Abstract

Timekeeping mechanisms are relevant to organisational productivity. Moreover, biometric timekeeping methods are more robust and provide access to enhanced systems of employee motivation and monitoring. This study sought to investigate the impact of the adoption and usage of biometric time and attendance management systems among the Ghanaian business community in the Greater Accra Metropolis. The study involved a quantitative research, and its population was the entire registered membership of Association of Ghana Industries in the Greater Accra Region of Ghana made up of 845 members. A sample size of 200 was chosen. This represented a sample size of 23.6% of the total population. Primary and secondary data were used, and self-administered questionnaire was the instrument used in primary data collection. Statistical tools used for data analysis were goodness-of-fit (Chi-square) test, 2x2 contingency table and Friedman (K-related samples) test. Results of the study indicated that biometric timekeeping technologies are more secured than traditional timekeeping methods. Moreover, the use of biometric timekeeping technologies has better effect on organization labour cost as compared with traditional methods. Also, investment in biometric timekeeping technologies is worth the cost, and biometric hardware technologies are not susceptible to
frequent breakdown as compared to traditional methods. The study concludes that biometric timekeeping technology is more useful and applicable within the business community in Ghana. It is recommended therefore that its adoption should be encouraged in the various organisational setups in the economy.

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**Index Terms**

Computer Science

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The Adoption of Biometric Fingerprint Timekeeping Technology in the Ghanaian Business Community – Effectiveness and Impact

Keywords

Timekeeping  Biometric  Fingerprint  Timekeeping Methods  Technology  Acceptance.