | 7.429                             | 102.14 | 2.14    |

Source: Data Processing (2025)

XYZ company organizational productivity from January to December 2024 was relatively better than production productivity, with several periods recording positive PIP. The highest increase occurred in December, while the largest



decrease occurred in March which was affected by a spike in administrative and general expenses, indicating waste or inefficiency, such as lack of control over the use of raw materials and office supplies.

### 3. Sales Productivity Level and Index

**Table 3. Sales Productivity Level and Index of XYZ Company**

| Month     | Gross Profit (IDR) | Cost of Sales (IDR) | Sales Productivity Level | IP (%) | PIP (%) |
|-----------|--------------------|---------------------|--------------------------|--------|---------|
| January   | - 8,040,700        | 425,000             | -18.919                  | 100.00 | 0.00    |
| February  | - 8,625,100        | 369,500             | -23.343                  | 123.38 | 23.38   |
| March     | - 17,132,300       | 434,500             | -39.430                  | 208.41 | 108.41  |
| April     | - 11,554,900       | 588,500             | -19.634                  | 103.78 | 3.78    |
| May       | - 12,386,300       | 468,600             | -26.433                  | 139.71 | 39.71   |
| June      | - 11,736,900       | 600,600             | -19.542                  | 103.29 | 3.29    |
| July      | - 14,159,900       | 541,900             | -26.130                  | 138.11 | 38.11   |
| August    | - 12,122,500       | 446,400             | -27.156                  | 143.54 | 43.54   |
| September | - 11,512,900       | 525,000             | -21.929                  | 115.91 | 15.91   |
| October   | - 12,663,100       | 420,600             | -30.107                  | 159.14 | 59.14   |
| November  | - 12,768,900       | 505,500             | -25.260                  | 133.51 | 33.51   |
| December  | - 10,433,500       | 468,200             | -22.284                  | 117.79 | 17.79   |

Source: Data Processing (2025)

XYZ company sales productivity from January to December 2024 is entirely negative, indicating that the cost of sales is unable to generate sufficient gross profit and continues to lose money. Although the PIP is positive, this actually shows a worse performance, as it reflects that the negative values in the sales productivity level are greater than the base period. This indicates the need for a comprehensive overhaul of sales activities and strategies.



## 4. Product Productivity Level and Index

**Table 4. Product Productivity Level and Index of XYZ Company**

| Month     | Gross Profit (IDR) | Direct Product Cost (IDR) | Product Productivity Rate | IP (%) | PIP (%) |
|-----------|--------------------|---------------------------|---------------------------|--------|---------|
| January   | - 8,040,700        | 34,911,000                | -0.230                    | 100.00 | 0.00    |
| February  | - 8,625,100        | 35,879,800                | -0.240                    | 104.37 | 4.37    |
| March     | - 17,132,300       | 45,092,200                | -0.380                    | 164.96 | 64.96   |
| April     | - 11,554,900       | 38,306,000                | -0.302                    | 130.97 | 30.97   |
| May       | - 12,386,300       | 39,437,200                | -0.314                    | 136.37 | 36.37   |
| June      | - 11,736,900       | 39,599,600                | -0.296                    | 128.69 | 28.69   |
| July      | - 14,159,900       | 40,044,800                | -0.354                    | 153.53 | 53.53   |
| August    | - 12,122,500       | 39,923,000                | -0.304                    | 131.84 | 31.84   |
| September | - 11,512,900       | 40,084,000                | -0.287                    | 124.70 | 24.70   |
| October   | - 12,663,100       | 40,205,800                | -0.315                    | 136.75 | 36.75   |
| November  | - 12,768,900       | 40,246,400                | -0.317                    | 137.75 | 37.75   |
| December  | - 10,433,500       | 38,994,800                | -0.268                    | 137.75 | 16.17   |

Source: Data Processing (2025)

XYZ company product productivity from January to December 2024 is entirely negative, indicating that production results are not able to generate sufficient gross profit and even tend to increase the burden of losses. Although the PIP is positive, this actually shows a worse performance, because it reflects that the negative value at the sales productivity level is greater than the base period. Corrective measures are needed to address production inefficiencies and ensure that activities add value to the company

