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Impact of Information and Communication Technologies on Charitable Organisations in Kuwait

By

Adel K. E. AL-Foudary

A thesis
Presented to Loughborough University
In fulfilment of the Thesis requirement for the degree of Doctor of Philosophy.

In Information Science.

Loughborough, Leicestershire, United Kingdom, 2005

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I ask Almighty Allah (God) to guide me to serve my country for any improvements and developments. Also I ask Allah to be of assistance to any humanitarian or aid organisations and any needy in the world.

II
Abstract

In many countries, non-profit organisations provide enormous help to the public in the form of services, aid, education, advocacy, and many other humanitarian supports. However, despite the important work of many non-profit organisations in their fields, there has been little research about the role on Information and Communication Technologies (ICTs) in facilitating aid distribution.

In an effort to improve understanding of non-profit organisations working in charitable programmes, this research assesses the impact of ICTs in charitable organisations in the State of Kuwait. One of the purposes of this study is to provide guidelines to improve the use of ICTs in order to meet the needs of charities, their donors and beneficiaries, and their ability to comply with state legislation. This research uses a multi-methodology approach, which employs two system methodologies in tackling the research problem. The research methodologies that have been applied are Soft Systems Methodology (SSM) and Effective Technical and Human Implementation of Computer based System (ETHICS).

The participants of the research included charities, authorities, staff, beneficiaries, and donors. The results showed that the current services and activities do not meet the needs and satisfaction of the charities, donors, and beneficiaries. The results also showed that the charities fall short in coping with the national and international compliance requirements.

Consequently, there is a need for an appropriate change in systems and procedures, which include database system, communication, technical, confidentiality and security of donors and beneficiaries, co-operation and coordination, and awareness and attitudes of authorities.

The study provides the changes needed to improve the current situation in Kuwaiti charities. As one of these changes, a novel design of a web-based Information Exchange System amongst Kuwaiti Charity Organisations (IESKCO) has been developed. This web-based system will combine all Kuwaiti charitable programmes into one appropriate system, which offers the highest level of benefits at the lowest cost for their clients. In order to ensure that this new system meets the users' needs, an empirical evaluation method has been chosen to evaluate the IESKCO prototype. The results revealed that the users' needs are met using the application. This research has also led to conclusions and directions for further research on the impact of ICTs in charitable sectors.

Keywords: ICT, non-profit charity, Kuwait, SSM, ETHICS, multi-methodology, beneficiary, donor, compliance, cooperation, communication
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<tbody>
<tr>
<td>AD</td>
<td>Anno Domini (The year of the Lord)</td>
</tr>
<tr>
<td>ADSL</td>
<td>Asymmetric Digital Subscriber Line</td>
</tr>
<tr>
<td>Application</td>
<td>A computer program designed for end users</td>
</tr>
<tr>
<td>ATM</td>
<td>Asynchronous Transfer Mode</td>
</tr>
<tr>
<td>ETHICS</td>
<td>Effective Technical and Human Implementation of Computer-based Systems</td>
</tr>
<tr>
<td>Ethernet</td>
<td>It is one of the most widely implemented LAN standards</td>
</tr>
<tr>
<td>Extranet</td>
<td>A new word that refers to an Intranet that is partially accessible to authorised outsiders.</td>
</tr>
<tr>
<td>Firewall</td>
<td>A system designed to prevent unauthorised access to or from a private network.</td>
</tr>
<tr>
<td>GCC</td>
<td>Gulf Co-operation Council</td>
</tr>
<tr>
<td>Homepage</td>
<td>The front door or entry page for a web site</td>
</tr>
<tr>
<td>HTML</td>
<td>Hyper Text Mark-up Language</td>
</tr>
<tr>
<td>ICT</td>
<td>Information and Communication Technology</td>
</tr>
<tr>
<td>Intranet</td>
<td>A network belonging to an organisation accessible only by the organisation's members, employees or others with authorisation</td>
</tr>
<tr>
<td>ISP</td>
<td>Internet Service Provider</td>
</tr>
<tr>
<td>LAN</td>
<td>Local Area Network</td>
</tr>
<tr>
<td>Network</td>
<td>A group of two or more computer systems linked together</td>
</tr>
<tr>
<td>ODS</td>
<td>Online Data Services</td>
</tr>
<tr>
<td>PCS</td>
<td>Problem Content System</td>
</tr>
<tr>
<td>PSS</td>
<td>Problem Solver System</td>
</tr>
<tr>
<td>RD</td>
<td>Root Definition</td>
</tr>
<tr>
<td>RP</td>
<td>Rich Picture</td>
</tr>
<tr>
<td>SSADM</td>
<td>Structured Systems Analysis and Design Methodology</td>
</tr>
<tr>
<td>SSM</td>
<td>Soft Systems Methodology</td>
</tr>
<tr>
<td>TCP/IP</td>
<td>Transmission Control Protocol/Internet Protocol</td>
</tr>
<tr>
<td>WAN</td>
<td>Wide Area Network</td>
</tr>
<tr>
<td>WWW</td>
<td>World Wide Web</td>
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Chapter One
Introduction

