

Password Security Concerns and Practices of Online Account Users: Case Study in Gampaha District, Sri Lanka

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With technological advancement, usage of internet and its applications are increasing rapidly. Because of that, number of online account users are also increasing. Although there are number of authentication technique, the most usable and popular authentication mechanism is using password protection mechanism. Same time data protection is also a critical problem. There are many threats for data of online users. Most user passwords are weak. Due to that reason attacker can easily break the password using dictionary attack, password guessing and social engineering attack and so on. This study has been evaluated password security concern and practices of online users. The objectives of this study was to identify relationship between the online users' password security concerns and practices with their education level, IT Skill and social factors. Hypothesis for the study was derived from these objectives. Conceptual framework has been developed using factors identify from literature survey. Independent variables are education level, IT skill and social factors. Dependent variable is password security concern and practices. Sample has at least one year experience of using password protecting online account. Simple random sample technique was used to select sample. Sample size was 180. Questioner was used to collect data. Survey querying: general demographic information, types and number of different password protected accounts maintained, internet usage behaviors (frequency, duration and longevity of use), actual practices used in generating, storing and using passwords and practices believed they should use in generating and storing passwords. Regression model was used to identify relationships. This study identify the relationships between the variables, general password characteristics of users, password construction practices/strategies of users and user perceptions of password construction practices that should be used.

Key words: Password Practices, Password Concern, Online User Account

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