

**REPORT ON INTERNAL CONTROL EFFECTIVENESS AT 3MS PAINTS**



**FINAL YEAR PROJECT**

By

Akif Sajjad Khan – NUST201434026BNBS70414F

Aimal Khan Jadoon – NUST201434032BNBS70414F

Mohammad Talha – NUST201437437BNBS70414F

NUST BUSINESS SCHOOL

National University of Sciences and Technology, Islamabad, Pakistan

2018

This is to certify that the  
Final Year Project Titled

**REPORT ON INTERNAL CONTROL EFFECTIVENESS AT 3MS PAINTS**

Submitted by

Akif Sajjad Khan

Aimal Khan Jadoon

Mohammad Talha

Has been accepted towards the requirements

For the undergraduate degree

In

**Accounts and Finance**

Ms. QurratUlain Ali

Lecturer, Finance and Investment

NUST Business School

National University of Science and Technology,

Islamabad, Pakistan

## **Abstract**

Our final year project was to test the internal controls and their effectiveness in a paint manufacturing concern known as 3MS Paints. 3MS Paints is a relatively young company and it is looking to expand its business domestically as well as internationally. In the local market, the company is opening up its own retail shops to bypass the distributors and hence effectively sell their product. Internationally, 3MS Paints is looking to expand to Sri Lanka, Malaysia, Thailand and countries in Africa as there is a lot of potential in these countries. The company is also looking to introduce Aerospace Paints which will help them achieve even greater heights in the domestic as well as the international market.

The scope of our project was to determine whether there was a smooth flow of information and processes in the Supply Chain, Inventory Management and Production departments. We tested the internal controls that are in place and we checked for discrepancies and any other fraudulent activities. We have also made recommendations in light of the shortcomings we found in the above mentioned processes. It was our main goal to add something of value to the company. We have also focused on the control environment of the company and the issues we have identified in the company pertaining to internal controls specifically. We have focused primarily on the Supply Chain management, Inventory management and the production process. In these processes, we have observed and explained the overall procedure and the processes. We have tested the basic audit assertions and found out whether the necessary controls were in place or not. In the end, there are specific suggestions for the company to adopt in order to further streamline their operations pertaining to the specific processes i-e Production, Supply Chain and Inventory management.

## **Acknowledgements**

First of all we'd like to thank Allah Almighty for giving us the strength, courage and determination to pursue and complete this project.

*To our esteemed supervisor Ms. Qurat ul Ain;*

We would like to thank you for being incredibly helpful, supportive and patient. You were extremely co-operative with us. You always enlightened us with great advice and support; and without you this project would not have been possible.

*To our program coordinator Mrs Fariha Wajid;*

We would like to thank you for being a constant source of inspiration and a pillar of support to us; throughout our program as well as our project. You always inspired us to work harder and be better versions of ourselves and we will forever stay in debt to you.

*To our friends and family;*

We would like to thank you for remaining patient with us and allowing us to spend the hours alone in our rooms working on projects, assignments and studying for exams and not spending much time with you. You were a pillar of support; without which our success would not have been possible.

# Table of Contents

## Contents

### Chapter 1

Introduction .....	1
1.2 The Company: .....	1
1.3 Company Organogram:.....	2

### Chapter 2

The Project .....	3
2.1 Project Scope: .....	3
2.2 Project Objectives: .....	3

### Chapter 3

The COSO Framework.....	4
-------------------------	---

### Chapter 4

4.2 Procedures Implemented: .....	10
4.3 Types of Evidence: .....	12
4.4 Test of Controls:.....	13

### Chapter 5.....

Disclosures .....	15
5.1 Responsibility and Authority:.....	15
5.2 Independence and Confidentiality:.....	15

### Chapter 6.....

Supply Chain Process .....	16
----------------------------	----

### Chapter 6.....

Supply Chain Process .....	16
----------------------------	----

6.1 Introduction: .....	16
6.2: .....	17
6.3 Test of Controls:.....	18
6.4 Deficiencies & Recommendations: .....	21
Chapter 7.....	22
Inventory Management Process.....	22
7.5 Deficiencies & Recommendations: .....	27
Chapter 8.....	29
Production Process .....	29
8.1 Introduction: .....	29
8.2 The Process: .....	29
8.4 Deficiencies and Recommendations:.....	35
Appendices.....	
.....44	

## LIST OF FIGURES

Figure 1: Company Organogram .....	2
Figure 2: COSO Framework.....	5
Figure 3: Supply Chain Flowchart.....	17
Figure 4: Material Receiving Procedure .....	22
Figure 5: Material Issuance Procedure .....	<b>Error! Bookmark not defined.</b>
Figure 6: Production Flowchart .....	<b>Error! Bookmark not defined.</b>
Figure 7: Purchase Transaction.....	37
Figure 8: Goods Transport Invoice .....	38
Figure 9: Goods Transport Invoice .....	39
Figure 10: Purchahse Invoice.....	40
Figure 11: Purchase Invoice.....	41
Figure 12: Purchase Invoice.....	42
Figure 13: Material Requisition Slip.....	43
Figure 14: Purchase Order .....	44
Figure 15: Inventory Ledger .....	45
Figure 16: Job Card.....	46

# Chapter 1

## Introduction

### **1.1 General:**

After taking notice of a few concerns of the director of 3MS Paints regarding the internal controls of their organization, inefficiencies of the processes and about stolen inventory and finished products, we decided to pursue a project in order to investigate these concerns and detect areas of inefficiency in the firm's operations. Our aim was to investigate and analyze the company's internal processes and controls using different procedures and determine the source of inefficiencies and weaknesses in the processes and also to provide necessary recommendations that can improve the company's operations.

### **1.2 The Company:**

3MS Paints is a Sole Proprietorship, with its country office at Plot #134, Triangle Industrial Area, Kahuta Road, Humak, and Islamabad. 3MS Paints has a wide range of interior paints, exterior paints, and metal & wood paints etc. The company boasts in its breakthrough technology and environment friendly policies and products. 3MS Paints manufactures its products in four simple steps involving preassembly and premix (preparation for production process), pigment grinding/milling (raw material preparation), product finishing/blending (production process) and filling/packaging (storage and sale). The company's paint product line includes: Wall Putty, Plastic Emulsion, Silky Emulsion, Synthetic Emulsion and Weather Shield.



### 1.3 Company Organogram:

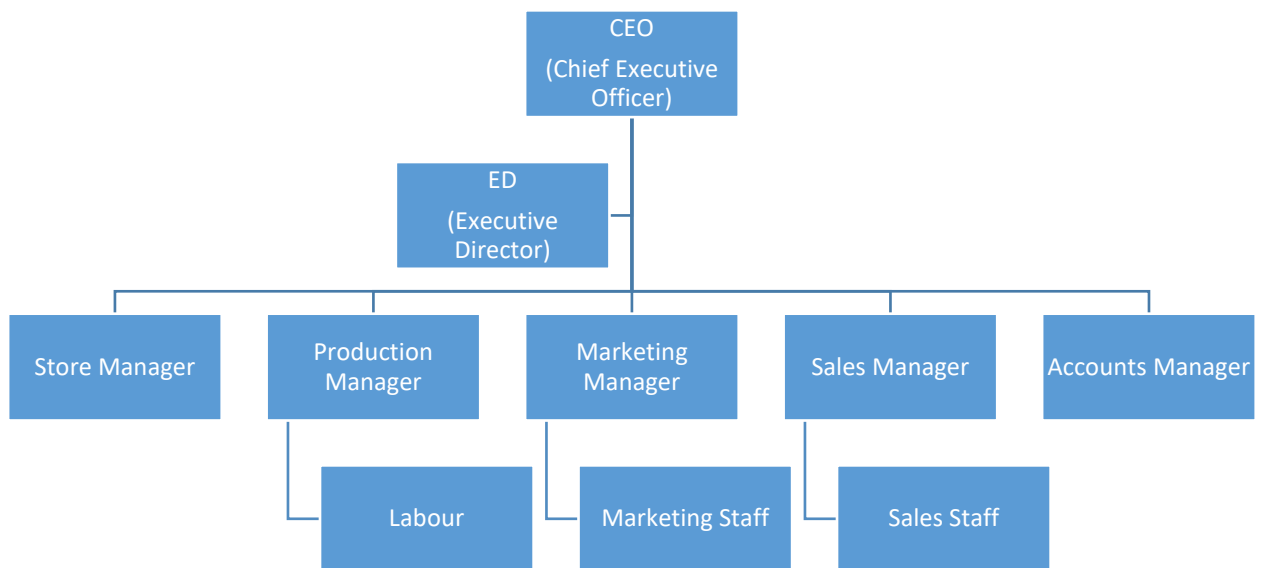


Figure 1: Company Organogram

### The Project

#### **2.1 Project Scope:**

This project aims to analyse and monitor the existing internal controls in the areas of production, inventory management and supply chain processes of the company. The project also focuses on providing recommendations and propose improvements in these areas. Our project aims to identify the various flaws and shortcomings in the processes regarding internal controls. After identifying and detecting the errors and deficiencies in the internal controls, we will evaluate our findings and propose a better and improved system of internal controls to implement.

