## **ABSTRACT**

PT. XYZ is a company engaged in information and communication technology services, as well as telecommunications networks in Indonesia. In its operations throughout Indonesia, PT XYZ is divided into seven regional divisions. One of the activities carried out by PT.XYZ is the management of NTE devices, which are devices owned by PT.XYZ or partners consisting of modems, Optical Network Terminals (ONT) and Set Top Boxes (STB) and leased to customers as long as customers subscribe to telephone services, home internet, and internet protocol television.

In carrying out the NTE device management process, PT XYZ, especially the digital broadband planning (DBP) unit, which has the function of planning access infrastructure development, experiences problems in managing data on the needs of NTE devices. Therefore, research was conducted on the business process of managing NTE data requirements to create a proposed business process design with the Business Process Improvement (BPI) method. The method is used to eliminate and upgrade each activity carried out with the aim of minimizing cycle time.

The final result of this research is an increase in cycle time efficiency of 13.9% by cutting cycle time for 238 minutes. The cutting and efficiency of cycle time was done by creating a simple information system using google spreadsheets. This was done because previously the process of inputting and processing data was done manually using Ms. Excel and required a fairly long pre-processing data.

This research provides benefits to the DBP unit of PT XYZ because it can cut the NTE needs data management work which originally took two days to complete the work to four to six hours or the equivalent of half a working day.

Keywords - Business Process, Business Process Improvement, NTE, Information System, Spreadsheets, Data.