## 5. Labor Productivity Level and Index

**Table 5. Level and Index of Labor Productivity of XYZ Company**

| Month   | Gross Profit (IDR) | Labor Cost (IDR) | Labor Productivity Rate | IP (%) | PIP (%) |
|---------|--------------------|------------------|-------------------------|--------|---------|
| January | - 8,040,700        | 13,800,000       | -0.583                  | 100.00 | 0.00    |



|           |              |            |        |        |       |
|-----------|--------------|------------|--------|--------|-------|
| February  | - 8,625,100  | 13,800,000 | -0.625 | 107.20 | 7.20  |
| March     | - 17,132,300 | 25,800,000 | -0.664 | 113.89 | 13.89 |
| April     | - 11,554,900 | 13,800,000 | -0.837 | 143.57 | 43.57 |
| May       | - 12,386,300 | 13,800,000 | -0.898 | 154.03 | 54.03 |
| Juni      | - 11,736,900 | 13,800,000 | -0.851 | 145.97 | 45.97 |
| July      | - 14,159,900 | 13,800,000 | -1.026 | 175.99 | 75.99 |
| August    | - 12,122,500 | 13,800,000 | -0.878 | 150.60 | 50.60 |
| September | - 11,512,900 | 13,800,000 | -0.834 | 143.05 | 43.05 |
| October   | - 12,663,100 | 13,800,000 | -0.918 | 157.46 | 57.46 |
| November  | - 12,768,900 | 13,800,000 | -0.925 | 158.66 | 58.66 |
| December  | - 10,433,500 | 13,800,000 | -0.756 | 129.67 | 29.67 |

Source: Data Processing (2025)

XYZ Company labor productivity from January-December 2024 is entirely negative, this shows that the contribution of labor does not cover the costs and actually increases the losses. Although PIP is positive, this shows a worse performance, because it reflects that the negative value at the sales productivity level is greater than the base period. A comprehensive improvement in human resource management is needed.

#### 6. Capital Productivity Level and Index

**Table 6. Level and Index of Capital Productivity of XYZ Company**

| Bulan     | Sales Result (IDR) | Total Capital (IDR) | Capital Productivity Rate | IP (%) | PIP (%) |
|-----------|--------------------|---------------------|---------------------------|--------|---------|
| January   | 31,000,000         | 44,140,700          | 0.702                     | 100.00 | 0.00    |
| February  | 31,200,000         | 44,875,100          | 0.695                     | 99.00  | -1.00   |
| March     | 32,600,000         | 58,132,300          | 0.561                     | 79.85  | -20.15  |
| April     | 32,100,000         | 48,154,900          | 0.667                     | 94.92  | -5.08   |
| May       | 32,000,000         | 48,436,300          | 0.661                     | 94.07  | -5.93   |
| Juni      | 30,600,000         | 48,636,900          | 0.629                     | 89.58  | -10.42  |
| July      | 31,800,000         | 49,059,900          | 0.648                     | 92.29  | -7.71   |
| August    | 32,400,000         | 49,122,500          | 0.660                     | 93.92  | -6.08   |
| September | 32,900,000         | 49,112,900          | 0.670                     | 95.38  | -4.62   |
| October   | 32,300,000         | 49,263,100          | 0.656                     | 93.36  | -6.64   |
| November  | 31,700,000         | 49,468,900          | 0.641                     | 91.24  | -8.76   |



|          |            |            |       |       |       |
|----------|------------|------------|-------|-------|-------|
| December | 32,800,000 | 48,033,500 | 0.683 | 97.23 | -2.77 |
|----------|------------|------------|-------|-------|-------|

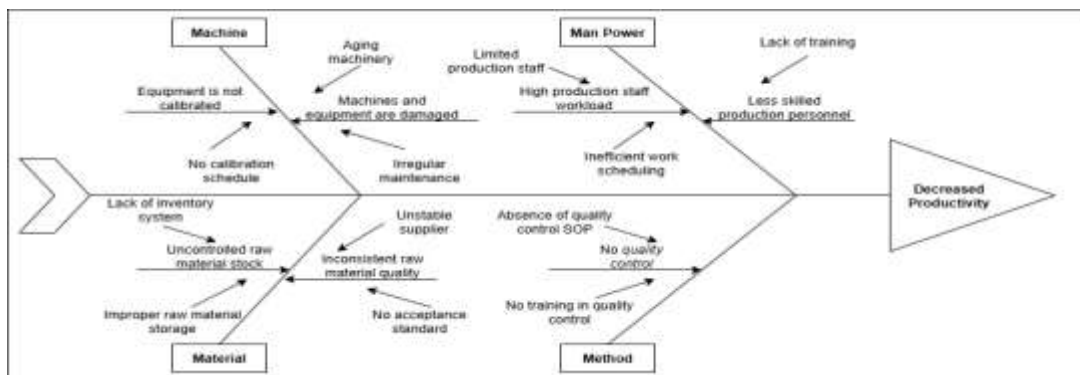
Source: Data Processing (2025)

XYZ company capital productivity from January to December 2024 shows a consistent downward trend, with all PIP values below the base period. This indicates that capital has not been used efficiently and income per capital is still low. There is no period with positive PIP, so capital performance requires serious attention for improvement.