#### **2.2 Project Objectives:**

Our Project aims to underline the following objectives:

- Analysing internal controls to ensure whether there is a smooth flow of processes and information in the production process, inventory management and supply chain.
- Testing for internal controls in the production process, inventory management and supply chain to check for inefficiencies and discrepancies.
- Identifying the risks and deficiencies relating to each process that impact value creation and affect the performance of the organization.
- Proposing recommendations for improvements in the existing internal controls so that the company can improve the efficiency and effectiveness of its operations.

### The COSO Framework

#### **3.1 Introduction:**

The COSO framework is an integrated framework which was published in 1992. This framework provides the basis for designing, implementing and conducting internal controls. The framework also helps to assess the effectiveness of the internal control processes. The COSO framework provides an insight about the company's accomplishment of objectives regarding the efficiency and effectiveness of operations, reliability and accuracy of financial reporting and the compliance with the laws and regulations.

#### **3.1.1 Application on Company:**

This framework has been applied on the company i.e. 3MS Paints and is shown in the figure given below:

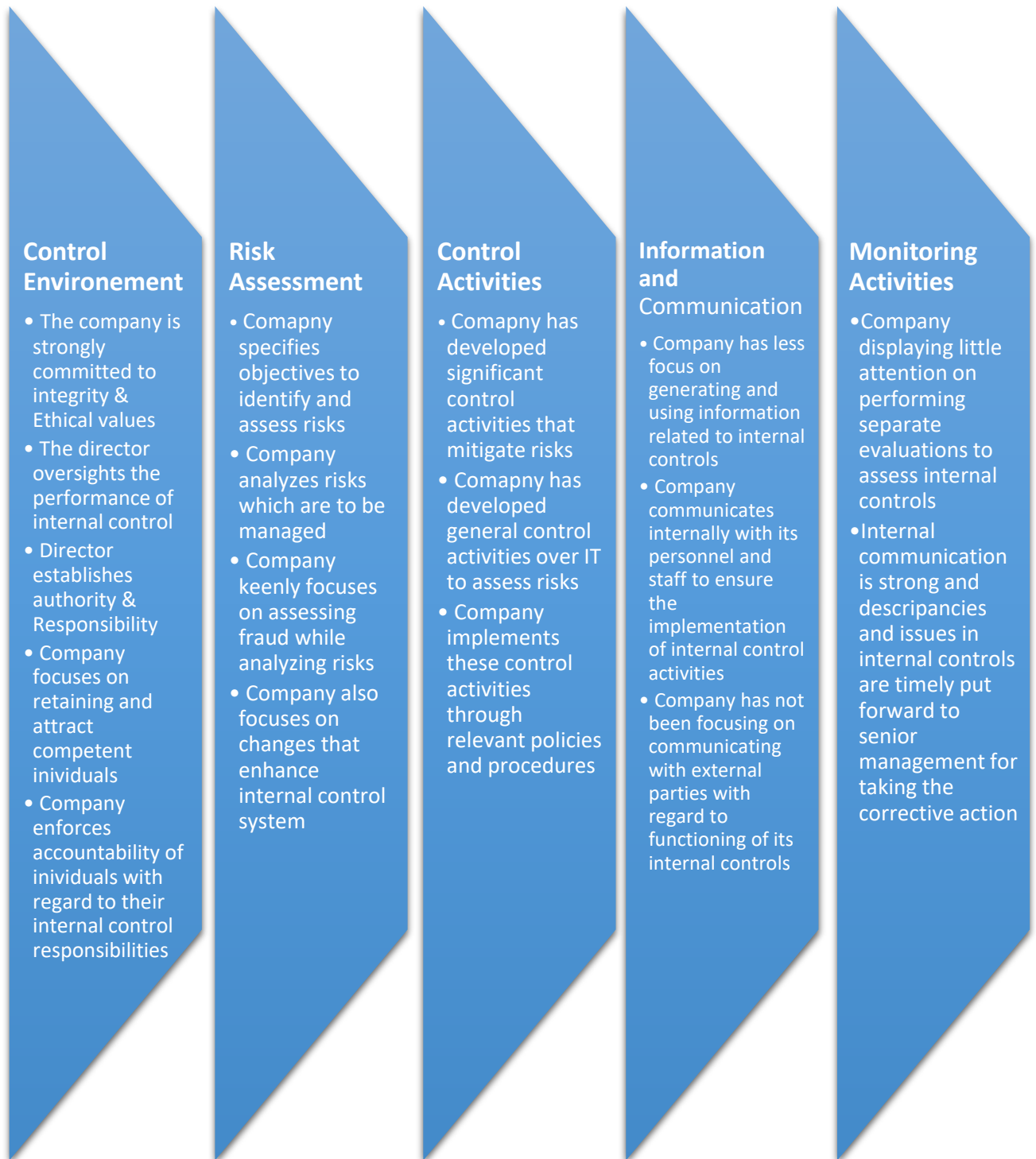


Figure 2: COSO Framework

### **3.1.2 Control Environment:**

The control environment of the company is quite effective. The control environment helps the company to achieve its objectives and operate its business efficiently. The company is highly committed to integrity and ethical values. The director clearly monitors the internal controls in place and takes into consideration the key issues relating to the internal controls. The management of the company also perform their responsibilities to achieve the business' objectives. The 3MS Paints Company also focuses on to retain the experienced and competent individuals and to attract and develop new personnel according to the requirements of the job. The director and senior management also holds the individuals accountable and responsible for their internal control responsibilities. Thus, the control environment of 3MS Paints helps the company to achieve its objectives and holds individuals accountable for any breach in the control activities on their behalf.

### **3.1.3 Risk Assessment:**

The company has clear set of objectives but it is sometimes impossible to identify the risks associated with the objectives. However, the director and the senior management focus on identifying the potential risks that may harm the operations of the firm and take relevant actions to mitigate the effects of such risks. The management also considers the assessment of fraud while identifying the risks. The fraudulent activities are analyzed while monitoring the risks associated with the objectives. The management is very keen in making changes that can improve the internal control system of the company and is interested to know about the deficiencies and recommendations relating to the existing internal control system. The management has also ensured that they will actually implement changes that can improve their existing control system.

### **3.1.4 Control Activities:**

The company has developed internal control activities to mitigate risks. However, the control activities in place are limited and have a lot of deficiencies, which needs to be improved. The company needs to add more control activities to avoid risks and their affects. The company has developed general control activities over technology to achieve its objectives. These control activities are implemented through the relevant procedures and policies.

### **3.1.5 Information and Communication:**

The company majorly focuses on improving the operations to enhance the productivity. The company has less focus on generating and using information related to internal controls. Some of the losses due to the inefficient control activities are not taken into consideration. However the director and senior management communicates internally with its personnel and staff to ensure the implementation of internal control activities. The company has not been communicating about the functioning of internal controls with the external parties.

### **3.1.6 Monitoring Activities:**

3MS Paints pay very little attention in performing separate evaluations for assessment of the company's internal controls. As the 3MS Paints is a manufacturing business which has keen focus on production and meeting the demands of its clients. So the firm primarily focuses on the improvement of its operations and is not inclined towards enhancing the internal controls. However, the internal communication in the company is strong, as there are fewer employees, so any issues and deficiencies in the internal control activities if identified are put forward to the management and the director for taking the necessary relevant actions.

