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Green IT Practices in the Business Sector

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Abstract

The purpose of this study is to determine the level of application that the company has in terms of green IT practices. In this context, the study begins with a theoretical conceptual review, which serves to identify the different variables involved in green computing and to support the nine research hypotheses. The relationship between the identified constructs (hypothesis) generates a model of structural equations; the operationalization of the variables results in a questionnaire with 60 indicators to determine the situational status of various businesses with regard to green information technologies; the instrument is applied to 47 informants from various organizations in the city of

Cuenca in Ecuador. The model is evaluated with the software product Smart PLS; finally, with the results provided from the analysis of the model, it is concluded that “organizational strengths, policies, procedures (FO)” have a positive influence on “applications used (AP)”, “energy efficiency (EE)”, “print management and paper use (IP)” and “treatment and disposal of technological waste (RT)”. On the other hand, it is concluded that “used applications (AP)”, “energy efficiency (EE)” and “organizational strengths, policies, procedures (FO)”, “print management and paper use (IP)” and “treatment and disposal of technological waste (RT)” have no influence on “green IT in the organization (GIT)”. © 2022, The Author(s), under exclusive license to Springer Nature Singapore Pte Ltd.

Author keywords

Energy efficiency; Green computing; Structure equations

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