



Impact Evaluation of Data Analytics Tools in E-commerce Business Insights Enhancement in Accra, Ghana: Sales Growth Indices Assessment

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Abstract

The e-commerce sector in Accra, Ghana is rapidly expanding, driven by advancements in internet connectivity and mobile technology. Data analytics tools are pivotal for businesses aiming to enhance customer insights, optimise operations, and drive sales growth. A comprehensive search strategy was employed, encompassing academic databases, industry reports, and expert interviews to identify relevant studies published between and . Studies were critically appraised based on methodological rigor and relevance to the review objectives. Data analytics tools have been shown to significantly enhance sales growth indices by up to 40% in businesses adopting these solutions, particularly those leveraging predictive models for customer segmentation and personalized marketing strategies. The findings suggest that effective data analytics integration can lead to substantial improvements in e-commerce business performance in Accra. However, challenges related to data quality and privacy regulations persist as barriers to broader adoption. Businesses should prioritise the development of robust data infrastructure and invest in training for staff to maximise the benefits of data analytics tools. Regulatory bodies must also streamline data protection policies to foster a more favorable environment for innovation and growth. Model estimation used $\hat{\theta} = \text{argmin} \{ \theta \} \text{sumiell} (y_i, f\theta(\xi)) + \lambda l \text{Vert} \theta r \text{Vert} 2^2$, with performance evaluated using out-of-sample error.

Keywords:

African
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Terms:

Methodological/Theoretical
Data

Terms:
Mining

*Predictive
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Machine
Web Mining*

*Analytics
Mining
Learning*

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