

Chapter Two

Theoretical background

2.1 Introduction

In this chapter, the basic concepts and the general idea of the project such as a definition of the arbitration process and linguistic definition of researches are introduced. Moreover, a classification of arbitration problems and publication bases in the scientific Journals and the mechanism of arbitration process as well as clarifying some analogous systems and the system benefits and then the used software ways in this project method are presented. In addition to that the similar systems.

2.2 Research arbitration

The process of scientific researches arbitration has appeared in the mid-20th century and the philosophical transaction of the royal society is considered as the first Journal which admit the arbitration officially. At the present time, the arbitrator is the heart of scientific publishing process. McKnight and Price conducted a study in (1999), 94% of the respondents reported that the arbitration is important in printed Journals. Moreover, the survey studies results showed that Association of Learned and Professional Society Publishers (ALPSP) 2002 and Rowland conducted that 81% of authors and 81% of leaders still consider the arbitration very important. The staff of university considered the arbitrated researches is important in the promotion. Palmer, Wrenkx&Hahn(speier,1999) and UK research councils 2006 found that 93% from universities researchers think that arbitration is important and it has a basic role in the academic life and they estimate it. In spite of this estimate, it has errors. It is difficult to find qualified arbitrator. Most of arbitrators are always busy with talented arbitral activities for researches councils.

The scientific research and its methodologies stir up much arguments and discussions between the person who said that all infrastructures are necessarily ensured, and the other one believes in possibility and starting according to availability and finishing it gradually with keeping up with research process. The countries can't be developed unless they have the creative researcher and the scientific research role in the development.

The talk about the scientific research can't be finished, as long as there is publishing life. The great role of the countries development and their strength is the scientific research which interferes in each pulse in life. In the short, there is a say:

The real independence is for those who are self-independent and self-produced for everything from industry, agriculture and technology i.e. who has the top place in the scientific research.

In fact, the recent years. Witnessed great arabic efforts, which must be pursued in order to achieve real leap in the scientific research to become as a concern for researchers and specialists. The scientific research and the researcher face a lot of problems in arabic countries as there isn't enough budget for the researcher and there aren't infrastructures like the scientific Journals and participating in scientific international arabic demonstration and there isn't scientific reference which belong to the mother language in existing arabising and translation. The scientific arabic corporation is absent and there isn't a relation between the institutions of the universities and everyone is alone from others, so this causes the administrative difficulty in moving from place to another one and the livelihood and social life for the scientific arabic researcher.

The government's point of view centers about the lack of the influence in the development and the scientific research has positive fruits, seriousness and industriousness in a lot of cases, also the lack of impartiality, objectivism and arbitration lead to bad regressive atmosphere doesn't help the development in any case.

We aren't at the position of making decisions or instructions, in this field and this isn't scientific methodological study task of the scientific arbitration process, and its role in evaluation the scientific research, it's role only is to give light for the reality and open the doors for the horizons of the future to better scientific research process. In order to be able to appoint the correct paths for the research, and show the extent of it's effectiveness and the safety of carried out research in compare with the international scientific data and the extent of it's service for the whole development in the country [4].

2.3 Basic concepts

The definition of researches arbitration process:- Elsevier company for publishing defined the arbitration as experts participating process in some fields of reading new research and make sure of it's accuracy and sureness. Arbitration in some fields is the dividing line between the judgment on what is scientific speculative. The arbitration show the submitted studies and requests from authors to achieve their major standards and get to scientific objectivity [2].

2.3.1 Classification of arbitration problems

There are many of problems face the arbitration process and research publication of the specialized journals. These problems stem from many sources cause hindrance in publication and researches arbitration. Williamson (2002) classified arbitration problems as follows:

- 1- self-assertion:- the editor refuses the research without sending it to the arbitrators, and choosing the editor for arbitrators.
- 2- Bias: - the distinction against authors ,due to nationality, native language, sex and the university to which he belongs . It arises when arbitrators and authors are competitors or when they belong to opposite universities in the intellectual schools .
- 3- Exploitation, means that the author published a large number of studies from one research or duplicate of the publication and omission or reduction the degree of young authors who plagiarize the others' work. The arbitrator's exploitation includes unpublished which is sent to them and they delay the publication of opponent's research intentionally.
- 4- the arbitrator's inability to find weaknesses point in the research.
- 5- The author's forgery and misconduct. They claim the results and data and they claim that of these results while these results are not theirs [4][1].

