

Abstract

Rural areas of Tanzania are still disadvantaged in terms of diffusion of IP-based services; this is due to lack of Information and Communication Technology (ICT) infrastructures, especially lack of connectivity. One of the limitations for connectivity problems in rural areas of Tanzania is the high cost to establish infrastructures for IP-based services [1-2]. However the cost of connectivity varies from one technology to the other and at the same time, the cost is also different from one operator (service provider) to another within the country. This paper presents development of software system to calculate cost of connectivity to rural areas of Tanzania. The system is developed to make an easy access of connectivity cost from different technologies and different operators. The development of the calculator follows the V-model software development lifecycle. The calculator is used to evaluate the economic viability of different technologies considered as being potential candidates to provide rural connectivity. In this paper, the evaluation is based on the techno-economic analysis approach.

Keywords

rural, connectivity, cost, V-model, technoeconomic analysis.