### **3.2 Issues Identified:**

The director makes sure that the control activities are performed properly and also ensures that the management meet their responsibilities as well. But there are a number of issues the company is facing with regard to its internal controls. The control environment is quite effective. However, there is no risk assessment criteria for analyzing the risks related to the internal controls in the company. The company has developed various control activities to mitigate the risks; however, these activities are very limited and have a number of discrepancies which need to be addressed. The internal controls are weak and can easily be breached and these can affect the firm quite significantly. The company also pays very little attention to develop and process information related to the internal controls. The 3MS Paints are primarily inclined to improve the ways of their production and increase their market share and therefore do not focus more on the internal controls. The company also does not communicate the functioning of the internal controls with the external parties. The company does not perform processes to evaluate the internal controls in place. There is no internal audit department in the company, which is quite necessary. As internal auditors review the internal control activities and present their findings and recommendations to the company, which are very useful; but in 3MS Paints Company there are no internal auditors and the company is not able to generate, process and analyze the quality information regarding the internal controls.

### Internal Control Process

#### 4.1 Basic Assertions:

##### 4.1.1 Completeness:

This is a very critical part of the internal control processes. This assertion is tested in the supply chain, inventory management and the production process. At each process completeness was tested by implementing relevant procedures.

##### 4.1.2 Existence:

This means that the assets, liabilities and other line items are physically present in the organization and they belong to the entity. The physical presence of all the items like the raw materials and finished products that are recorded on the sage software must be there in the organization. This assertion was tested in the inventory management process.

##### 4.1.3 Accuracy:

Accuracy is another basic assertion and it was tested in the supply chain and production processes. In the production process; due to the introduction of sage software, we can see that the assertion of accuracy is observed as the software gives a very accurate estimate of the inputs as well as the outputs in the production.

##### 4.1.4 Security:

The security means that all the assets of the entity are securely kept and the access is properly accredited. It must also be ensured that there are no chances of theft or stealing of the assets. This assertion has been tested in the inventory management and production processes.



#### **4.1.5 Segregation of Duties:**

The segregation of duties assertion was tested in all the processes i.e. supply chain, inventory management and production process. As 3MS paints is a SME (small and medium enterprise), so there is a major problem of segregation of duties and this assertion was analyzed in each process separately.

#### **4.2 Procedures Implemented:**

Different procedures were then performed in order to test these assumptions and either provide confirmation that they hold true or detect any breach of these assumptions present in the organization. The procedures we implemented are classified as:

- 1 Observation
- 2 Enquiry and Confirmation
- 3 Inspection of Records
- 4 Re-Performance
- 5 Analytical Procedures

Although there are different other procedures used for testing the internal controls and assessing the material misstatements like the substantive testing and attributive sampling; however we did not use these procedures as it was out of the scope of our project. So we only focused on the observation, enquiry and confirmation, inspection of records and re-performance procedures to test the internal controls.

#### **4.2.1 Observation:**

##### **4.2.1.1 Company's Operations:**

In this step the company's operations are closely observed. Firstly, we studied the processes and operations of the company from their standard operating procedures and also from the direct meetings with the director; then we analyzed these processes by observing them

physically and checking the flow of processes. We observed the production, storage, procurement and supply chain processes. We analyzed each process thoroughly and observed each document relevant to the procedures. We focused on non-participant observation and come up with the relevant information.

#### **4.2.1.2 Documents:**

The documents are very important in almost each process especially in procurement, supply chain and storage. The documents obtained from the company were observed and cross-checked. Any discrepancies and mismatch between the corresponding documents were identified and have been added in the report. All the documents were properly inspected and all the major and minor issues were highlighted. The documents like the purchase order, production order, bills of materials, production plan, store entrance sheet etc. were thoroughly analyzed and also cross-checked where necessary.

#### **4.2.1.3 Company's Premises and Plant Facilities:**

The company's premises and plant facilities were also properly observed. It was ensured that all the assets like the plant facilities and inventory are kept safe. The store room of raw materials is near the production area and is regularly monitored by the store keeper to avoid any chances of theft, still or any losses of raw materials.

#### **4.2.2 Enquiry and Confirmation:**

The next process we implemented to analyze the internal controls was enquiry and confirmation. We thoroughly investigated each procedure with respect to the internal controls and came up with several discrepancies on which the enquiry was done and later confirmed from the management as well. The enquiries were done in the areas where there were weak internal controls or even no controls in place. Enquires were also made for the matters such as knowledge of fraud or suspected fraud affecting the entity, post sales obligation and marketing and sales information as well. Enquires were also made about the possible risks related to the entity and how they are addressed by the management.

#### **4.2.3 Inspection of Records:**

Another procedure which we used was inspection of records. As there were a few documents that the company had shared with us and we properly checked each document and then cross-checked with other documents to confirm that the figures match and there is no material misstatement. The documents which were inspected include store entrance sheet, work order/job order note, job detail report, manufacturing order, stock overview report etc.

#### **4.2.4 Re-Performance:**

Re-performance was also done to evaluate the internal controls. The company basically uses SAGE software. This software is used for the purpose of making production plan and also to come up with the amount of raw material needed to be used in the production to meet a specific order. We actually test the system by first making dummy entries into the software and then we also compared the actual purchase order with the entry made in the sage software to verify that the amount of raw material is the same and correct.

### **4.3 Types of Evidence:**

During the project and analysis of the internal controls, we came up with the following evidences:

#### **4.3.1 Physical Evidence:**

Physical evidence was obtained through observation i.e. by analyzing the company's operations, environment and company's premises and plant facilities. The physical evidence was formed the basis for our internal control analysis.

#### **4.3.2 Testimonial Evidence:**

Testimonial evidence was obtained by enquiry and confirmation. We held direct interviews with the personnel including the store manager, staff and labour and gathered useful information regarding the internal controls in the form of testimonial evidence. The discrepancies and issues in the different processes were discussed with the management based on the testimonial evidences.

#### **4.3.3 Analytical Evidence (Based on the Information Provided):**

Based on the information provided by the company we obtained these evidences by analyzing and processing the information. Based on this information re-performance, accuracy, validity and completeness tests were performed.

### **4.4 Test of Controls:**

#### **4.4.1 Authorization:**

Authorization basically refers to the fact that the transactions and documents are approved by the relevant authorities. This also includes the proper authorization of important documents like the purchase orders, store entrance sheet, work orders etc. This test of control was performed in the inventory management, production and supply chain processes.

#### **4.4.2 Accuracy (Re-performance):**

Accuracy is another basic assertion and it was tested in the supply chain and production processes. This control activity was also analyzed by the re-performance procedure.

#### **4.4.3 Validity:**

Validity means that the transactions and documentation fairly represents events that actually occurred. It also includes that the events are done lawfully and are executed with proper authorization. This test was performed in the payroll process to analyze the internal controls within the process and to identify the weaknesses that exist in the process.

#### **4.4.4 Security:**

Security includes the safety of the assets, plant facilities and inventory. It means that the access to the factory premises, assets and information systems is controlled and only granted to authorized and relevant personnel. This test of control was performed in the inventory management and production process.

#### **4.4.5 Segregation of Duties:**

Segregation of duties means that no single individual is responsible for performing and monitoring a task himself. It also ensures that the person who processes the transaction must be a different individual than the one who is recording the transaction. Segregation of duties may be costly sometimes for the business but it is very critical with regard to internal controls and mitigating risks. This test was performed in supply chain, inventory management production and payroll processes.

#### **4.4.6 Physical Controls:**

Physical controls are also important part of the control activities. It includes the physical security of the assets, authorization for accessing to the company's computers and softwares and safe guard facilities in the factory premises. The physical controls help to prevent theft and stealing of the assets and inventory.

### Disclosures

#### **5.1 Responsibility and Authority:**

As a team; accessing the internal controls, we derived our authority directly from the senior management and director of the company; 3MS paints. Our team had been authorized to conduct a comprehensive internal audit of the company's internal systems and processes and we were responsible for keeping the director informed of any weaknesses and areas of significance importance that we noticed during the assessment of the internal controls.