1.1 Introduction

Many countries have recognised the importance of Information and Communication Technology (ICT) as a basis for social and economic development. This technology is transforming most aspects of society and the non-profit sector is no exception.

In the state of Kuwait, there are four non-profit charity organisations that are undertaking the responsibility for managing charity matters, namely Zakat House, Khairia, Islah and Turath. These organisations are managing and administrating funds to the value of multi millions of dollars and they have been established in order to provide humanitarian aid nationally and internationally (The Kuwaiti Philanthropic, 1996). At a national level, their main functions can be summarised as requesting donations from people, public or private organisations in Kuwait, helping and supporting poor families financially, and conducting rehabilitation programmes for prisoners or any other deprived groups. At an international level, these organisations intend to assist poor countries in building schools, hospitals, roads, and digging water wells, besides providing human relief aid, such as food and medicine for countries in severe need. In addition, they provide aid to areas affected by natural catastrophes, such as earthquake, flood and famine.

However, in recent times, and due to the economic difficulty which affects most public and private organisations in Kuwait, charity institutions began to
experience tremendous deficits in their available funds. This prevented their charitable and humanitarian activities from expanding further and limited their spending on existing projects. Consequently, on the 1st of November 1999, Zakat House called for a national meeting to discuss issues concerning charitable bodies in the state of Kuwait (Zakat House, 1999).

Additionally, Zakat House sponsored a national convention named “The National Charity Symposium” for the same purpose (National Charity Organisation Symposium, 2001). These meetings concluded that a lack of adequate cooperation among these charity organisations was the most pressing factor which had to be addressed and resolved. One of the recommendations which was noted in the Symposium was the formation of a specific committee called “The Co-operation Development Committee” whose role was to design an appropriate strategy that would facilitate the sharing of available resources, aiding and coordinating their work, and encouraging donors.

The Kuwaiti charities are facing a challenge in coping with changes in administration and management styles, and in dealing with ICT as a tool to manage and administer their resources and services. There is a lack of empirical data and analytical analysis on the Kuwaiti charities and ICT, and how the charities benefit from ICT facilities.

1.2 The Aim of the Study

The main aims of this research are to investigate and analyse the current state of ICT use in charitable organisations in the State of Kuwait and to provide guidelines to improve ICT in order to meet the needs of the charities, their donors, beneficiaries, and to enhance their ability to comply with state legislation.
1.3 Objectives of the Study

In order to achieve the aims of this study, several objectives have been formulated. These can be outlined as follows:

Objective 1

To investigate the impact and use of ICT in Kuwaiti charities. This objective will be achieved by the following:

1. Investigating and analysing the current impact and use of Information and Communication Technology (ICT) in charity organisations in the literature.

2. Applying the relevant findings to the context of the Kuwaiti charities.

Objective 2

To investigate and analyse the future impact, role and use of ICT in Kuwaiti charities. This objective will be achieved by:

1. Investigating any existing collaboration and co-ordination between these organisations.

2. Identifying problems and obstacles to improving ICT among Kuwaiti charities.

3. Investigating and analysing how ICT can encourage donors and improve the funding capabilities of charities.

4. Investigating how ICT can meet the needs and satisfaction of charities, donors, beneficiaries and staff.
5. Investigating how ICT can help in coping with national and international pressures.

**Objective 3**

To identify the changes needed to improve the charities' performances. This objective will be achieved by:

1. Establishing problem models for charities.

2. Using a system intervention to improve the problem situation, and to recommend strategies and practical solutions for the improvement of ICT among charity organisations.

**1.4 Significance of the Study**

The main significance of this study can be summarised in the following:

1. This is the first research in the State of Kuwait that investigates ICT in Kuwaiti charities and offers a prototype of a charitable information system.

