ABSTRACT

Artificial intelligence or Artificial Intelligence has started playing a crucial role in enterprise security. Artificial Intelligence is being used to improve the cybersecurity posture of various organizations and departments in the public sector. Presently, different departments under the public sector keep coming under the attack of online threats. The public sector has been witnessing an increasing number of cyberattacks over the last couple of decades. Considering the priorities like securing data and preventing breaches, there is a need to implement new intelligent mechanisms to combat cyberattacks as traditional systems such as IDS (Intrusion Detection System), IPS(Intrusion Prevention System), SIEM (Security Information and Event Management), and Firewalls solutions turned out to be ineffective. Given that Artificial Intelligence has got the potential to secure systems, various departments and organizations under the public sector can benefit from artificially intelligent systems to protect the confidentiality, integrity, and availability of an organization's information assets.

Keywords: Artificial Intelligence, Cybersecurity, Public Sector, Information Security, Artificial Intelligence in Public Sector

ABSTRAK

Kecerdasan buatan atau *Artificial Intelligence* mulai memainkan peran penting dalam keamanan perusahaan. Artificial Intelligence sedang digunakan untuk meningkatkan postur keamanan siber dari berbagai organisasi dan departemen di sektor publik. Saat ini, berbagai departemen di bawah sektor publik terus berada di bawah serangan ancaman online. Sektor publik telah menyaksikan peningkatan jumlah serangan siber selama beberapa dekade terakhir. Mempertimbangkan prioritas seperti mengamankan data dan mencegah pelanggaran, ada kebutuhan untuk menerapkan mekanisme cerdas baru untuk memerangi serangan siber sebagai sistem tradisional seperti IDS (*Intrusion Detection System*), IPS (*Intrusion Prevention System*), SIEM (*Security Information and Event Management*), dan solusi Firewall ternyata tidak efektif. Mengingat Artificial Intelligence memiliki potensi untuk mengamankan sistem, berbagai departemen dan organisasi di bawah sektor publik dapat memanfaatkan sistem kecerdasan buatan untuk melindungi kerahasiaan, integritas, dan ketersediaan aset informasi organisasi.

Kata kunci: Kecerdasan Buatan, Keamanan Siber, Sektor Publik, Keamanan Informasi, Artificial Intelligence di Sektor Publik