#### **5.2 Independence and Confidentiality:**

To maintain independence and confidentiality, it is important to note that our team has no direct obligation or authority over any of the processes and systems monitored. Our primary purpose is to collect information and evidences regarding any leakages and weaknesses present in the system and report our findings to the director of the company. All information that we gathered and report during the course of the assessment will be considered highly confidential, and may only be accessed by the director to whom we report and our project supervisor. Any other individuals interested in gaining access to our findings must consult and contact either our team or the director of the company directly. It is understood that this information is highly confidential in nature and may only be accessed after permission is granted by the relevant authorities.

### Supply Chain Process

#### **6.1 Introduction:**

Supply Chain is used as a differentiating factor amongst a lot of companies hence it needs proper concentration for improvements. 3MS Paints works closely with its suppliers and has a JIT supply for big clients. Currently, 3MS Paints has its focus on direct marketing and aims to deliver as much of its product to end users themselves rather than building on its retail network and capturing a fair market share in the market. For this reason, there is a gap in the market whereby retailers are not given a significant share of the produce for sales.

3MS Paints is currently making direct sales in the local markets through their showrooms in Bahria Town Phase 7 and Gulberg, Islamabad. They have a very insignificant market share because of their direct sales strategy however they are exporting their products to Afghanistan through distributors who then facilitate them by making sales to end users. Their strategy for direct sales is more consumers centric in the way that they plan to open more showrooms for color advisory for clients that would help them choose the right paint for their paint projects.

3MS Paints has its plans to expand to Middle Eastern and African countries while it is in the process of making corporate offices and showrooms locally.

Functionally, supply chain runs through a wide spectrum of tasks right from materials planning to procurement to primary distribution. It plays a pivotal role in enhancing operational efficiency and producing rapid procurement, production and delivery systems. By the use of this, there has also been improved flexibility of operations, lowered output time and reduced delivery costs, while at the same time improving customer-servicing levels and profitability.

The company has been supplying its product to Afghanistan as well, as part of its international exports but the sale of their products in Afghanistan is taken by local distributors there who facilitate the marketing and sales of their product

## **6.2 Supply Chain Flow:**

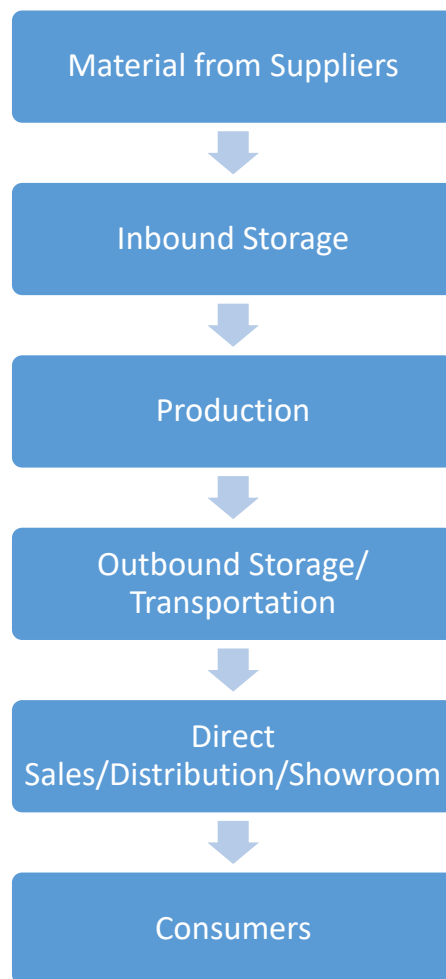


Figure 3: Supply Chain Flowchart



### **6.3 Test of Controls:**

In Supply Chain particularly in the process of procurement we found some discrepancies which can result in financial problems for the company, following are some of them:

- There was no concept of having a proper quotation neither was there an amount set as a criterion above which a quotation would be needed.
- Most of the quotations they had were handmade bills without any signatures and stamps.
- They did not consult any other vendor other than the three they were dealing with for a long time.

In case of internal auditing the best statistical process that can be applied is attributive sampling as usually companies have certain rules pertaining to purchases for instance that purchases of more than a thousand rupee should be authorized with a purchase order whereas in case of 3MS paints there is no set criteria for any of such procedures so we applied our testing on purchases on the basis of following aspects:

- Purchases having high values
- Purchases that are recurring
- Purchases that are of significant importance to the organization

This helped us identify that on what basis the purchases were being made so that we could apply appropriate test of controls.

### **6.3.1 Observing and evaluating Segregation of Duties:**

In this test we observed the steps and people who are involved in particularly this process. The people who are mainly involved in procurement are the Executive Director, store manager and the production manager who raises the demand for materials. We checked that whether each person had an independent role. As 3MS has a JIT procurement for large clients so whenever there is such an order instruction from Executive Director are given to the production manager who then raises a requisition to the store manager to get the needful materials however if material are not available in large quantity as required for production it is told to the Executive director via demand order who then contacts either of the three suppliers for procurement of the material for the normal production it is the other way round store manager checks the quantity of finished goods in the store if they are below a reasonable level that is the buffer he informs the Executive director who then orders the production manager to produce the required units and a similar process is carried out. As according to our observation **segregation of duties was satisfactory** as the Executive Director himself placed orders after calling three of his vendors asking for prices and how quickly he can have the raw materials and placed an order to one of the vendor that suited his requirements at that time. However the quotations he had were on calls and sometimes handmade bills without any signatures and stamps.

### **6.3.2 Completeness**

In the process of supply chain at the stage of procurement while dealing with the assertion of completeness after some inspection we found that one of the major document that is part of the procurement procedure – **purchase order, was not being kept by the organization** as according to the executive director as no purchase manager was involved in the process of procurement, he directly placed all the order so he never felt the need of purchase order however the document is very important as if there is an discrepancy or shortfall in the goods received by the organization they can double check it but to this he replied it never

happened as we are working with same suppliers for a long time there is relationship of trust however if any such thing has not happened does not mean that it cannot happen. 3MS has to be cautious and shall a purchase order. As this is an order generated by a company to a supplier indicating the types, quantities, and agreed quoted prices from a list of trusted suppliers and vendors for the purchase of raw materials that are required for the production process.

### **6.3.3 Authorization**

Though there was no proper documentation for some of the procedures but still **all the transactions were made by the relevant authorities** if not approved. As usually the purchase order is made by the purchase manager and approved by the executive director but at 3MS as there was no purchase manager the procurement transaction was being performed by the executive director himself who otherwise would have approved such a transaction. **Moreover the register where the accountant recorded all the sale purchase transactions was also double checked and signed by the executive director by the end of the day.**

### **6.3.4 Accuracy**

After inspecting we found that **the transaction performed were recorded in a register in the relevant time period** even though the **purchase transaction was not being backed a proper document** the purchase order however a register was being kept by the accountant where all the purchase and sales transactions were being recorded and **the executive director used to check it on a daily basis in order to check that whether everything was recorded and at the correct amount.**

## **6.4 Deficiencies & Recommendations:**

After applying audit assertions, we came to the conclusion that there were some problems that need to be addressed.

- Though the processes were going alright but it lacked certain documents, which should have been there were missing like the purchase order. Hence, it is recommended that 3MS should start using proper documents that are usually used in the procurement process and keep a proper record of them for the future as this will not make things easier for anyone who would like to assess the performance of the business.
- There was no purchase manager, the executive director was doing this work, which hinders the segregation of duties. We would suggest to the organization to hire a purchase manager as it will bring more clarity into the process as it will be his core duty to keep an eye on purchases and document it properly.
- The documents that were being used were not proper it was just everything written on 3MS notepad without any signatures or stamps. Hence, it is suggested that 3MS Paints should introduce proper documents with proper authorization. This will create more accountability and an efficient system at 3MS paints.
- Moreover, the register that was kept for recording of sales and purchase of goods was filled in a very rough way; while checking it was very difficult to understand what actually was written.

## Inventory Management Process

### 7.1 Introduction:

Inventory management is the management of inventory and stock. As an element of supply chain management, inventory management includes aspects such as controlling and overseeing ordering inventory, storage of inventory, and controlling the amount of product for sale.

