The study sought to investigate the determinants of ICT adoption in the hotel industry in Kenya. The study was carried out in Mount Kenya tourist circuit. To understand the determinants critical adoption of ICT, the study identified five objectives namely: Examine the influence of organizations’ resources on adoption of ICT in the hotel industry: Asses the role of employee characteristics on adoption of ICT in the hotel industry: Investigate the role of the size of the organization on the adoption of ICT. The study was guided by diffusion of innovation theory which identifies, the innovation itself, the communication channels used to spread information about the innovation, time and the nature of the group to which it is introduced as the most prominent factors influencing information technology adoption. To achieve the objective, the study adopted a survey design with a descriptive approach. A sample of 124 managers was drawn through simple random sampling techniques from a target population of the 180 hotels in Mount Kenya tourists’ circuit. The analysis was conducted using SPSS where descriptive statistics were also generated including frequency and mean. Inferential statistics were also generated including regression coefficient, ANOVA and eventually and information technology adoption model by hotel was generated. The findings of the study indicate the fact that the five factors are important though in different ways. Singly the factors may not adequately influence IT adoption, but the combined effects were found to be very strong accounting for about 87% of IT adoption.