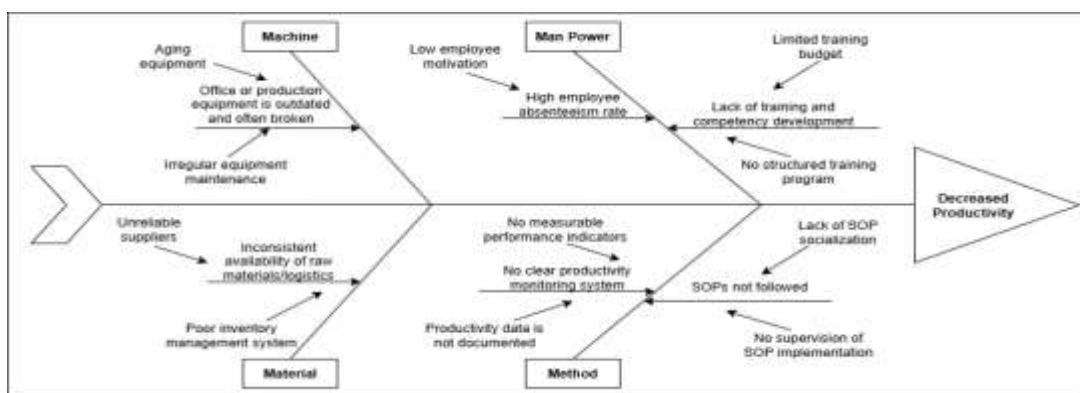
### Analysis of Factors Causing Productivity Decline

The following are the results of the analysis of the factors causing the decline in productivity of production, organization, sales, products, labor, and capital which can be seen in Figures 1 - 6.

#### 1. Causes of Decreased Production Productivity



#### 2. Causes of Decreased Organizational Productivity



### 3. Causes of Decreased Sales Productivity

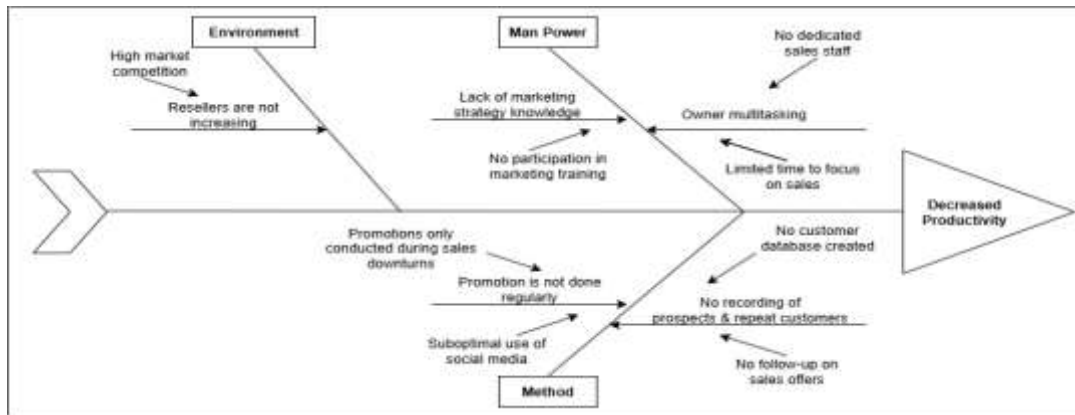
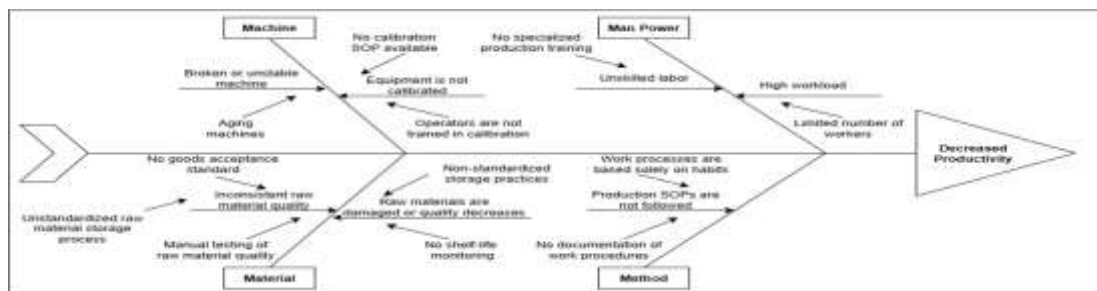
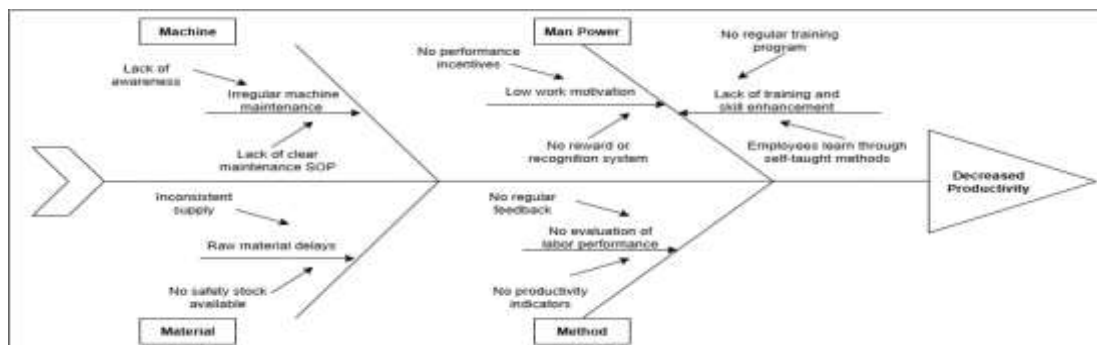


