## Arab International Journal of library and Information Studies Vol. 1, No. 3 July 2022

Data science: the science of the future

### Rebhi Mustafa Alyan

Prof. of library and Information science
Faculty of Educational science – University of Jourdan

#### **Abstract:**

Data science is one of the new sciences that emerged at the beginning of the twenty-first century in developed countries, especially the United States of America, which teaches it at the bachelor's, master's and doctoral levels. The study deals with this new discipline, the data scientist, the pros and cons of studying data science, the most famous universities that teach it, and the Microsoft professional program in data science.

<u>Keywords:</u> Data science; Data scientists; Data analysts; data science Programs.

# AI techniques and their effects on the effectiveness of the content and services of Information institutions: an exploratory study

### **Ahmed Farag Ahmed**

Professor and Head of the Department of Libraries, Documents and Information, Assiut University

#### **Zeinab Mohamed Hesham Salem**

Department of Libraries, Documents and Information, Assiut University

#### **Abstract:**

Information institutions have recently witnessed the launch of the fourth industrial revolution, which based on the technologies, and applications of the innovated Artificial Intelligence characterized by a radical difference if compared to the precedent technologies in terms of the depth of their impact, the degree of their intertwining or their relationship with a variety of fields. Therefore, they regarded as technologies based on the knowledge and technology some of whose domains are robotics, Nanotechnology, Quantum Computing, Biotechnology, Internet of Things, Big Data, 3D Printing, and Autonomous Vehicles etc.

The recent study intended to highlight the most prominent features of the evolution of the four industrial revolutions technologies until the advent of the AI applications, and to explore the concepts, features and characteristics connected to these applications.

The recent study also aims to shed light on the potential views and perspectives of the current trends pertaining to the AI applications and to demonstrate their influence on the effectiveness of managing the digital content and the services rendered to the information institutions and to focus on the features of this influence in light of the main tasks which are of great strategic importance to the information institutions. In addition, the study has demonstrated the techniques to apply AI technologies in the management of the digital content and reinforcing the services rendered to the information institutions through displaying applied models of the sectors and departments in which AI technologies can be apply.

**Keywords:** Fourth industrial revolution; Information institutions services; AI applications; Machine learning; Interactive information services

## Data Research Management in the ISI Web of Science database: an analytical study using bibliometric and visual analysis

#### Dr. Soheir Abdel Baset Eid

Department of Information Sciences Faculty of Arts - Beni Suef University

#### **Abstract:**

This study aims to monitor and analyze Literature in the field of "research data management" Indexed in the ISI Web of Science database. The Study used Bibliometric methods to study the different distributions of this Literature. It also used VOS viewer to visualize and analyze data in order to verify the co-occurrence of keywords in Literature units. The study showed that the year 2019 witnessed the highest publication rate of 88 works, and that journal articles are the most common form of information sources, with a number of 379 articles. The field of library and information Science ranked first among the subject areas published in the research data management with 310 works.

In terms of publishing places, the United States of America came at the fore with 138 works, the English language topped the list with 89.56%, and the Portuguese author João Rocha da Silva, the authors are most productive with 15 works, and the article is titled Panorama: A Targeted Proteomics Knowledge Base, published in 2014, top Articles Cited, based on keyword networks that show the most frequent terms as well as the base term Research Data Management The terms: library, research data, data processing, and FAIR Principles for data are related topics to the term research data management.

**<u>Keywords</u>**: Research data management; Bibliometric analysis; Visual analysis; Keyword network.

# Quantitative and qualitative trends for academic periodicals articles at Sohag University Amal Mahmoud Ahmed Mehawed

#### **Abstract:**

The bibliometric study of academic periodicals at Sohag University included the productivity of preparing periodicals and articles. The study found that the numbers and articles of each periodical varied from one college to another with varying productivity. Researchers, faculty and the field of knowledge to which the periodical belongs varied, The total number of academic periodicals published by the faculty of Sohag University was two hundred and forty, with a productivity of four thousand and four hundred and forty articles. This productivity of articles is considerable, and academic periodicals of the University are given great scientific value both domestically and internationally.

Some academic periodicals agree on the manner in which they are produced; Some of them are published twice a year - semi-annually as the periodical Faculty of Arts, Commerce and Medicine and the Journal of Environmental Studies and Sports Education, and some four times a year - quarterly periodicals as the three Faculty of Education and the periodical Faculty of Agriculture.

The majority of departments for colleges issued by them are academic periodicals whose authors have published articles, and scientific departments in academic periodicals for theoretical colleges have outperformed academic periodicals for practical colleges in total (3137) Articles, whereas total articles for practical colleges amounted to one thousand one hundred seventy-two (1172) is also the dominant language in the academic periodicals of practical colleges such as Medicine and Sciences and the College of Agriculture has a total of 27 articles in English out of a total of 39 articles with 69.23% of the articles of the Journal of Agriculture.

**Keywords:** Academic periodicals; Bibliometric study

## The Reference service in Sohag University Libraries: a field study

#### Israa Ahmed Hussain

#### **Abstract:**

The study aims to identify the reality of the reference services provided in Sohag University libraries and the reality of general and specialized references acquired in the libraries, by analyzing the data obtained from the two questionnaires that were distributed to the study sample.

The first questionnaire is directed to the employees of Sohag University libraries, where this questionnaire aims to identify the reference services provided in the libraries of Sohag University and the extent of their contribution to the development of the educational and research process at the university, and to know the extent of staff satisfaction with the work environment in the library and the difficulties they face in dealing with the users.

The second questionnaire is directed to the users of libraries, who are represented according to the study sample of faculty members and their assistants at Sohag University. The category of faculty members and their assistants was chosen because they are the category most in need of references for use in preparing scientific research, whether to obtain the master's and doctoral degrees or to obtain the degree of promotion. It provides them with accurate and clear information.

**<u>Keywords</u>**: References; Reference sources; Reference service; Digital reference service.

# Documents of Diwan Al Kanater Al Khayrieya (1262 – 1302 AH / 1845 – 1884 AD): A Diplomatic and archival study

### Walid Salem Mohammed

#### **Abstract:**

This period (1845-1884) is considered one of the most important periods in the history of irrigation and its projects in Egypt Where Muhammad Ali Pasha and his successors paid great attention to agriculture, and one of the effects of that shift from Basin irrigation to permanent irrigation by constructing canals, dams and barrages, and these projects culminated in the Al Kanater Al Khayrieya Project, and a bureau was established for it specialized in construction operations and architecture, connected with other Egyptian offices, and documents of great importance emerged from this that clarified the stages that the arches went through since they were an idea until they became a historical monument.

The study dealt with the history of the construction of the arches, from the beginning of the project to the abolition of the Diwan, It also dealt with an archival study that defined the study documents, their places of preservation, and their physical condition, as well as the arrangement and archival description of these documents. The diplomatic study dealt with the external and internal characteristics of the documents, and finally the results and recommendations of the study.

**Keywords:** Al Kanater Al khayria; Irrigation projects; Study of Archive; Diplomatic study; Water ways; Turbines. The substance irrigation.