## **ABSTRACT**

## DESIGN OF IBC E-FORM DUMPING AND MIXING CHECKLIST INFORMATION SYSTEM USING THE WATERFALL METHOD

## Nuzuliyanti Tirtasari 19103021

The development of Information and Communication Technology (ICT) is a top priority for all fields in the world because it really helps human work so that in the current era it has penetrated almost all fields, one of which is industry. The existence of technological developments is one of the supporters of the industrial revolution which is already in industry 4.0. The industrial revolution is a change in the human mindset from work done conventionally to digital. The industrial revolution 4.0 carried out automation in all fields within the company by utilizing computer language and machine language into one such as Artificial Intelligent (AI). One of the companies implementing the industrial revolution 4.0 with the smart factory concept is PT Sanghiang Perkasa (Kalbe Nutritionals). PT. SHP is committed to actively contributing to increasing the value of health for millions of Indonesian people, to become a world-class manufacturing company, to be able to produce various products of the highest quality, adequate quantities, effective production time, a thorough distribution process with competitive selling prices as a vision. company. Through a Total Productive Maintenance (TPM) System approach that promotes effective and efficient processes. One of the problems that exist in companies that do not have an automated process is filling out the IBC area checklist form. The IBC e-form checklist was created with the aim of digitizing the IBC e-form checklist to get data in real time, make it easier for operators, and the data input is valid. Data collection methods before building the program are observation, literature study, and interviews with users. The system development method used is the Waterfall method because the stages of this method are related to the flow of this project starting from the initiation stage to maintenance. Program development uses the C# and HTML programming languages then data storage uses the Microsoft SOL Server database and is supported by the Boostrap framework which helps make it easier to create frontend views.

Keywords: Revolusi Industri 4.0, Prototype Model, Kalbe Nutritionals, Bootstrap