

ELECTRONIC TOLL COLLECTION SYSTEM CASE STUDY

BACKGROUND

Electronic Toll Collection System came into existence when the problem of delay of vehicles over the toll roads aroused. The stopping of vehicles on the toll lanes and collecting the toll rates via cash lead to a lot of wastage of time. But when this system was introduced the problem was solved. The toll can be paid by the customer through credit card bills as well. The bill may be mailed to the address where the car licence plate number is registered. This system reduced the jams over the toll roads which proved out to be very beneficial.

SOLUTION

Electronic toll collection system allows the vehicle drivers to pass the toll tax booths without stopping at the toll booths. The toll amount is deducted from the RFID card. This RFID card is rechargeable and account is stored on the records. The Radio Frequency Identification is a technology with the help of which the human beings vehicles etc are tracked with the help of radio frequency signals.

BENEFITS

1. It leads to payment flexibility.
2. It helps in emission control
3. It is a time saving technology

FEATURES

Gone are the days when people used to sit on toll booths to collect the toll. This technology has probably lead to advancement in the life of people. RFID is the technology which is same as barcoding. It uses Automatic Identification and Data Capture. This technology automatically identifies the object. Further it collects the data about the object. Afterwards it enters those data about the object with little or no human intervention. RFID systems consist of three components: an RFID tag or smart label, an RFID reader, and an antenna. RFID tags contain an integrated circuit and an antenna, which are used to transmit data to the RFID reader (also called an interrogator). In this way this system works effectively.

