

## ABSTRACT

Emerging trend of road accidents in the world accounts for a considerable number of deaths which the technology advancement, safety instructions and law enforcements are still unable to control it effectively. Sri Lanka is also faced with rising trend of the road accidents yearly. Despite the fact that the vehicle population and the drivers' population is an increasing trend, the infrastructure development and safety of the drivers are lapses in Sri Lanka.

E-Government concepts have been initiated to enhance the efficiency and the effectiveness of the services by both public and private sectors in Sri Lanka. In Sri Lanka context manual instructions are placed besides the roads to mitigate the road accidents which is less effective due to drivers' need to reach the area. Some restrictions of manual instructions are weather conditions, traffics, visibility at night and internal factors. Since commercially available E-Applications are installed with predefined instructions which are less effective than an active mode of E-Applications.

Despite most of the E-Applications in world enhance the effectiveness and efficiency than a manual form of systems, the available safety applications and instructions are unable to reduce the increasing trend of the road accidents. Due to these facts, it is evident that there is a gap between technology acceptance and drivers' contribution to mitigating the road accidents. The drivers' contribution was identified as deciding factor of avoiding road accidents in previous studies.

Due to limited studies which have been concentrated on drivers' contribution to mitigating the road accidents, the researcher evaluated the acceptance of E-Application in terms of E-Readiness. E-Literacy, Technology, Network coverage and internal factors were identified as independent variables. Usefulness of E-Application was identified as the dependent variable and quantitative research followed to test the hypothesis. Since all four variables positively accepted, the drivers' E-Readiness is in the accepted level to initiate E-Application in Sri Lanka.

Considering the outcomes of the research, it is recommended to initiate an E-Application with responsible authority to mitigate the road accidents in Sri Lanka. The drivers' safety, public safety, free from property damages, free from air pollution, and minimize traffic density etc. can be considered as benefits. Since the younger generation in Sri Lanka has the highest digital literacy where applying E-Application will be future invest.