ABSTRAK

Pecandu TikTok yaitu pembuat konten, yang berbelanja, dan yang menonton konten TikTok di Indonesia, terus meningkat setiap tahun. Tiap pecandu TikTok ini dapat menimbulkan dampak negatif yang berbeda. Oleh karena itu, perlu diketahui kelompok pecandu TikTok yang paling berpengaruh terhadap peningkatan pengguna TikTok di Indonesia dan sekaligus memberikan pengaruh terbesar terhadap dampak negatif yang ditimbulkan. Pada penelitian ini, model $SEI_1I_2I_3R$ pertama kali dikonstruksi. Analisis kestabilan titik ekuilibrium model dilakukan dengan menentukan nilai eigen dan matriks Jacobian dan diperoleh titik ekuilibrium bebas pengaruh pecandu Tik Tok stabil asimtotik jika $R0 = 0,941019 < 1$ serta titik ekuilibrium endemik adalah stabil asimtotik jika $R0 = 1,011756 > 1$. Simulasi numerik dilakukan dengan menggunakan software MAPLE.

Kata kunci: *Pengguna TikTok, Model $SEI_1I_2I_3R$, Kestabilan Titik Ekuilibrium, Simulasi Numerik.*

ABSTRACT

TikTok addicts, namely content creators, those who shop, and those who watch TikTok content in Indonesia, continue to increase yearly. Each TikTok addict can have a different negative impact. Therefore, it is necessary to know which of these people with an addiction has the most influence on the increase in TikTok users in Indonesia and, at the same time, has the greatest influence on the negative impacts that arise. In this research, the SEI1I2I3R mathematical model was first constructed. Analysis of the stability of the model's equilibrium point was carried out by determining the eigenvalues and Jacobian matrix and obtained that the equilibrium point free from the influence of Tik Tok addicts was asymptotically stable if R0=0.941019¡1 and the endemic equilibrium point was asymptotically stable if R0= 1.011756¿1. Numerical simulations were carried out using MAPLE software.

Keywords: *TikTok User, TikTok Addict, Mathematical Models, Basic Reproduction Numbers, Numerical Simulation.*