### 7.2 Material Receiving Procedure:

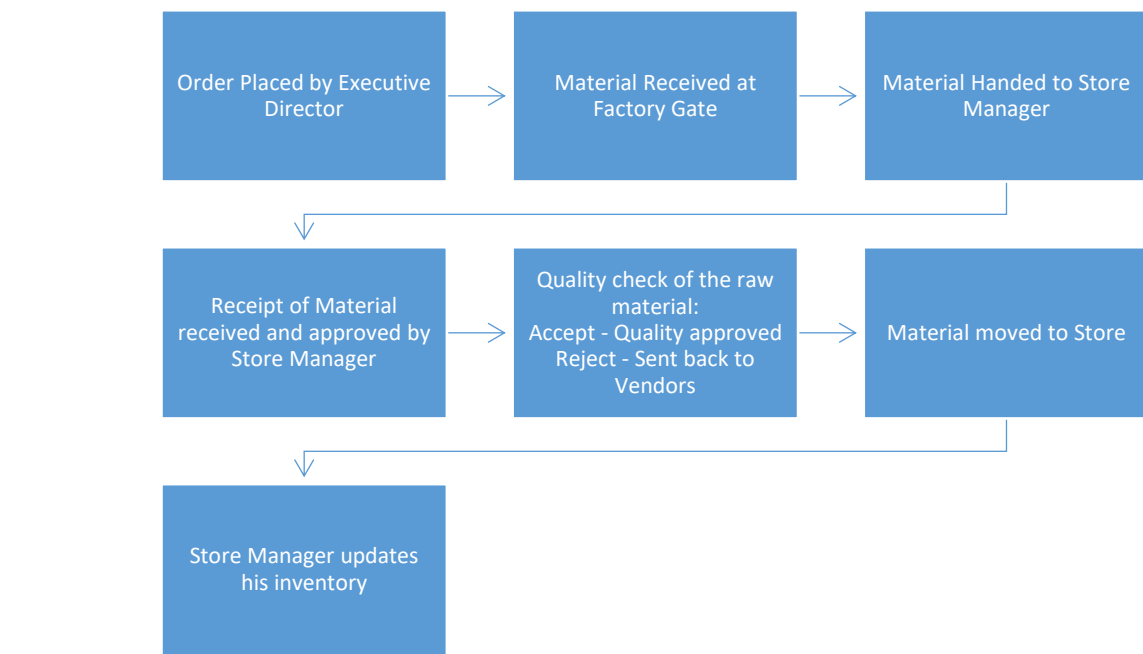


Figure 4: Material Receiving Procedure

3MS Paints gets its supply of raw materials from a varied range of suppliers from Karachi and Lahore. The company places its order with the suppliers when the inventory has a deficiency of raw materials or there is a huge demand for a product from a client which will drive a hectic production cycle and revenue for the company. The inbound and outbound logistics of 3MS Paints is based on carriage adopted by suppliers for all inbound logistics of raw materials while carriage adopted by the company itself for all outbound logistics of final finished product to be sold to the end users.

The raw material coming into the factory is handed over to the store keeper by the show of the receipt of goods ordered against a credit payment or an advance payment depending on the scenario. There is no inward gatekeeper pass that checks this supply of raw material into the factory. The inventory is then moved to the stores after is tested for quality by random sampling of the liquid in drums of 200kgs and powdered form material from bags of 25kgs.

If the raw materials are of the required standard then they are approved by the store manager to be put into further usage by moving them to the inventory, however, if rejected then they are returned back to the supplier.

The amount of finished product to be supplied depends on the batches being prepared each day for different jobs. A job card defines what is being produced on a given day at the factory. The finished product is also tested for quality checks before reaching the end user and if the product is approved after a lab test, it enters the dock for outbound logistics. If rejected, then either settling is done to bring the product to the right shades or the entire batch is rejected and disposed as spillage.

### 7.3 Material Issuing Procedure:

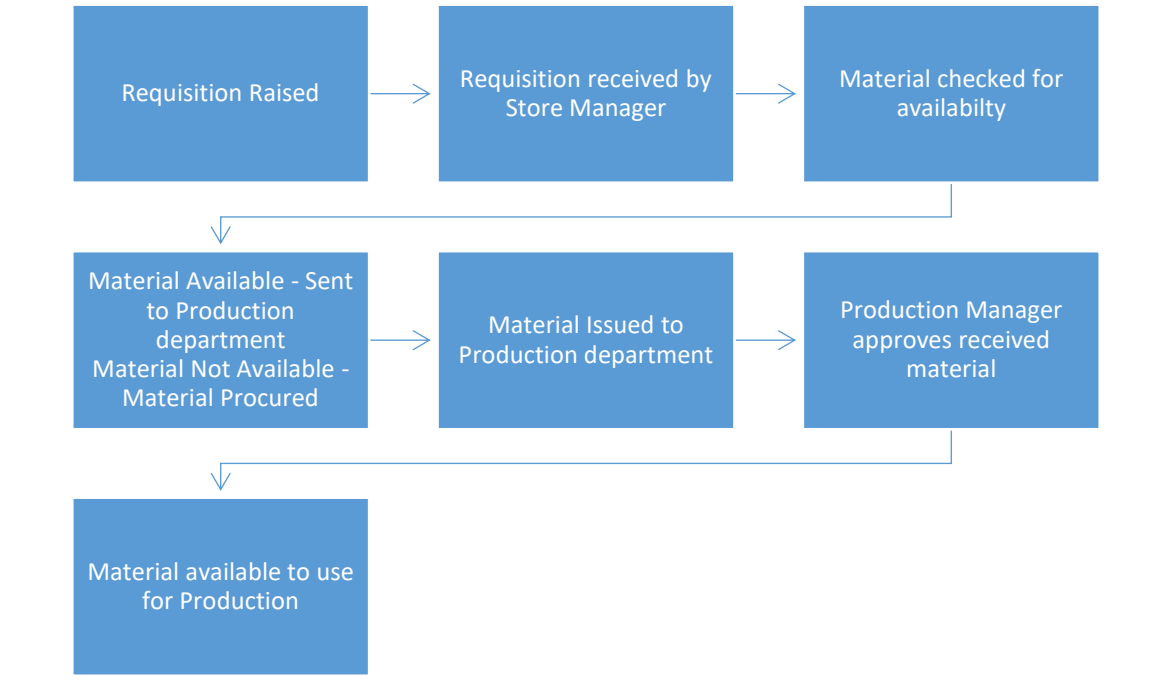


Figure 5: Material Issuance Procedure

The procedure for getting material for production is quite simple as identified according to the need for production a requisition is raised to the store manager who then issues the material as in the normal course of business a decent buffer is kept so they do not have to procure material which may cause delay in production however if there is a big order for which the available raw material is not sufficient , 3MS procures it on urgent basis as it has

excellent relationship with its suppliers and this is the only reason it can undertake and execute big orders within minimal time.

However, for the normal course of production material is issued from stores to production department where the material is checked against the requisition that was raised in order to get the raw material for production.

## **7.4 Audit Assertions:**

### **7.4.1 Completeness:**

Unlike procurement, there were documents present that are to be used in the inventory management process however the documents were not proper they were made on the 3MS notepad these documents included store issuance, material requisition slip which again were handmade and did not had any signatures or stamps.

### **7.4.2 Segregation of duties:**

There were different individuals doing different jobs in different departments that are related to inventory management. The production manager raised the requisition for the material required for production and the store manager issued the material. Moreover, the store manager received the material from the supplier and gets them placed in the store so the segregation of duties was satisfactory.

### **7.4.3 Authorization:**

As the store issuance and material requisition slip were made manually by the respective managers however they are not signed or stamp neither do they have a proper format so any one can make a forge slip and misuse the notepad in order to get material from the store.



#### **7.4.4 Security:**

Despite the glitches in the documentation, physical access to store was restricted to the store manager and executive director no worker could access the store in their absence as the keys are either with the store manager or the director and they are physically present whenever a placement or with drawl is to be made.

#### **7.4.5 Miscellaneous Tests:**

Moreover, we performed some miscellaneous tests.

##### **7.4.5.1 Checked that Material issuance and requisition slips were made by the respective managers:**

We managed to get 5 slips of material issuance and confirmed it with store manager that whether he made them and 5 requisition slips and checked them with the production manager that whether it was made by him or not. Both assured that the slips were in their hand writing and were made by them.

