

THE EVALUATION OF ISO 22000 <sup>6</sup>  
IMPLEMENTATION IN PT S (STUDY ON  
UNLOADING RAW MATERIAL PROCEDURE)



UNDERGRADUATE THESIS

Submitted to complete part of requirements  
for Bachelor's Degree in Management

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PARAHYANGAN CATHOLIC UNIVERSITY  
FACULTY OF ECONOMICS  
PROGRAM IN MANAGEMENT

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**EVALUASI PENERAPAN ISO 22000 DI PT S <sup>66</sup>**  
**(PADA PROSEDUR PEMBONGKARAN BAHAN**  
**BAKU)**



**SKRIPSI**

Diajukan untuk memenuhi sebagian syarat untuk memperoleh gelar  
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## **ABSTRACT**

In food factories, one of the important things is the food safety. In ISO 22000 there is a Food Safety Management System that helps to maintain the quality of the food itself. If it is found a violation against the ISO 22000, the factories could lose their certification and will lose their customers. This research is trying to evaluate and understand the procedure of the implementations of the ISO 22000 in PT S which is a food factory that produces yeast. It needs to be evaluated because of there are some violations found during the process of unloading the raw material. The research methods are quantitative, with descriptive and the technique that is used are interview, collecting documents for the data and observation.

The research finds that PT S still uses different communication platforms; some of them are using email, and the rest are using WhatsApp Group which appears the miscommunication to be happening; the evaluation or as known as the internal audit period is once a year while there is some evaluation that needed to be done as soon as possible, and their training is conducted not with the experts but with the managerial which resulting to the lack of awareness of the procedure. The recommendation for PT S is they have to socialize about their communication tools and using just one platform, they should conduct the evaluation or their internal audit twice a year so they can update their procedure, and the training should be conducted by the experts so they can get their own individual certificate.

The result of this research offers insights for the PT S especially for the procedure in unloading raw material and also to the readers when it comes to the implementation of ISO 22000 by using the cause and effect diagram.

Keywords: ISO 22000, Cause-and-effect Diagram, Food Factory

## **ABSTRAK**

*Dalam pabrik pangan, salah satu hal terpenting adalah keamanan pangan. Dalam ISO 22000 ada sistem yang membahas keamanan pangan yaitu Food Safety Management System yang membantu menjaga kualitas dari makanan itu sendiri. Jika ditemukan pelanggaran dalam penerapan ISO 22000 maka sebuah pabrik atau pun organisasi tersebut dapat kehilangan sertifikasinya dan berujung kepada kehilangan pelanggan. Penelitian ini mencoba untuk dapat mengevaluasi dan memahami prosedur dari penerapan ISO 22000 pada PT S yang merupakan pabrik makanan terkhusus untuk ragi. Hal ini perlu dilakukan dikarenakan ditemukannya penyimpangan-penyimpangan yang terjadi pada saat proses pembongkaran bahan baku. Metode yang digunakan adalah kuantitatif yang bersifat deskriptif dengan menggunakan teknik wawancara, mengumpulkan dokumen data, dan observasi.*

*Hasil dari penelitian ini adalah adanya perbedaan penggunaan media komunikasi sehingga terjadinya miskomunikasi, ada yang menggunakan email dan menggunakan WhatsApp Group; lalu untuk evaluasi internal audit yang hanya diselenggarakan satu tahun sekali yang kenyataannya evaluasi tersebut perlu dilakukan secepatnya dan pelatihan yang diberikan tidak dengan ahlinya tetapi dengan manajerial saja sehingga mengakibatkan kesadaran pekerja yang kurang akan pentingnya prosedur ini. Rekomendasi untuk PT S adalah mengadakan sosialisasi untuk media komunikasi yang mereka gunakan dan hanya dengan menggunakan satu media saja, PT S sebaiknya mengadakan evaluasi internal audit satu tahun dua kali sehingga mereka dapat mengevaluasi kinerja dalam kurun waktu 6 bulan dan pelatihan yang diberikan langsung dari ahlinya sehingga masing-masing dari mereka mendapatkan sertifikasi individual.*

*Hasil dari penelitian ini memberikan masukan dan juga pencerahan untuk perusahaan dan pembaca dalam implementasi dari ISO 22000 dengan menggunakan cause and effect diagram.*

*Kata Kunci: ISO 22000, Cause-and-effect Diagram, Pabrik Produksi Makanan*

## PREFACE

Praise the Lord for blessing the paper entitled “The Evaluation of ISO 22000 Implementation in PT S (Study On Unloading Raw Material Procedure),” which has been completed. This paper was prepared to fulfill one of the requirements for the final semester in the Management Undergraduate Program, at Parahyangan Catholic University for the academic year 2023/2024. I felt several challenges and could not have done without the support, prayers, and motivation I had given. I want to express my gratitude to those who have been a part of this journey with me:

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The author realizes this paper has flaws; it needs criticism and suggestions to improve this undergraduate thesis. Hopefully, readers will be inspired and learn something new.

Bandung, January 2024

Nanda Naomi Sungkono



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# CHAPTER 1

## INTRODUCTION

### 1.1. Background

Production is the most important process in a food factory, which is why food safety becomes one of the factors that must be completed. There are several certifications for food safety, and companies need them to gain their customer's trust and benefit from the market. Crosby (1979) said that quality is '*Conformance to requirement*', which means the standard's requirements are already met. The requirements must be fulfilled to achieve the best quality. If it's not fulfilled, the output will not reach the maximum capacity given by the standard.

According to Government Regulation Number 86 about '*Keamanan Pangan*' (Food Safety) (Pemerintah Indonesia, 2019); food safety is a condition that is needed for preventing biological, and chemical contamination and things that will affect the human body. One factor that needs to be checked is the raw material used in the production. In conclusion, we need quality control for the raw materials used in production.

