The Philippine National Public Key Infrastructure in Pamantasan ng Lungsod ng Muntinlupa Towards Digital Services Security Model for Public Universities

Mardyon B. Yongson
http://orcid.org./:0000-0002-1305-7570
yongson.mardyon1026@gmail.com
Philippine Christian University
Manila, Philippines

Abstract

The integration of the Philippine National Public Key Infrastructure (PNPKI) into Pamantasan ng Lungsod ng Muntinlupa's (PLMun) digital services framework is the main topic of the study. The research tackles the urgent need for a strong security model to protect sensitive data and strengthen public institutions' overall security posture as digitalization becomes more widespread in academic settings. Its goals are to determine if integrating PNPKI into PLMun's digital services is feasible, examine how PNPKI improves data security and integrity, and develop a complete security model for public universities based on PNPKI. The research study uses a methodical approach, looking closely at PNPKI features and how well they fit with PLMun's digital infrastructure. Comparison studies of current security models for public universities based on PNPKI. The research study uses a methodical approach, looking closely at PNPKI features and how well they fit with PLMun's digital infrastructure. We'll compare the security approaches that are currently in use in educational institutions, and we might use surveys or interviews to get feedback from pertinent parties. The study expects to demonstrate the possible advantages of PNPKI implementation in PLMun, including increased data security, better authentication procedures, and improved digital resilience in general. Analyses of comparisons will shed light on the benefits of PNPKI over other security methods. In summary, it offers PLMun and other public universities a workable implementation roadmap for PNPKI. Policymakers, university administrators, and IT experts will find great value in the expected outcomes, which highlight the importance of a uniform security architecture.

Keywords: Information Technology, Public Key Infrastructure, Digital Services, Security Model, Data Integrity