Figure 3. Factors contributing to the decline in sales productivity

### 4. Causes of Decreased Product Productivity



### 5. Causes of Decreased Labor Productivity



## 6. Causes of Decreased Capital Productivity

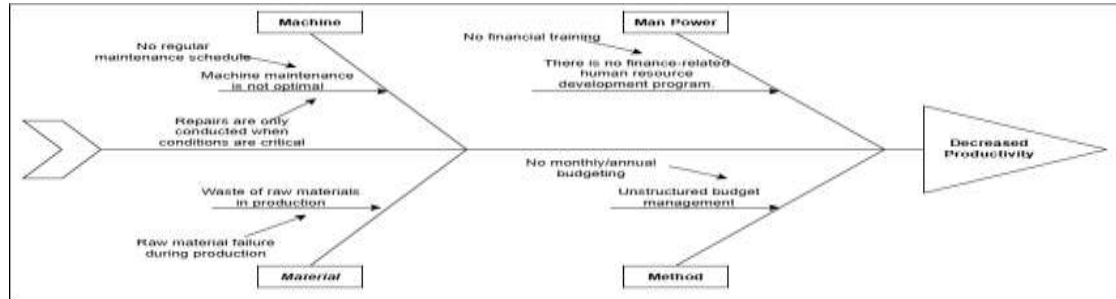


**Figure 6. Factors contributing to the decline in capital productivity**

## Productivity Improvement Recommendations

The following are corrective actions to improve the productivity of production, organization, sales, products, labour, and capital which can be seen in Table 7.

**Table 7. Productivity Improvement Recommendations**

| A. Production Productivity Improvement |                                             |                                                                                                                                                                                |
|----------------------------------------|---------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| No                                     | Improvement                                 | Proposed Productivity Improvement Measures                                                                                                                                     |
| 1                                      | Less skilled production personnel           | <ul style="list-style-type: none"> <li>Hold regular training according to production stages</li> </ul>                                                                         |
| 2                                      | High production staff workload              | <ul style="list-style-type: none"> <li>Increase the number of staff or hire casual workers during high production.</li> </ul>                                                  |
| 3                                      | Machines and equipment are damaged          | <ul style="list-style-type: none"> <li>Perform regular preventive maintenance (weekly/monthly maintenance schedule)</li> </ul>                                                 |
| 4                                      | Equipment is not calibrated                 | <ul style="list-style-type: none"> <li>Create a periodic calibration schedule for critical equipment</li> </ul>                                                                |
| 5                                      | Inconsistent raw material quality           | <ul style="list-style-type: none"> <li>Establish raw material standards (color, aroma, moisture content)</li> <li>Establish a supply contract with a fixed supplier</li> </ul> |
| 6                                      | Uncontrolled raw material stock             | <ul style="list-style-type: none"> <li>Reorganize storage space based on the type of material both before and after the production process.</li> </ul>                         |
| 7                                      | No quality control                          | <ul style="list-style-type: none"> <li>Develop a simple quality control SOP for coffee raw materials that refers to company standards.</li> </ul>                              |
| Improved Organizational Productivity   |                                             |                                                                                                                                                                                |
| No                                     | Improvement                                 | Proposed Productivity Improvement Action                                                                                                                                       |
| 1                                      | Lack of training and competency development | <ul style="list-style-type: none"> <li>No-cost training from professional resource persons for competency improvement</li> </ul>                                               |

