Application of RFID and Mobile Technology on Blind Library System (RFMB) (Case Study in Blind Library of Shiraz city)

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Abstract

Purpose: According to the problems of visually impaired people in the library, this research aims to introduce a model with respect to existing methods, using RFID technology and cell phone to resolve the problem of searching books without the librarian guidance and investigates the possibility of using this technology in libraries that have open stack. According to the current design, a model is proposed for implementation in blind special libraries (Shiraz Blind Library as the case study).

Methodology: The modeling approach was used for implementation of the research. A collection of hardware equipments and related software, library studies and databases acted as dataset for this research. By means of the mentioned data, the model was created and analyzed through simulation.

Findings: In proposed model, reader hardware reads RFID tags identifier and sends the prepared information to the cell phone by USB cable. The prepared information searches the indexed information of books that have same codes and next to it, calls the player to play the sound of the targeted book information.

Originality/Value: According to Article 9 of the International Convention of People with Disabilities, and UNESCO Public Library Manifesto in 1994 ,and authors' investigations, there is no similar pattern of integration of RFID technology and cell phone. The proposed model with relatively low cost of needed soft and hardware can help blinds remarkably.

Keywords: RFID Technology and Cell Phone, Public Libraries, the Blind Library, Library Services and Special Groups.