World Academy of Science, Engineering and Technology International Journal of Environmental and Ecological Engineering Vol:16, No:11, 2022

IAM Smart - A Sustainable Way to Reduce Plastics in Organizations

Authors: Krithika Kumaragurubaran, Mannu Thareja

Abstract : Saving our planet Earth is the responsibility of every human being. Global warming and carbon emissions are killing our planet. We must adopt sustainable practices to give our future generations an equal opportunity to enjoy this planet Earth, our home. One of the most used unsustainable materials is plastic. Plastics are used everywhere. They are cheap, durable, strong, waterproof, non-corrosive with a long life. So longthat it makes plastic unsustainable. With this paper, we want to bring awareness on the usage of plastic in the organizations and how to reduce it by adopting sustainable practices powered by technology. We have taken a case study on the usage of photo ID cards, which are commonly used for authentication and authorization. These ID cards are used by employees or visitors to get access to the restricted areas inside the office buildings. The scale of these plastic cards can be in thousands for a bigger organization. This paper proposes smart alternatives to Identity and Access Management (IAM) which could replace the traditional method of using plastic ID cards. Further, the proposed solution is secure with multi-factor authentication (MFA), cost effective as there is no need to manage the supply chain of ID cards, provides instant IAM with self-service, and has the convenience of smart phone. Smart IAM is not only user friendly however also environment friendly.

Keywords: sustainability, reduce plastic, IAM (Identity and Access Management), multi-factor authentication

Conference Title: ICSBSBM 2022: International Conference on Sustainability in Business and Sustainable Business Models

Conference Location: Amsterdam, Netherlands Conference Dates: November 03-04, 2022