

## **ABSTRACT**

*PT XYZ is not an actual company name, which is a company located in Java Island which is engaged in a leading network service provider, one of the services is called data center, specializing to help small and medium businesses in order to provide solutions in the area of cost-effective communication. In managing the number of data from the client which contained in PT XYZ's data center, surely a data center is needed that can support operations of every client's data is managed. However, the construction of a data center at PT XYZ, especially in cabling management still has not met the ANSI/TIA-942 standard for data center until now, such as laying power cables and data cables that are still in one grouping and labeling the devices. Effective cabling management such as grouping cables according to their type in the device rack and tray is very important to be done by PT XYZ to be able to easily manage to cable. The benefits can be obtained are that cables look neat and structured and minimized errors in managing the cabling system in the computer room. Besides that, it can produce stabling air in cooling and can save time in managing it. This research uses the ANSI/TIA-942 standard in cabling management scope and the PPDIOO life cycle approach method until the third stage: Prepare, Plan, and Design. Using this method is assessed suitable for long-term development in PT XYZ data center itself. The results of this research are the form of a proposed data cable and power cable, a systematic labeling system according to the ANSI/TIA-606-B standard, and SOP for labeling and cabling installation for a new client in the data center, according to current conditions at data center PT XYZ, with the hope that later it can be useful for the development of a better company.*

*Keywords: Data center, cabling management, ANSI/TIA-942 standard, PPDIOO life cycle approach.*