The safety management system used for the food factory is the Food Safety Management System known as FSMS, a standard that the International Organization for Standardization (ISO) made for food safety in ISO 22000. This certification can be use by the whole chain for the food factory and everything that related to food, and this certification can be use to earn customer's trust and factory can export their product (ISO Indonesia Center, 2019). The consequences of the bad quality of the ingredients affect the health of the human body (International Standard Organization, 2018). Other requirements to complete the ISO 22000 are HACCP (Hazard Analytical Critical Control Point) and GMP (Good Manufacturing Practices). According to Heizer, Render, and Munson (2020), implementing quality control in food safety could increase the factory's reputation.

PT S is a food factory that produces yeast. The factory needs this certification because they are going to export the yeast. At the moment, PT S has already received ISO 22000 certification. The whole process has done correctly according to the certification, but there are several problems such as foreign objects

in unloading because the process after is taken care of automatically, and some requirements that are not according to ISO 22000. In other words, it needed corrective action, such as continuous improvement, to reach the ISO 22000 standards.

**Table 1.1**  
Procedure Violations Data During Unloading the Raw Material

Period	Events	Effects
March 2023	The salt supplier did not use safety helmets and safety boots.	It is against ISO 22000 in Control of Product and Process Nonconformities, and the consumers are moving to another supplier.
March 2023	The quality of the carton (packaging) was ripped.	The carton (packaging) could not be use, so lack of packaging to be sent to their customers
April 2023	The urea supplier did not use safety helmets and safety boots.	It is against ISO 22000 in Control of Product and Process Nonconformities, and the consumers are moving to another supplier.
November 2023	The gas supplier did not use the safety seal for transferring the gas.	Leaking can lead to decreased gas and lack of gas to produce the yeast.

Source: PT S

Table 1.1 shows several violations from the food safety management system standard found in 2023 and how the factory reacted to them. If PT S does not take action, PT S will lose the certification ISO 22000; they will lose their customers because can't send its products abroad. So, to avoid that, we need to evaluate the

implementation of the Standard Operating Procedure (SOP) for the raw material by using ISO 22000 for the yeast that will be exported.

The method used in this research is Total Quality Management (TQM), especially a cause-and-effect diagram to find the sources of the problems. Cause-and-effect diagram can be the tools to find the solution because it helps to find out the causes by looking at the possible problems and the points will be highlighted. It is suitable for this research by looking at the violations that has happened. Especially when it comes to look out the implementation of a standard in PT S. This research intended to see The Evaluation of ISO 22000 Implementation in PT S.

## **1.2 Research Question**

This research seeks to address the following questions:

1. What are the standards procedure for unloading the raw material implemented by PT S related to food safety?
2. How does the implementation of the ISO 22000 in PT S?
3. What are the causes of the violations in the factory's standard food safety process?

## **1.3 Research Objective**

These research objectives are:

1. To understand the standard procedure for unloading the raw material of the implemented by PT S.
2. To understand the implementation of the ISO 22000 in PT S.
3. To understand the cause of the violations in the factory's standard food safety process.

## **1.4 Benefit of Research**

The benefits of the research are:

1. For PT S

This paper aims to maintain the quality control of the raw materials and the food safety regulations through evaluating the standard process with the implementation of ISO 22000.



## 2. For External Parties

This paper aims to give an understanding of the use of Total Quality Management based on implementing ISO 22000.

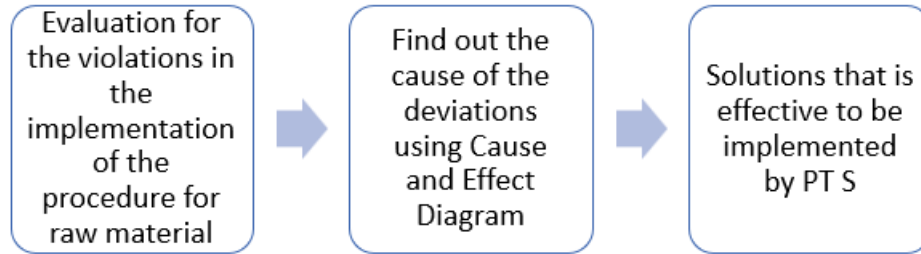
### **1.5 Framework**

In making the best product, it needs the best quality for the raw material, and there is a system for the standard process in the factory. The system that food factory is going to use called Food Safety Management System (FSMS) with ISO 22000. PT S wants to send their products abroad, to Thailand and Japan so it needs the ISO 22000 certification. In PT S, it was found that there are some violations in the raw material receiving procedure. Because of that the product's hygiene becomes questionable, is not safe for food safety and the quality of the raw material is the key (Erkoc, Gurnani, Ray, & Jin, 2023). It needs to be handled quickly if PT S does not want to lose the certification and it will affect to the customers also.

The solution that can be done is by reviewing the continuous improvement of the implementation with ISO 22000 with the cause-and-effect diagram. According to Heizer, Render, and Munson (2020) in Total Quality Management there are 7 tools which are a check sheet, scatter diagram, cause and effect diagram, Pareto chart, flowchart, histogram, and statistical process control. This research will find out the causes of the violations that has happened to avoid the same mistake in the future by using the cause-and-effect diagram.

This research starts with an interview and collects the data about the violations from the raw material receiving procedure. After getting all of the data, this research will conduct another interview to find out more about the causes and classified it to the cause-and-effect diagram. The next step will be looking out for the best solutions for PT S.

**Figure 1.1**  
Framework of the Research



Source: Data processed by the author.