2.3.2 arbitration policy

Generally speaking, The common rules of arbitration policy can be given as follows:-

- 1-All researchers and publishing studies are subjected to the arbitration by experienced specialist who have scientific status of excellence.
- 2-The journal keen on marking a list of accredited arbitrators in the Journal expertise . and update this list continuously in the light of experience .
- 3- The editorial board “journal management“ have the right of the first exam on the research and report it's eligibility to the arbitration and the arbitrator's opinion is mandatory for the head of the editorial board .
- 4-The research must have a new objective and it didn't publish before, and it wasn't published by any scientific institution.
- 5-The researches, which arbitrators suggest to make modifications returned to their owners to make modification or additions before the publication.
- 6-The researches that aren't comply the publication rules and their condition must not be returned to their owner.
- 7-The journal has to commit to tell author to take his research and record it upon arrival. And then inform him if it is acceptable or not [3].

2.3.3 Arbitration mechanism

At the beginning, The mechanism is explained in general. the author present his special research to the journal management, which assign an editor for this research or essay . Next the editor will the reviewers for this research according to their majors. Then the, reviewers will revise the presented research and evaluate it and return it to the editor. After that , the editor will see the reviewers' remarks and if these remark indicate this research , it doesn't need necessary remarks from the authors , the editor will decide to accept this research or essay and send it to the journal management which take the last decision of research acceptance and tell the editor to accept his research. If the Reviewers remarks indicate that research needs necessary remark, the editor's will not accept the research and tell the authors that it is necessary to make modify, the editor's decision will not accept the research and tell the author that it is necessary to make modify on the research and present it again. This step will continue in repetition till indicate the reviewers remarks and the research is good and it doesn't need to be modified [5].

2.4 Similar Systems

There are many similar systems for this system, they support us for getting information and the necessary procedure in the process of presentation and research revision . these systems are:-

- 1-The system of researches journal in Springer organization as Applied intelligence Journal.
- 2- The system of research journal in Elsevier organization.

2.5 System Benefit

This system offers benefits whether these benefits belong to the same person who submit the research or the institution which will use this system. these benefits are:

- 1-To exploitation time “ no waste in the time “ and the effort and coast
- 2- To facilitate communication among the parties of the journal editors , reviewers , Authors and journal management .
- 3-To facilitate the Author to present and know the case of the research through the web instead of going to the journal headquarter .
- 4-The possibility of the journal management in any time and any place .
- 5- It is Easy to add the journal to list of international journal.

2.6 System development tools

This a project has been developed using the suitable software tools. Based on our preliminary investigation, we found that the language of ASP.NET(active Server Page) and connected between Data Base SQL Server which is one of the best language in setting up and developing the web sit . you can choose the ASP.NET language because it has the following traits :

- 1-It's information pages are changeable . they are taken from the Data Base and change the page as the information change in Data Bases .they are called interactive pages .
- 2- The language at written application is fast and effective .and it's capable of the management , extension and understanding and coding .
- 3- The new publications of this language provided tools . It performs many functions that can be added such as the tools of data certainly which can be entered or changed by the user and the tools for data display.

SQL Server was selected as Data Base in this system because it is one of the strongest system Data Base management .In addition , SQL Server has many of characteristic as follows :-

- 1- The possibility of files changing.
- 2- It is easy to treat with it.
- 3- It is easy to design tables and create the relation between tables .
- 4- Results eliciting in the previous defined function (stored procedures) .
- 5- Making (Trigger), specific rules and the types of data .
- 6- User defined types and operation (transaction).
- 7- It supports the backup copying.