Analysis of the Physical Behavior of Library Users in Reading Rooms through GIS: A Case Study of the Central Library of Tehran University

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Abstract : Measuring the extent of daily use of the libraries study space is of utmost significance in order to develop, re-organize and maintain the efficiency of the study space. The current study aimed to employ GIS in analyzing the study halls space of the document center and central library of Tehran University and determine the extent of use of the study chairs and desks by the students-intended users. This combination of survey methods - descriptive design system. In order to collect the required data and a description of the method, To implement and entering data into ArcGIS software. It also analyzes the data and displays the results on the library floor map design method were used. And spatial database design and plan has been done at the Central Library of Tehran University through the amount of space used by members of the Library and Information halls plans. Results showed that Biruni's hall is allocated the highest occupancy rate to tables and chairs compared to other halls. In the Hall of Science and Technology, with an average occupancy rate of 0.39 in the tables represents the lowest users and Rashid al-Dins hall, and Science and Technology's hall with an average occupancy rate (0.40) represents the lowest users of seats. In this study, the comparison of the space is occupied at different period as a study's hall in the morning, evenings, afternoons, and several months was performed through GIS. This system analyzed the space relationship effectively and efficiently. The output of this study can be used by administrators and librarians to determine the exact amount of using the Equipment of study halls and librarians can use the output map to design more efficient space at the library.

Keywords : geospatial information system, spatial analysis, reading room, academic libraries, library's user, central library of Tehran university