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# QUALITY CONTROL IN IMPROVING PRODUCT QUALITY IN THE FINISHED GOODS WAREHOUSE OF PT. INDOFOOD NOODLE DIVISION SEMARANG USES THE PDCA (PLAN-DO-CHECK-ACTION) METHOD

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**ABSTRACT**

With the progress of modern times, the competition between companies is becoming more and more stringent, one of which is seen from the quality of the goods produced, to produce goods of quality then the control of the products produced is carried out. This research was carried out at Indofood CBP Successful Wealth Noodle Division Semarang where many defective items were still found in the warehouse so that control and repair processes on defective products and goods were still needed. The purpose of this research is to know the quality control (Quality Control) in improving the quality in the finished goods warehouse as well as to know obstacles in enhancing the quality of the products produced, where the company needs to carry out the control of the product quality because there are still many defects in the warehouse of finished products. This research uses qualitative research methods with a descriptive approach. Research data sources use primary and secondary data sources used as information sources. In data collection by conducting field observations, interviews and documentation. The results of this study show that quality controls on products have been carried out from raw materials to the delivery of products to consumers, but can not be said well because there are still found defects on the products produced, caused by humans, machines, and methods, so there is still need to improve on controls, methods and machines.



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## INTRODUCTION

In the times and technology that develops, as well as the development of science will make businesses more competitive, and companies are expected to keep up with the times.

According to Law No. 39 of 2021 in terms of halal product guarantee, which stipulates that all goods that enter, exit, distribute, and sell must have a halal certificate, and must come from prohibited materials that are exempt from the existence of a halal certificate. Adhita, et al. (2019), that quality is a necessary aspect in identifying the success of a product in market competition, the quality of each item has different criteria according to customer needs.

In analyzing problems in control, it can be done by using SWOT analysis methods (Strengths, weaknesses, opportunities, threats), fishbone diagrams (fishbone diagrams), 5 why analysis, six sigma, Gap analysis (Gap analysis), PDCA (plan-do-check-action) DMAIC (Define, Measure, Analyze, Improve, Control). In this study, the researcher uses the PDCA (plan-do-check-action) method, with the help of fishbone diagrams and 5why analysis, in analyzing the problem and quality control measures, where this method can help the researcher in analyzing the problem, and this method can be implemented and applied in the company that the researcher researches. According to Nasution (in bastuti, 2022) PDCA, fishbone diagrams and 5why analysis can be used in testing and implementing changes that will improve the performance of products, processes, and systems in the future.

PT. Indofood Noodle Division Semarang is a company engaged in the food industry in the form of instant noodles. Quality products are not only influenced by high-quality materials, but also influenced by the control carried out in order to improve the quality of the product, the stricter the control is carried out in the finished good warehouse so that it can produce goods or products that are maintained and of high quality. In the warehouse of Finished goods are often found damaged products, caused by humans, machines, methods and methods used. The types of damage that often occur are leaking seasoning oil, torn cartons, crushed products, loose adhesives, which causes companies to have to return damaged products.

## METHODS

In this study, the research approach uses a qualitative research approach. Qualitative approach is an approach that understands the phenomenon of the research subject's experience related to perception, motivation, behavior, and other phenomena.

Research with a qualitative approach is research on descriptive research conducted by qualitative research methodology. In this study, the data sources taken are from primary data and secondary data, where primary data is data obtained through interviews with informants. Secondary data is supporting data owned by the company, and collected by the company, such as archives in the company, and data obtained from sources or research objects that indirectly provide data to researchers, is secondary data.

In data collection techniques, this study uses observation, interview, and documentation techniques. Observation is a technique in which data collection is carried out directly in the company through observation during the process of implementing activities, which is carried out for six months which is carried out with open observation. Interviews aim to collect data and research information, interviews are the process of collecting data that is carried out by means of face-to-face questions and answers. Interview is a technique in data collection that is carried out by taking data through media that is used as data in support of research which is carried out directly by researchers in the company's finished goods warehouse. In this study, the author made a direct Observation to the research location and recording the points obtained through interviews with respondents. According to Miles and Huberman, the analysis activity consists of three lines of activity that occur Simultaneously, namely data reduction, data presentation, and conclusion / verification

## RESULT AND DISCUSSION

In this study, the researcher discusses and examines Quality Control in Improving Product Quality at PT. Indofood CBP Sukses Makmur Noodle Division Semarang. In this study, the author describes how quality control in improving product quality starting from raw materials, semi-finished goods, finished goods, and delivery of goods to consumers, according to the opinion of Supriyadi (2021), this study examines four of the five categories of controller standards. The control carried out by the company is on raw materials, semi-finished goods, finished goods, standards for administration, packing, and delivery of products to the final consumer.

