## **ABSTRACT**

PT XYZ is a third-party logistics company that is engaged in the storage and delivery of goods. In practice PT XYZ is a third party that handles products from various suppliers from the start of storage until the delivery of products to consumers. PT XYZ has a warehouse where in the warehouse consists of several directorates. One of the directorate in the warehouse of PT XYZ is the directorate pharma that handles pharmaceutical products. The storage system in the directorate pharma products is still done randomly and do not pay attention to the characteristics of the product itself. This contributes to the high cycle time and not achieving the target time on the activity of storing and order picking. Delay that causes high cycle time is the process of finding the location of stored products that take a long time.

Thus as for the purpose of this study is to menentuan product storage slot that can minimize the time delay in pharma directorate in the warehouse XYZ.

To address the issue of the delay that occurs in the design of the proposed directorate pharma product storage allocation using warehouse slotting. The proposal starts from the identification of delay using Value Stream Mapping, after that is classifies products based on movements in the warehouse using the FSN analysis, the final stage will be simulated travel time to prove the improvement obtained in the process of finding the location of the product after repair.

Based on the results of future state Value Stream Mapping is obtained an increase in the time value added amounted to 5.57% from the initial process time of 889.83 seconds to 742 seconds.

Keywords: Warehouse slotting, FSN Analysis, Value Stram Mapping, Simulation Travel Time.