

## Evaluating the Performance of Public Libraries in Provinces by Data Envelopment Analysis (DEA)

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### Abstract

**Purpose:** Making use of the quantitative method of data envelopment analysis (DEA), this research tries to calculate the efficiency and ranking of public libraries in Iranian provinces in 2008.

**Methodology:** This research is an applied study and was conducted as survey. Data collection was performed from internet. The time interval of the used data was the year 2008 and data were classified with respect to province. Public libraries located in 30 Iranian provinces were evaluated in terms of several input indices, including the number of books, literate population of each province, the number of libraries in each province, the number of librarians, the number of seats, and total number of audiovisual materials in libraries of each province, and also with regard to several output indices, including total number of members, the number of books lent, and the number of clients visiting each library of the provinces. Excel software was used for data collection, while analyzing and solving the model was accomplished using Excel DEA Solver software.

**Findings:** According to the results, the libraries in 15 provinces out of the whole 30 provinces were efficient, whereas the others were inefficient. Using super-efficiency score, it was found that the highest super-efficiency scores among the provinces with efficient libraries belonged in descending order to Ilam, South Khorasan, and Semnan, while among the inefficient provinces, Bushehr, Qom, and Kordestan got the lowest super-efficiency scores.

**Originality/Value:** Performance evaluation has gained a specific position in the library and information sciences literature and has been a matter of debate among the experts. Through employing a quantitative method which is reliable for performance evaluation, the present study tries to evaluate the performance of public libraries in Iranian provinces and propose applied strategies to promote their performance level.

**Keywords:** Performance evaluation; Public libraries; Decision-making unit; Data Envelopment Analysis (DEA)