##### **7.4.5.2 Matched the store issuance with the requisition slips:**

As the store issuance and material requisition slips were matched we found that the material issued by the store manager was in accordance to what was being demanded the production manager we asked the production manager that how it can be assured that the raw materials are required for a new production or the raw material previously attained have been used up to this he replied that the company uses SAGE which is a software that produces job card and tells the exact amount of raw materials in order to produce the desired quantity.

#### **7.4.5.3 Evaluated the supporting documents:**

We examined the supporting document that were being used in the inventory management process to check if they were properly made and used again and again **however we found that the documents were merely instructions written on 3MS notepad. Moreover, they were no sign and stamps underneath. Only the sale and purchase register was complete and up to date.**

The documents we inspected were:

1. Material requisition slip
2. Store Issuance
3. Purchase register
4. Sale register

#### **7.5 Deficiencies & Recommendations:**

There were a few shortcomings in the Inventory management process and we have certain recommendation for 3MS paints. We recommend the following aspects to the company

- In the inventory management process, we found some glitches which were pertaining to the documents that were involved in the process. Documents like store issuance and material requisition were merely written on the notepad of the company without any signatures or stamps. Hence, it is recommended that the company should use proper documentation material requisition slip and the store

issuance slip should have a proper format and should be signed by the respective manager so to ensure accountability.

- Moreover, an important document in inventory management that is the gate pass was not being used which could result in loss of inventory and can affect the relationship of trust with its suppliers.
- There were no cameras installed in the storage area. It is recommended that the company should place cameras in store and on the main gate this would ensure that work will not stop if the store manager and executive director is not around as after placing the cameras the store should be kept open and the production manager may get the approved raw materials from store and similarly place finished goods in the store.
- The company should maintain all the documents that have been used at any stage of the process so that it is easy for the owner to match the respective documents and the executive director will have a fair view of whether everything is synchronized, in order and it will also ensure that the records are available for everything that has been used and there are no leakages or frauds.
- Proper documentation should be kept so that the financial statements could be prepared and the owner can get to know what has been made out of the business right now most of the records are hap-hazard.

### Production Process

#### **8.1 Introduction:**

The production department is one of the most important department in any manufacturing concern. If the organization is to perform well, the production department has to perform well and efficiently. The production department of the company helps the company to gain more customers if it is producing quality products. That being said, it can also have a negative impact on the revenue of the company if the quality of the product is poor and as a result, the company will lose customers. In simpler words, the production department plays a make or break role in determining the revenue and the market position of the company. 3MS paints is not different when it comes to the production, the company emphasizes on the quality of the production as well efficient production of its products.

#### **8.2 The Process:**

3MS Paints manufacture a wide range of interior paints, exterior paints, metal & wood paints etc. This manufacturing process involves four steps:

- Preassembly and premix (Preparation for Production Process)
- Pigment grinding/milling (Raw Material Preparation),
- Product finishing/blending (Production Process)
- Filling/Packaging (Storage and Sale).

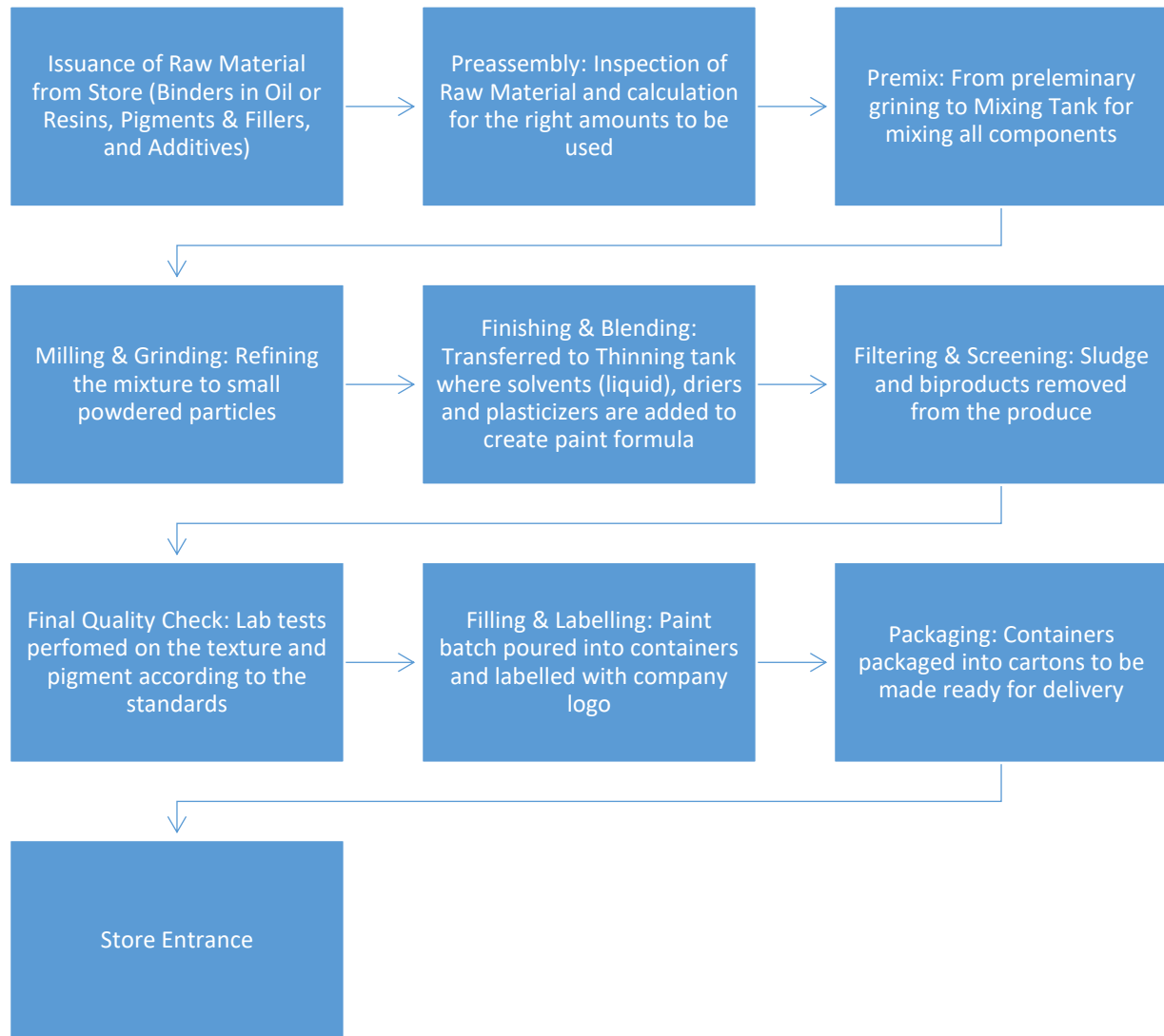


Figure 6: Production Flow Chart

The manufacturing starts after the raw materials are requisitioned from the inventory storage from the authentication of the store manager. These raw materials are in liquid as well as powdered form including pigments & fillers, binders in the form of oil or resins, solvents (liquid form), driers, plasticizers and other additives. The pigments, fillers and oil or resin binders are fed into the Feed Hopper along with other additives to hold paint particulate matter that has been poured from bags and drums for the purpose of air pollution control and neglecting contamination of the premix. This matter is then transferred to the mixing tank where rotators mix these compounds to form a mixture of pigments and colors. This then gets transferred to the milling tank where the pigments are grinded and milled with the use of huge cutters which perform a rotary movement to refine the mixture. This refined mixture is then moved to thinning tank where solvents, driers and plasticizers are then added to dissolve or disperse different components used in the paint formulation (pigment and resin), which produces the paint of desired consistency for application. This is then transferred for screening where filtering takes place and the sludge is removed from the produce. The paint is now ready to be sent for filling and packaging into Gallons (4 Liters), Buckets (16 Liters) and Quarters (1 Liter) containers. The Labeling Machine labels the paint containers with its batch number, product description and the company logo with a wrap on the containers after which the final packaging is done for the products to be sent to storage as finished goods. Gallons and Quarter containers are then later packaged into cartons for distribution.

