

ABSTRACT

The rapid development of technology today is evident in the extremely fast and dynamic exchange of data. Therefore, there needs to be a technology that can manage, process, organize, and store the data exchange that occurs. Data center is one of the technologies that can accommodate these things. Because of its capable function, data center is widely used in various industries such as government, banks, telecommunication, etc. This research will analyze the existing conditions of data centers based on TIA-942:2005 standards using the PDCA (Plan-Do-Check-Action) method. The assessment is conducted using the assessment worksheet from annex G, which includes aspects of telecommunications, architecture, electrical, and mechanical. The initial results show the achievement of tier 1–4 of 76.11%, 66.67%, 58.57%, and 47.03% respectively. After excluding water-cooling based systems, the values increased to 91.49%, 76.56%, 64.40%, and 51.50%. Based on these results, a gap analysis will be conducted along with recommendations to improve the quality of the data center according to tier 2 in TIA-942:2005 standard. Based on 30 existing gap points, the recommendations provided can serve as a reference to fulfill the requirement of targeted tier.

Keyword – data center, TIA-942, PDCA