|                                         |                                                             |                                                                                                                                         |
|-----------------------------------------|-------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------|
| 2                                       | High employee absenteeism rate                              | <ul style="list-style-type: none"> <li>Create a reward system for full attendance and good performance</li> </ul>                       |
| 3                                       | Office or production equipment is outdated and often broken | <ul style="list-style-type: none"> <li>Perform regular equipment maintenance (weekly/monthly maintenance schedule)</li> </ul>           |
|                                         |                                                             | <ul style="list-style-type: none"> <li>Plan for priority equipment replacement with gradual funding</li> </ul>                          |
| 4                                       | Inconsistent availability of raw materials/logistics        | <ul style="list-style-type: none"> <li>Establish a fixed supply contract with 1 - 2 trusted suppliers</li> </ul>                        |
| 5                                       | SOP not followed                                            | <ul style="list-style-type: none"> <li>Revise and reprint SOP, then socialize in regular briefings</li> </ul>                           |
| 6                                       | No clear productivity monitoring system                     | <ul style="list-style-type: none"> <li>Define simple performance indicators (output per day)</li> </ul>                                 |
|                                         |                                                             | <ul style="list-style-type: none"> <li>Record daily work results manually/digitally and evaluate weekly</li> </ul>                      |
| <b>Sales Productivity Improvement</b>   |                                                             |                                                                                                                                         |
| <b>No</b>                               | <b>Improvement</b>                                          | <b>Proposed Productivity Improvement Action</b>                                                                                         |
| 1                                       | Owner multitasking                                          | <ul style="list-style-type: none"> <li>Recruit staff to help with marketing</li> </ul>                                                  |
| 2                                       | Lack of marketing strategy knowledge                        | <ul style="list-style-type: none"> <li>Take digital marketing training (free/MFI)</li> </ul>                                            |
|                                         |                                                             | <ul style="list-style-type: none"> <li>Join a business community to learn from each other</li> </ul>                                    |
| 3                                       | Resellers are not increasing                                | <ul style="list-style-type: none"> <li>Maximize sales, especially in the production area, namely the Bangli region</li> </ul>           |
| 4                                       | Promotion is not done regularly                             | <ul style="list-style-type: none"> <li>Set 1-2 regular promotions per month (beginning of the month &amp; end of the month).</li> </ul> |
|                                         |                                                             | <ul style="list-style-type: none"> <li>Use special moments (national coffee day, holidays).</li> </ul>                                  |
| 5                                       | No recording of prospects & repeat customers                | <ul style="list-style-type: none"> <li>Regular follow-up every week (private chat on whatsapp with discount offer)</li> </ul>           |
| <b>Product Productivity Improvement</b> |                                                             |                                                                                                                                         |
| <b>No</b>                               | <b>Improvement</b>                                          | <b>Proposed Productivity Improvement Action</b>                                                                                         |
| 1                                       | Unskilled labor                                             | <ul style="list-style-type: none"> <li>Hold regular production-specific training</li> </ul>                                             |
| 2                                       | High workload                                               | <ul style="list-style-type: none"> <li>Recruit additional production personnel or contract workers</li> </ul>                           |
|                                         |                                                             | <ul style="list-style-type: none"> <li>Implement a shift work system so that the load is evenly distributed</li> </ul>                  |



