Green Computing: Awareness and Practice in a University Information Technology Department

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Abstract : The fact that ICTs is pervasive in today's society paradoxically also calls for the need for green computing. Green computing generally encompasses the study and practice of using Information and Communication Technology (ICT) resources effectively and efficiently without negatively affecting the environment. Since the emergence of this innovation, manufacturers and governmental bodies such as Energy Star and the United State of America's government have obviously invested many resources in ensuring the reality of green design, manufacture, and disposal of ICTs. However, the level of adherence to green use of ICTs among users have been less accounted for especially in developing ICT consuming nations. This paper, therefore, focuses on examining the awareness and practice of green computing among academics and students of the Information Technology Department of Durban University of Technology, Durban South Africa, in the context of green use of ICTs. This was achieved through a survey that involved the use of a questionnaire with four sections: (a) demography of respondents, (b) Awareness of green computing, (c) practices of green computing, and (d) attitude towards greener computing. One hundred and fifty (150) questionnaires were distributed, one hundred and twenty (125) were completed and collected for data analysis. Out of the one hundred and twenty-five (125) respondents, twenty-five percent (25%) were academics while the remaining seventy-five percent (75%) were students. The result showed a higher level of awareness of green computing among academics when compared to the students. Green computing practices are also shown to be highly adhered to among academics only. However, interestingly, the students were found to be more enthusiastic towards greener computing in the future. The study, therefore, suggests that the awareness of green computing should be further strengthened among students from the curriculum point of view in order to improve on the greener use of ICTs in universities especially in developing countries.

Keywords : awareness, green computing, green use, information technology
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