A model for the growth of infection

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Abstract:

The phenomenon of growth is a widely applicable and investigative topic in various disciplines. An economist would study it in the light of demand and supply. A manager would like to study it as an organizational objective and adhere to it. A statistician is interested in it for the demographic studies. Biologists are interested in the study of the growth of infection in plants, animals and human beings so that suitable preventive measures be taken and adequate treatment be done. In this paper a model for the growth of infection is constructed. The model, however, could be used (or constructed on similar lines) for the general phenomenon of growth. In the first section we introduce the phenomenon of growth of infection. In section two we construct a model for the growth of infection such that it levels off (reaches the steady state or becomes asymptotic) at 1 and mention various measures that could be obtained for the undertaken projects. In section three we study a general case of the growth of infection. Although the studies of section two are particular cases of section three we study them first because of the certainty of some events, especially with the living organism.