|   |                                                |                                                                                                                                        |
|---|------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------|
| 3 | Broken or unstable machine                     | <ul style="list-style-type: none"> <li>Invest in new machines if the age of the machine has passed the optimal service life</li> </ul> |
| 4 | Equipment is not calibrated                    | <ul style="list-style-type: none"> <li>Develop calibration SOP and schedule periodic calibration</li> </ul>                            |
|   |                                                | <ul style="list-style-type: none"> <li>Train machine operators to perform basic calibration</li> </ul>                                 |
| 5 | Inconsistent raw material quality              | <ul style="list-style-type: none"> <li>Select a reliable supplier and evaluate regularly</li> </ul>                                    |
|   |                                                | <ul style="list-style-type: none"> <li>Set material acceptance standards with inspection checklist</li> </ul>                          |
| 6 | Raw materials are damaged or quality decreases | <ul style="list-style-type: none"> <li>Store materials according to temperature and humidity standards</li> </ul>                      |
|   |                                                | <ul style="list-style-type: none"> <li>Establish a system to check shelf life regularly</li> </ul>                                     |
| 7 | Production SOP are not followed                | <ul style="list-style-type: none"> <li>Create and document SOP for each stage of production.</li> </ul>                                |
|   |                                                | <ul style="list-style-type: none"> <li>Socialize SOP and conduct training on their use</li> </ul>                                      |

#### Labor Productivity Improvement

| No | Improvement                            | Proposed Productivity Improvement Action                                                                                 |
|----|----------------------------------------|--------------------------------------------------------------------------------------------------------------------------|
| 1  | Lack of training and skill enhancement | <ul style="list-style-type: none"> <li>Design and execute a regular training program for production employees</li> </ul> |
| 2  | Low work motivation                    | <ul style="list-style-type: none"> <li>Implement a clear performance-based incentive system</li> </ul>                   |
|    |                                        | <ul style="list-style-type: none"> <li>Provide rewards or appreciation for achievements and contributions</li> </ul>     |
| 3  | Irregular machine maintenance          | <ul style="list-style-type: none"> <li>Create maintenance SOP and conduct regular training.</li> </ul>                   |
| 4  | Raw material delays                    | <ul style="list-style-type: none"> <li>Establish regular suppliers with on-time delivery contracts</li> </ul>            |
|    |                                        | <ul style="list-style-type: none"> <li>Provide safety stock to avoid material shortages.</li> </ul>                      |
| 5  | No evaluation of labor performance     | <ul style="list-style-type: none"> <li>Establish clear and measurable performance indicators</li> </ul>                  |
|    |                                        | <ul style="list-style-type: none"> <li>Conduct periodic evaluations and provide constructive feedback</li> </ul>         |

#### Capital Productivity Improvement

| No | Improvement | Proposed Productivity Improvement Action |
|----|-------------|------------------------------------------|
|----|-------------|------------------------------------------|



|   |                                                                |                                                                                            |
|---|----------------------------------------------------------------|--------------------------------------------------------------------------------------------|
| 1 | There is no finance-related human resource development program | ▪ Conduct regular financial training for relevant employees.                               |
| 2 | Machine maintenance is not optimal                             | ▪ Implement a routine maintenance schedule and periodic machine inspections.               |
| 3 | Waste of raw materials in production                           | ▪ Implement standardized dosage of raw materials and strict supervision during production. |
|   |                                                                | ▪ Train labor to be more economical and efficient in the use of materials                  |
| 4 | Unstructured budget management                                 | ▪ Create and implement an annual and monthly budgeting system.                             |

Source: Data Processing (2025)

## CONCLUSION

The highest level of production productivity occurred in January at 0.794, while the lowest occurred in July at 0.692. The highest level of organizational productivity occurred in December at 7.429, while the lowest occurred in March at 6.150. The highest level of sales productivity occurred in January at -18.919, while the lowest occurred in March at -39.430. The highest product productivity level occurred in January at -0.230, while the lowest occurred in March at -0.380. The highest level of labor productivity occurred in January at -0.583, while the lowest occurred in July at -1.026. The highest level of capital productivity occurred in January at 0.702, while the lowest occurred in March at 0.561.

The main cause that affects the low level of productivity in production productivity is the inconsistent quality of raw materials. Organizational productivity is affected by the lack of training and competency development. Sales productivity is influenced by lack of marketing strategy knowledge. Product productivity is affected by damaged raw materials or decreased quality. Labor productivity is affected by low work motivation. Capital productivity is affected by the absence of finance-related human resource development programs.

Recommendations for improvements that can be made by the company are setting standards for raw materials (color, aroma, water content), preparing simple quality control SOP for coffee raw materials that refer to these standards, giving awards or appreciation for achievements and contributions, and conducting training to increase competence related to production, finance, marketing and assessing the quality of raw materials.



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