The product line at 3MS Paints includes

- Wall Putty,
- Plastic Emulsion,
- Silky Emulsion,
- Synthetic Emulsion &
- Weather Shield

### **8.3 Audit Assertions:**

Following are the Audit Assertions that are applied in the production process in 3MS paints:

#### **8.3.1 Segregation of Duties:**

The main audit assertion regarding the production process is the segregation of duties. We observed in the production process that there was segregation of duties. There are separate workers who perform different duties. The production manager overall looks at the entire production process. There are different workers who are involved in different parts of the production process. There is a worker who is involved in bringing the raw materials from the store. The same person mixes the raw materials which are in the form of pigments and resins to the mixing machine. This person is responsible for the preassembly and pre-mix of the raw materials. After that, there is a separate person who is responsible for Grinding and milling, he prepares the raw materials to such form so that they can be used in the production process. While the blending and mixing is in progress, there is a separate worker who is overlooking the process in case the machine has to be stopped. This person is responsible for the product finishing and blending process. This is the main process in which the paint is being manufactured. There is a separate worker who is responsible for suitable packaging of the paints in different gallons, therefore he is responsible for the filling and packaging of the product. Before the paint is packed in gallons, there is a quality manager who is responsible for checking whether the product is produced of the adequate quality. He checks whether the overall batch of the product is satisfactory quality wise. **In the production process, we observed that different duties were performed by different workers and there was a manager who overlooks the entire production process.** It must be mentioned that there is no greater need of segregation of duties as the production process

is not a very specialized and it is also due to the very specialized manufacturing machines in case of Paint manufacturing at 3MS paints.

### **8.3.2 Completeness:**

The first most important audit assertion in the production process is **Completeness**. In order to test the completeness of the process, we have observed that to check the completeness of the production process, 3MS Paints makes use of the physical counting of the finished goods which is done by the production manager and counter checked by the store manager as the finished product is transferred from the production area to the store area. It must be noted that the benchmark used to check the completeness of the production process is the estimated output as predicted by the sage software. According to the executive director and the production manager, they both counter check the actual output with the estimated output as estimated by the software. According to the executive director, a deviation of less than 5% from the estimated output is allowed. According to the production manager, on average the deviation never exceeds 1-2% from the estimated output. That being said there are **no cameras installed in the production area**. But we can conclude that **due to the software being used as the benchmark and the physical count of the finished goods ensure the completeness of the production process**.

### **8.3.3 Accuracy:**

Accuracy is also a very important audit assertion that has to be followed in order to arrive at a good quality product. We observed and inspected the production process and found out that the production process is very accurate due to the introduction of the Sage software that is used for the production process. The Job card that is issued by the software tells the production manager the exact amount of raw materials that are requires to produce a specific amount of finished goods or to complete a batch. They are very accurate estimates and they also enhance the quality of the product. The job card also incorporates any alterations that are to be done in case the product's quality or quantity is not up to the mark. Hence, it can be concluded that **the introduction of Sage software for the purpose of**



production is of much significance and has improved the accuracy of the production as well. However, taking the software out of the equation, the company has got no mechanism to counter check the accuracy of the product.

#### **8.3.4 Authorization:**

We have inspected that the production process is properly authorized at different steps by different employees as mentioned in the supply chain management. The production process starts when the requisition is raised by the executive director. The executive director himself authorizes the production of paints and has the complete and absolute authorization in every process at 3MS Paints. This requisition is received by the store manager who checks whether the raw materials required for the production are available in the inventory or will they have to be purchased from the vendors. If they are available, the store manager authorizes the issuance of raw materials to the production manager. Store issuance Receipt is issued by the store manager. **It must be noted that there is no proper format of the store issuance receipt, it is merely hand written by the store manager on a 3MS Paints notepad.** After the raw material required is present, the production commences which is authorized by the production manager. **It can be concluded that there is suitable authorization required at every step in the production process.** However, at 3MS paints, **there is no proper documentation involved, every authorization is done by the word of mouth and hand written notes.**

#### **8.3.5 Security:**

Security is also a very important audit assertion. At 3MS Paints. The production process is very secure. There are two gateways from which people can approach the production area. One is used for the entrance of raw materials that are to be used in the production. The second is used to transfer the finished product to the store room which is besides the production area. Less number of gateways to and from the production area make it much

secure. Other than that, 3MS paints uses the Sage software for its production process. It is a manufacturing software which tell us the exact number of raw materials and the quantities required of each material that will help finish the required finished goods. The software also tells the exact quantity of the finished product that is to be expected. Although the **production area has no biometric attendance or entrance system but that doesn't pose a significant problem for the company.** According to the executive director, the estimates provided by the software provide very accurate estimates of the finished goods and hence it makes it difficult for the employees and workers to find any loopholes to steal or misplace any finished goods or raw materials from the production area. We can conclude that the security in **the production process is satisfactory and the use of Sage software also helps in securing the finished goods and raw materials.**

#### **8.4 Deficiencies and Recommendations:**

- The most significant deficiency in the production process is the absence of cameras. It is highly recommended for the organization to install cameras in the production area to have a better glimpse of what is happening.
- There is no proper documentation for the transfer of goods between stores and the production area. It will be very easy for both the production manager and the store manager to put the blame on each other in case raw material or finished goods go missing.
- The production area is not secure and everyone can access it. It is recommended that the production area should only be accessible to those who work in the production department and the production area should be secured by introducing biometric entry system.

- The overall documentation can be improved by introducing relevant documents at each step of the production cycle. For example, there should be a store entrance receipt that is to be used by the store manager. Physical inventory checklist, Material requisition slip and material issuance note can be introduced for the better communication between production department and other relevant departments.
- The production manager handles the sage software; the production manager lacks the IT expertise to use the sage software comprehensively; it is recommended that 3MS Paints should hire an IT manager to fully utilize the software.

