

# Online Advertising and its Security and Privacy Concerns

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**Abstract—** Commercial advertising has greatly benefitted from Internet services and online advertising can even be considered as the foundation of web economy. However, despite the availability of many books on how to create, use and make profit from online advertisement; there is little in-depth study on its true nature, security and privacy concerns. Through this research, the authors were able to establish an in-depth understanding of online advertising by collecting and analyzing numerous data on online advertising, with the hope that it could serve as a basis for further study on the field. The authors have also examined the security and privacy concerns of online advertising and the various gimmicks used to victimize innocent people. On the positive side, the paper explains the attractiveness of free online advertising services and the mechanism through which website owners profit from hosting online advertisements despite the fact that neither advertisers nor users pay for the services. On the negative side, the paper shows how online advertising hosts could be victimized by some shroud users for their money making purposes by continuous clicking of online advertisements without any intention of purchase. It also cites cases in which some website owners have marketed users' private information behind the scene. The paper concludes by highlighting pros and cons of online advertising, i.e., despite its numerous advantages, such as efficiency and range, it presents many dangers to advertisers, providers, website owners, and users.

**Keyword—** Online Advertising, Web Economy, Internet Services, Security, Privacy



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