The Impact of Artificial Intelligence and Big Data in the Postal Sector

Mary Ifeoluwa Olawuyi

Nasarawa State University, Nasarawa, Nigeria, Nigerian Postal Service, Abuja, Nigeria

Corresponding author

Abstract

Background: Postal network world-wide is considered a national infrastructure for economic development and it plays a strategic role in the digital inclusion initiatives. Digital Economy propels the adoption of emerging technologies by providing services to citizens and other government organizations. Artificial intelligence tends to improve capacity, efficiency, flexibility and cost effectiveness of services. Delivery services are increasingly important in its ability to offer everyone access products translating to socio-economic and business benefits. The Post has therefore become a veritable tool for helping governments to successfully achieve its national transformation strategies.

Objectives: To examine how Artificial intelligence technology will drastically impact the normal operations of postal sectors by using drones, robotics, automated machine to communicate with customers, assist supply chain, improve transport services and logistics.

Methodology: The study was completely based on the objectives to survey individuals and businesses via convenience sample on primary data collected from 200 respondents through questionnaires. Survey impacts were divided into four categories: e-post and e-government; e-commerce; e-financial and payment solutions; and address verification.

Results and discussion: This digital transformation has been tested by verifying the citizen's addresses and it showed excellent performance. It was observed that the Post is the closest to the citizen and therefore can generate more data for Government decision making.

Conclusion and future work: Digitalization is fast reducing the business of processing data and transforming mailing activities around the world. Technologies have dramatically opened the way for small and medium-sized businesses to participate in digital economy through e-commerce. There are, however, a few shortcomings of the system which will require changes to existing legal and regulatory frameworks that will affect the postal sector. It is advised that the Post partners with the Government as a first alternative one stop shop to all public authority services due to the data managed by the Postal service.