

Types and Wi-Fi capabilities of Mobile Devices Used by Undergraduates: a Case from University of Ruhuna

I.D.K.L. Fernando^a, P.G. Nishantha^b and K.H. Ramanayaka^c Library, University of Ruhuna

^kusala@lib.ruh.ac.lk bnishantha84@lib.ruh.ac.lk ckokila@cc.ruh.ac.lk

Abstract

Use of mobile devices such as Smart phones (SMP), Tablets (TAB), and Feature phones (FP) to access internet through wireless Ethernet (Wi-Fi) has been popular among undergraduates. This study aimed to investigate the trends of using these mobile devices among undergraduates. Employing a cross sectional survey, data were collected from a sample of 227 undergraduates selected proportionately from the faculties. Data were gathered during one month period. When considering the types of mobile devices used, 70% of respondents form Faculty of Humanities and Social Sciences (HSS) and 75% from Faculty of Management and Finance (FMF) are using FPs. Respondents form Faculty of Marine Sciences and Technology (FMST) and Faculty of Science (FOS) are using SMPs 60% and 48% respectively. Use of FPs of females (38%) is higher than males (26%). 3% of males from all faculties mostly use TABs while 16% uses SMPs. Use of Wi-Fi enabled mobile devices to access internet showed a statistically significant difference (p<0.005) among faculties. Multiple comparison through Dunns Bonferroni approach shows a significant difference (p<0.05) in the Wi-Fi enabled devices use between faculties. There was a significant difference ($\alpha = 0.015$) between HSS and FOS while a significant difference (α = 0.031) shown between FOS and FMF. Students from both faculties, FMF and HSS are using less number of Wi-Fi enabled devices than the students in the FOS. Students from the FOS may seek for more online information rather than the students from Humanities. 34% of males and 27% of females got the ability to access to Wi-Fi network from their mobile devices. It can conclude that there are three categories of undergraduates (when considering the mobile use) SMP users, TAB users and FP users. Further the TAB and SMP user groups can be considered as advance mobile users who use SMP and TABs with Wi-Fi facility to access internet services and web applications. Thus the ratio of advance mobile users to FP users is highly important in future library management practices. Thus factors such as gender ratio, faculty, and the availability of wireless connectivity should be considered when implementing a mobile dependent services through an academic library. The outcome of the research will facilitate the library administration of the University of Ruhuna and other academic institutions to determine the right time to introduce new mobile driven services and factors that could be considered prior to introduce such services to academia.

Keywords: mobile apps in education, new library services, mobile devices usage, undergraduate mobile device usage