ABSTRACT

Health is an important aspect of human life, and technological developments have brought significant changes to the health sector. In Indonesia, the health technology sector or "Health Tech" has grown rapidly in recent years. This research aims to conduct an analysis of Techno-Economics and Regulations related to Health Tech in Indonesia.

Regulations related to Health Tech in Indonesia are still in the development stage, and this research provides insight into the regulatory framework needed. Regulation is needed to strike a balance between facilitating innovation in Health Tech and protecting patient rights and personal data. This research also highlights the importance of collaboration between government, the private sector and society in developing effective regulations. Health Tech also has the potential to increase economic growth through job creation and increased productivity in the health sector. However, Health Tech development also requires significant investment in infrastructure and workforce training.

In conclusion, Technology Analysis explains in detail the simulation results of the Health Tech infrastructure network topology design through the Qos (Quality of Service) Parameter with a delay category index of "very good" which is 2,4415 s, a jitter category index of "good" which is 2,4808 s, and a throughput category index of "good" which is 2,580 Mbps. From the results that have been tested, it can be concluded that the Health Tech infrastructure network topology design that was tested has good and stable optimization when sending data through the core switch. In the Economic Analysis, the NPV value was obtained of Rp. 2,798,289,898.85, an IRR value of 24%. For a Payback Period of 7 Years and a PI of 1.63. So with this it can be concluded that this Health Tech business is worth continuing. Meanwhile, from the Regulatory Analysis side, Apps should only access data relevant to medical purposes and should not access additional data that is not required without the user's explicit consent. Strict restrictions on third-party apps that want to access health data from the main app, including providing audits for them.

Keywords: Health Tech, Techno-Economics, Regulation