In the use of raw materials, control is carried out to produce existing standards, Raw materials are the main ingredients of the manufacture of a product, in the

manufacture of noodles require reliable and quality raw materials, in order to produce quality and quality finished goods. Raw materials are said to be of high quality if they meet the standards that have been set. Raw materials provided before being used in the manufacture of noodles must be controlled to see the suitability standard on the flour used. The raw material used is wheat flour taken from a flour company in Surabaya. The standard of raw materials must be wheat flour, there is no dirt in the flour, the color must be appropriate, the flour used must be fine, the moisture content contained in the flour must not be high, the weight of the flour must be appropriate, in Indofood itself quality control has been carried out on flour by sampling flour that has just arrived from suppliers, and sampling the flour taken will be analyzed in the lab room, after the analysis can only be used for product manufacturing.

Semi-finished goods are products that have not fully become finished goods, especially in Mi products, still in the process of forming noodles and the process of making spices on Mi packaging. For semi-finished goods, it still requires additional steps before becoming a final product that is ready to be sold. semi-finished goods are controlled. The weight of the Mi block must be in accordance with the predetermined standards, intact or no lumps, no contamination or dirt, quality control of semi-finished goods is carried out physically through product sampling and analyzed starting from shape, moisture content, weight, and if it has entered the packaging machine, there will be automatically a sensor tone to detect empty oil and empty spices.

quality standards of finished goods that start from the inbound process for the inbound process in the finished goods warehouse starting from the head of warehouse operations receiving a letter of the number and name of the goods from the production warehouse, then after being declared suitable, the product will be delivered from the production room through the finished goods warehouse conveyor consisting of upper and lower conveyors, and in the finished goods warehouse there will be warehouse staff who receive and arrange the goods to the location that has been determined, and there will be Quality Control staff who will sample the product. After the goods are arranged in the warehouse with pallets, the identity paper of the goods will be affixed.

The cardboard that is the packing of the Mi product, the wrap or etiquette, the weight of the product must be in accordance with the standard, the sealing strength. When in the warehouse, control is also carried out on product quality and storage quality, such as products must be neatly arranged without overhangs, product pallets are not damaged, there is no pest. The standard for physical specifications is that the cardboard or Mi packaging must be in good condition, not dented, the batch number must be clear, the production code must be there, the number of contents must be there, the weight of the product, the expiration date must be there. Mi etiquette or packing must be in good condition, the production code must be present and clear, the weight of the product must be clear, not torn, no damage, the sealing must be sturdy. The production code on the carton and etiquette should match the numbers and letters, and be clearly visible.

The sealing must be sturdy and not torn to ensure the product remains safe and of high quality. The weight of the product must be in accordance with the standards that have been determined and written on the packaging. Goods in finished goods that can be released or can be received such as the carton code is not clear but can still be read, the carton is slightly dented but does not affect the quality of the finished goods, the finished goods etiquette/packaging is not neat but does not have holes/leaks, direct information to the production and repairs are immediately made. For goods sent to consumers, it means that the goods are good and have passed the control stage in the finished goods warehouse, if the specifications of the goods sent to consumers are certainly good, starting from the packing and packaging have passed the checking stage and have been released, for the delivery of goods to consumers has been controlled and running well. Transportation is also checked so that goods can be transported properly, and it is still being carried out. The control carried out is the inspection of the back door of the container in good condition, the seal or seal is in good condition, the rubber door seal is still installed and still intact, the door frame is free from cracks, has a container number, there is no strong smell on the means of transportation, free from pests, the container must be clean, dry and free from contamination of foreign objects or materials that can damage the product.

In research conducted in the Finished Goods warehouse, it is often found that there is a lot of damage to goods, which is caused by human factors, machines, and methods that have not been carried out in accordance with the standards, so that they still cause

damage, namely leaking seasoning oil, torn cartons, crushed products, loose sealing so that they still need repair or reject. In analyzing problems and control steps to reduce defective products, namely by using the PDCA (plan-do-check-action) method assisted by fishbone diagrams that explain and illustrate the obstacles that occur in the company, and assisted by the 5why analysis table which helps analyze problems that often occur in the company by asking questions.

## CONCLUSION

In the control carried out there are four points, namely control for raw material quality standards, semi-finished goods quality standards, finished goods quality standards, standards for administration, packing, and delivery of final products to consumers, but in quality control it still needs to be improved and evaluated because there are still damaged products found in the warehouse, where in finished goods products the quality standards are not optimal. There are obstacles in implementing quality control in improving quality, namely human, machine, and method factors that have not run optimally, causing damaged goods such as leaking seasoning oil, torn cartons, crushed products, loose sealing, so that there is still a need for special handling and repair of damaged goods.

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