

1.0 Introduction

This chapter is an introductory chapter to the thesis. It presents background of outsourcing software development. And states the problem and explores the objective of the research. Finally it explains the scope and organization of this research.

1.1 Background:

In the modern society of knowledge and technology the IT industry has become one of its essential parts. Information and communication technologies are integrated in every business across the globe. The key element of these technologies is software, this makes software production and implementation exceptionally Important(OlegIshenko, 2005).

In the early ages of computing, software development was considered an internal affair by most of the technology firms, those companies tended to have their own development departments producing software for their internal needs. This approach was known as ‘in-house development’. On the other hand there were a number of companies that rejected the idea of the in-house development and turned to specialized companies buying software from them or contracting the development work (OlegIshenko, 2005).

Sudan is suffering blockade , need of hard currency and continuous policy changes, so it is important to encourage product and local programmers and local companies where clearly seen the local developer communicating abilities with users which is the missing ring for solving the problem of communicating with users according to their

different culture and language that caused demand description weakness though failure of regimes.

In recent years in Sudan there have been an increased usage of in-house outsource or off-shoring outsource, to meet the need of organizations and to help organizations to control and reduce high cost.

1.2 Problem of thesis:

At present so many countries throughout the world increased the usage of outsourcing software development so as to get the benefits of the advantages such as reducing of cost, gaining the advanced technology and having new skills.

Sudan, as other countries has been taken by the advanced outsourcing software development technology acknowledging its current economic situation, and not considering its high usage costs compared with other countries.

Many organizations do not plan properly for outsourcing .They do not take the risks of outsourcing into account, and they do not consider its effect on the user and usability of the system In addition, the organization do not lock into the problems arising from contract, security, and the failures of some implementations of outsourcing.

This research is an attempt to study outsourcing software development experiment and find its successes benefits, and shortcoming also to find ideal application of outsourcing throughout the organizations.

1.3 Objective of thesis:

- To make a general study on outsourcing software development and the awareness of the organization about the various scientific and practical aspects related to outsourcing.

- To find the organization need for the outsourcing software development, and the attention of the organization to its risks.

- To explain the advantages and disadvantages when choosing outsourcing software development with respect to determining requirement specification and performance.

- To illustrate the contract ability to handle changes in case of the need for modification and maintenance as well as the security policies, if the organization selects outsourcing software development.

- To make a general study on the organization situation, and clarifying the extent the organization attention to end user and the system usability.

1.4 Research question:

In this research the question is divided into primary and secondary parts.

Primary questions:

- 1.** Is the high cost of outsourcing Software development justified?
- 2.** Is outsourcing software development in conformity with the required specifications?
- 3.** Does the organization give any attention to end users or system usability?
- 4.** Is the organization that uses outsourcing take the risks into account?

5. Are there any strict security guidelines and policies for outsourcing software development?
6. Do the organizations find a trusted partner and establish contract models that make sense?
7. Is the failure of outsourcing software development due to decision or implementation?
8. Does the organization assess and measure the performance?
9. What are the reasons that made outsourcing software development succeed in Sudan, and what are the differences between software produced in and outside Sudan?
10. Does the organization ensure that the transfer of new knowledge and experience don't lead to programmers loss of skills and expertise due to outsourcing software development?

The secondary questions:

- 1- Do users understand the technical problems and know how to deal with them?
- 2- What was the contract ability of handling change towards outsourcing software development?
- 3- Do organizations take into account the factors of efficiency and effectiveness when resorting to outsourcing software development?
- 4- Are there any obstacles that affect outsourcing software development?
- 5- Was the failure of outsourcing software development resulting as user's lack of skills and abilities?
- 6- Explain if the organization cares about the availability of user manuals for user guidelines?

7-Does the organization study outsourcing in a scientific manner before introducing it, and is the decision taken according to considerable needs?

8-Was the outsourcing software development failure resulting from weak requirements specifications?

1.5 Research design:

This study used a survey approach to investigate the current status of outsourcing software development in Sudan. The survey consisted of two questionnaires:

- One for the users who have already used two types of systems, the first type was outsourced within or outside the country and the second type was in-sourced within the organization by the employer.

- The second questionnaire was for the experts who had knowledge on software and linked to the wide adoption of the resolution on outsourcing of software and its application, and who were working on software companies, university professors or others.

The researcher focused on the end users, system usability, technical problems, requirements, failure of outsourcing software development, and also on the risk, the advantages and disadvantages, the contract, security and the extent of the success of outsourcing software development.

1.6 Scope of the thesis:

This research focuses on outsourcing software development in Sudan and its influence on the success of the implementation and maintenance. The thesis does not cover the influence of the types of software technologies such as languages or database management system etc.

1.7 Organization of thesis:

The thesis is organized as follow:

The second chapter is a theoretical framework, it discusses the concepts of outsourcing software development .and reviews the risk, the advantages, disadvantages, the types of outsourcing, the Specific areas of Outsourcing, The reason, the contract, and the security of outsourcing etc.

The Third Chapter contains statistical analysis of the sample.

The Fourth chapter presents the result of this research, the recommendations.

This is followed by the references and the appendix.