## Importance of RFID based Circulation System in the Current Scenario: a study

Chanda, A<sup>1</sup>\*

<sup>1</sup>Bahona College, Jorhat, Assam, India \*anupamchnd1988@gmail.com

## Abstract

RFID (Radio Frequency Identification) is a system that uses radio waves to identify a tagged object(s); the object(s) must be tagged with an RFID tag. It is used in the library for various purposes like circulation, stock verification, and theft detection, etc. The RFID system has two basic parts, i.e., tags and readers. The reader gives off radio waves and gets signals back from the RFID tag, while the tag uses radio waves to connect and identity and other information. The most commonly housekeeping operation used by the libraries is RFID based circulation system. There is two way of RFID-based circulation system: by using a staff station or by using a self-issue-return kiosk. In the staff station, patrons need to put their books, and they also need to put their RFID smart card in the card reader, then the staff present in the circulation desk have to click the issue tab available in the RFID middleware software, after that the books will automatically be issued to the patron. The process is the same in the case of a self-issue-return kiosk, but the only difference is that patrons can issue/return the book(s) by themselves. The study aims to provide a detailed process, how the RFID-based circulation system works, and its importance in the library in the current scenario. An experimental method of research has been used to conduct the study. The researcher has implemented an RFID system in the library, and detailed information has been collected based on the experiment during the installation and use of the RFID system in the library. The study found that RFID-based circulation systems provide quick services which save the time of the patrons as well as library staff. The study also found that there is less margin of error in the case of RFIDbased circulation systems in the library.

**Keywords:** *RFID*, *Circulation process*, *Staff station*, *Self-issue-return kiosk*, *Library staff*.