## **ABSTRACT**

Telkom STO (Automatic Telephone Center) Sepanjang is a branch company of Telkom Sidoarjo which is in the Sepanjang District, Sidoarjo, East Java and is part of PT Telkom Indonesia (Persero) Tbk as one of the BUMN (State Owned Enterprises) which operates in the field of ICT services (Information and Communication Technology) and telecommunications networks. Install New Services (PSB) chosen from the six services provided by Telkom STO Sepanjang if this is because the target for PSB requests to customers has not been achieved every month.

In solving PSB problems at Telkom STO Sepanjang, the method used is Lean Service by initial identification using Value Stream Mapping and Process Activity Mapping. So waste delay becomes the main focus on the type of waste that needs to be improved by using a waste finding checklist. In addition, it is also necessary to select the process of the PSB service which is the focus of improvement by comparing the cycle time value with the takt time calculation so that the installation process is selected. Then the design of a standard time reminder system and scheduling of new installations is carried out using the Extreme Programming method so that it can minimize waste delay in the installation process. In addition, the design results can also eliminate the root cause of the length of appointment management, the difficulty of estimating the completion time of the installation, and the absence of a reminder engine for the causes of man, method, and machine.

Keywords: New Install Service, Lean Service, Extreme Programming