## APPENDICES

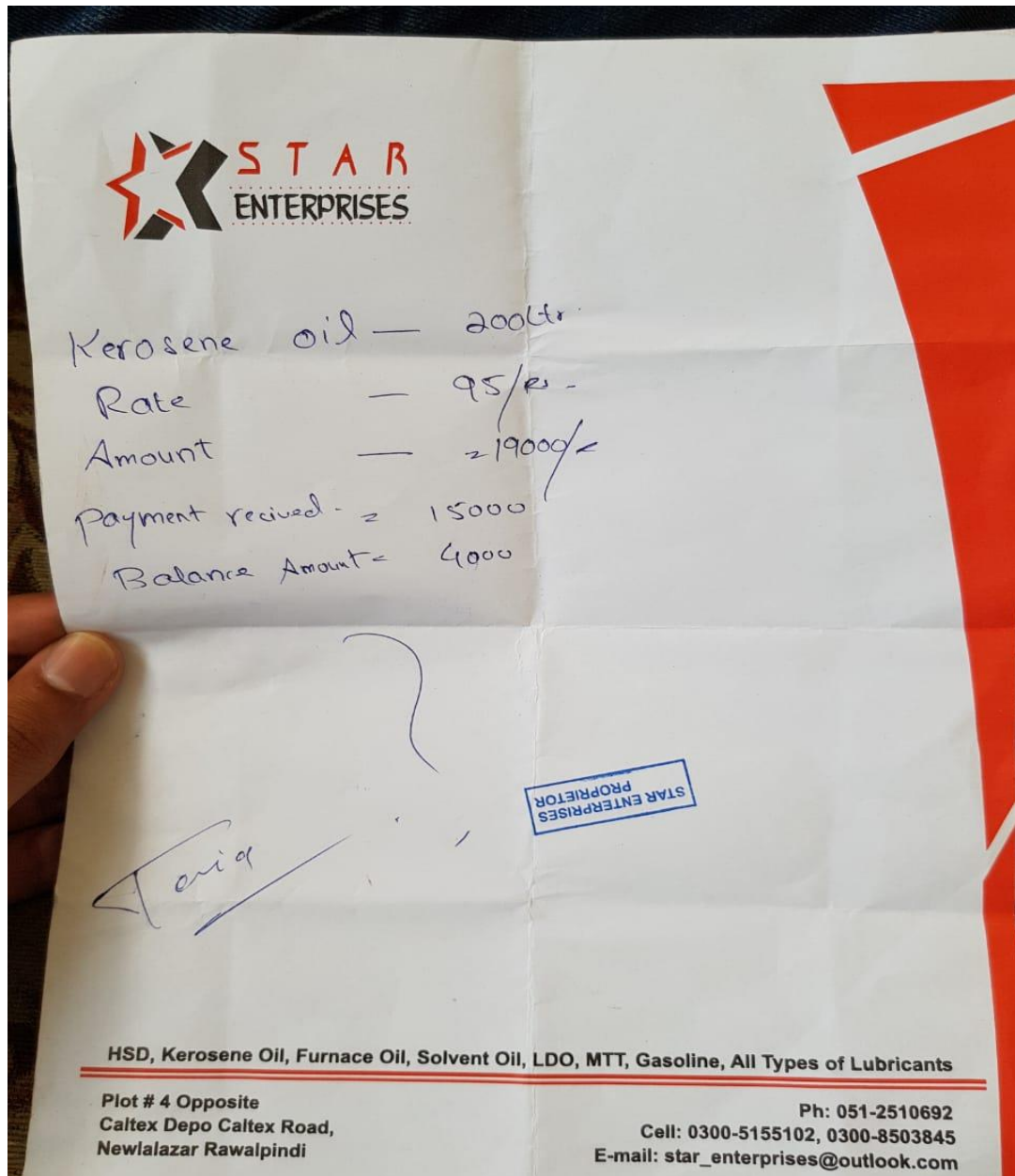


Figure 5: Purchase Transaction





# Sale Invoice

Date: 13-04-2017  
Time: 11:26:18AM

Sale Invoice #: 900  
Invoice Date: 12-04-2017  
Invoice Due Date: 19/04/2017

Customer Details: 3 MS Paint Induty  
Balance:  
Mr. Saad Riaz  
Plot No. 134, Triangle Industrial Area, Humak Town,  
Islamabad  
Rawalpindi

Reference: LHR Cargo (19827)

S.No.	Product ID	Description	Details	Qty	Unit	Unit Price	Amount Rs.
1	FIN GULDATA FRESH	guldata Fresh - 7		50.00	Kg	600.00	30,000.00

روپے = 42,70 = آپ کی تیار رقم معاوضہ حاضر میں  
 روپے وصول پائے ..... مبلغ ..... آپ کی آخری وصولی تاریخ  
 فرق کی صورت میں ان نمبرز پر رابطہ کریں  
 فون نمبر: 0321-8404292 , 0321-4292405

30,000/-  
 15,000/-  
 15,000/-  
 10,000/-  
 5,000/-  
 5,000/-  
 Balance  
 10/11/2017  
 NTE Bill  
 NTE  
 Pash PAID 17/5/17

Total Qty:- 50.00

Total: 30,000.00

Received the above articles in running & good condition.

Order By \_\_\_\_\_ Delivered By \_\_\_\_\_ Received By \_\_\_\_\_

Gross Total: 30,000.00  
 Received: 0.00  
 Balance: 30,000.00

Figure 8: Purchase Invoice

MIS

DS Effuse's Tentative Offer

MAR-20-18 05:22 PM

Page 1 of 1

Status : Posted

Sr#	Item Description	UOM	Quantity	Rate	Value
-----	------------------	-----	----------	------	-------

Doc.No: 2257-1718 Date: 20/03/18 MR. SAAD RIAZ (3MS)

Remarks:

1	TITANIUM DIOXIDE R-2295 (DAWN)	KGS	500.00	416.00	208,000.00
2	WSCP-3	KGS	5.00	3,500.00	17,500.00

<b>Gross Amount:</b>		<b>505.00</b>			<b>225,500.00</b>
----------------------	--	---------------	--	--	-------------------

<b>Total:</b>					<b>225,500.00</b>
---------------	--	--	--	--	-------------------

Amount in Words: (Rupees Two Hundred Twenty-Five Thousand Five Hundred Only)

Last Balance:	0
Current Bill:	225,500
<b>Total Balance:</b>	<b>225,500</b>

Prepared By

Checked By

Approved By

Figure 9: Purchase Invoice



**INVOICE** Original Copy

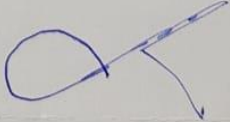
**DYCAM**

<b>Party Details :</b> SAAD RIAZ SAHIB ISLAMABAD	Invoice No. : 466 L Dated : 26-02-2018
---	---

S.N.	Description of Goods	Qty.	Unit	Rate	Discount	Price	Amount(Rs.)
1.	PVA 24-88 Powder (25Kg)	500.000	Kg	225.00	0.00	225.00	1,12,500.00
<b>Grand Total</b>							<b>500.000 Kg</b>
							<b>1,12,500.00</b>

**Rupees One Lakh Twelve Thousand Five Hundred Only**

<b>Terms &amp; Conditions</b> 1. Kindly check your goods at the time of delivery 2. Goods once sold will not be return or exchange. E.& O.E.	<b>Receiver's Signature &amp; Stamp :</b> <div style="text-align: center; font-size: 2em; color: blue;">  </div>
---	---

**Signatory**

Figure 10: Purchase Invoice

**3MS**  
paints

For Publicity Only



**3MS Industries, UK**

Head Office  
486 Howlands, Welwyn Garden City, Hertfordshire,  
United Kingdom AL7 4HA Company No. 07110248

Country Office  
Triangular Industrial Area, Kahuta Road, Islamabad,  
Pakistan. Tel: +92-51-4493726 Fax: +92-51-4492823

web: [www.3mspains.co.uk](http://www.3mspains.co.uk)

7/3/18

17kg

Titanium powder

73kg's

Flame powder<sup>®</sup>

3kg

NP 9 chemical

5kg

Ammonia liquid

Figure 11: Material Requisition Slip

# 3MS paints

For Publicity Only



3MS Industries, UK

Head Office  
486 Howlands, Welwyn Garden City, Hertfordshire,  
United Kingdom AL7 4HA Company No. 07110248

Country Office  
Triangular Industrial Area, Kahuta Road, Islamabad,  
Pakistan. Tel: +92-51-4493726 Fax: +92-51-4492823

web: [www.3mspains.co.uk](http://www.3mspains.co.uk)

26/1/18.

MR Jaleem. ALKRAM

SANB DMA2.

Purchase.

ORDER:-

4<sup>th</sup> BE Defining Tomorrow

20 Litre - Plastic Emulsion  
Alph white.

20 Litre - Healthy Shield.  
SAND STONE.



Figure 12: Purchase Order

بابت ماه آبان 2013				روزنامه چیه			
رقم	صفحه	تفصیل خرج	تاریخ	رقم	صفحه	تفصیل آمدن	تاریخ
رقم حساب	3016	Silky white 1/1 PIB o/white 2/1					
رقم حساب	1000	w/s white 1/1 w. putly AT 1/1					
رقم حساب		w/s shade 1/1	16/11/13	رقم حساب		Ac 1000	16/11/13
رقم حساب		w/s camel 1/1 THENFER 2/1 F.Pozyl Brown Hand 3/1					
رقم حساب		Sil white 1/1 w/s shade 1/1					
رقم حساب		w/s camel 1/1 Sil 1/1 w. putly AT 1/1					
رقم حساب		w/s white 1/1 Sil o/white 1/1					
رقم حساب		Emul Oxid. 1/1 Vatnish 1/1					
رقم حساب		Bibulking 1/1 w/s Beav. 1/1	17/11/13	رقم حساب		CHINAR	17/11/13
رقم حساب		signed Red 1/1				25kg cm + 30 440 25kg Talcam 40	

Figure 13: Inventory Ledger

## JOB CARD

DATE: \_\_\_\_\_

PRODUCT: \_\_\_\_\_

QUANTITY: \_\_\_\_\_

S.NO.	RAW MATERIAL	ESTIMATED QTY / JOB	ADJUSTMENT	INITIAL ADDITION	2ND ADDITION
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					

### PACKING DETAILS

CHECKED BY

\_\_\_\_\_

5KG	24 KG					18L
0.91 L	3.64 L	14.56L	1L	4L	16L	20 L

Figure 14: Job Card