NATIONAL UNIVERSITY OF SCIENCE AND TECHNOLOGY

Faculty of Applied Sciences

Computer Science Department

Topic: Software Defined Network Programmability

Title: An Assessment of software defined network programmability implementation in Zimbabwe Service Provider Networks.
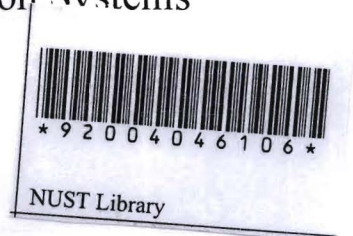
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Abstract

Nowadays next generation networks are taking over from traditional approaches, and software defined network automation and programmability is one of the concept of next generation networking that is being implemented to overcome the shortcomings of traditional networking. The problems associated with traditional approaches led to the introduction of software defined network which implements automation and programmability to network management. Service provider networks in Zimbabwe have to evolve and adopt next generation technologies in order to improve network performance and service provision. The study focuses on Zimbabwe service providers which include Econet, Netone and Telecel, focusing mainly on the technical departments of respective organisations. The research paper examines the preparedness of service providers to adopt software defined network, the perception of service providers towards software defined networking and a comparison to global adoption trends of software defined network programmability and automation. The research uses a mixed approach method through a questionnaire technique to obtain quantitative and qualitative data. The technology-organisation-environment framework will be used as the framework to provide an in-depth analysis of the three aspects of technology, environment and organisation that affect adoption of new technologies.