2. There is a need for an effective and efficient system to reach beneficiaries to save lives and save money. Therefore, this study is an important step in determining and controlling fraud.

3. Charities depend on donors for funds. Therefore, there is a need for a system to meet their needs and satisfaction.

4. Charities need to comply with national and international rules and regulations regarding charitable organisations and ICT will help to achieve this compliance.

5. Kuwait is a member of the Gulf Co-operation Council (GCC). One of the main aims of this council is to establish full cooperation and coordination. Therefore, the outcomes of this research can be adopted in various GCC countries because of similarities in their charitable backgrounds.
Chapter One

1.5 Research Questions

This study intends to answer the following questions:

1. What are the main factors that encourage donors to give to charities and participate in their activities?

2. How can charities reduce fraud and reach the needy effectively and efficiently?

3. How can the awareness and attitudes of charities' employees be improved?

4. How can ICT improve the performance of charities?

5. What are the main problems and obstacles to improving ICT use among and between charities?

6. Are there any training programmes and which ICT training methods are the best?

7. What are the main steps that charities need to take to comply with national rules and legislation?

8. What are the main benefits of co-operation and co-ordination among these organisations?

9. What information is necessary to achieve effective collaboration among charity organisations in Kuwait?

10. What are the main steps needed to improve communications between the charities and beneficiaries?
1.6 Research Method

This research applied the SSM and ETHICS methodologies as a framework for the study. Justifications for their usage are explored in detail later on in Chapter Four. Furthermore, in order to build the richest possible picture in SSM, it was necessary to obtain detailed in-depth information in relation to the problem situation. The major techniques that were used for data collection were questionnaires, interviews, case studies and a focus group.

1.7 Structure of the Thesis

The thesis consists of eight chapters and each chapter deals with a number of issues which collectively make up the whole. Chapter Two provides a general background on The State of Kuwait, in addition to an extensive review of the existing charity organisations in the State. Chapter Three surveys the literature related to information and communication technology with more emphasis on charity organisations. Chapter Four discusses the research methods. This presents reasons behind the selection of the most appropriate method for the study. In addition, this chapter covers the data collection techniques which used in this study. Chapter Five reports the analysis of the fieldwork data collection tools (questionnaire, interviews, focus group and case studies) while Chapter Six applies a multi-methodology approach, based on the results of the data collection. This chapter also includes the design and evaluation of a prototype model. Chapter Seven offers the major findings of this study, outlines the objectives and results of the research questions, and assesses their value. Finally, Chapter Eight draws conclusions from this research study and provides recommendations and suggestions for possible further research.
Introduction

Chapter One: Introduction

Aims & objectives (Chapter One)

Literature Review (Chapters Two & Three)

Research Methods (Chapter Four)

Fieldwork Results
- Questionnaire
- Interviews
- Case studies
- Focus groups (Chapter Five)

System Intervention (SSM + ETHICS) (Chapter Six)

Discussions (Chapter Seven)

Conclusions & Recommendations (Chapter Eight)

Figure 1.1: Flow chart of the research process

This chapter consists of three main parts. The first section provides an overview of the State of Kuwait. The second section outlines the importance of charity giving and aims in Kuwait. Furthermore, in this study, the different forms of charity are explored. The last section investigates the charity organisations in the State of Kuwait.

The State of Kuwait is one of the GCC countries. It is situated at the north-west tip of the Arabian Gulf, between Iraq in the north and west, and Saudi Arabia in the south-west (see figure 2.1). Its total area is 17,818 square kilometres (7000 square miles) and includes several islands scattered in the Gulf (Kuwait Ministry of Information, 2002).
2.1 Introduction
For the purpose of this research, it is crucial to understand the background of the culture and values of the State of Kuwait with special emphasis on the Islamic perceptions of philanthropy.

This chapter consists of three main sections: The first section considers the main characteristics of the State of Kuwait. This section includes a description of the economic, social, cultural and political background of Kuwait. The second section outlines the importance of charity giving and alms in Kuwait. Furthermore, in this section, the definition, principles and goals of charity are explored. The last section involves a review of the charity organisations in the State of Kuwait.

2.2 General background of the State of Kuwait
The State of Kuwait is one of the Gulf Co-operation Council (GCC) countries. It is situated at the north-west tip of the Arabian Gulf, between Iraq in the north and west, and Saudi Arabia in the south-west (see figure 2.1). In total, the State covers 17,818 square kilometres (7000 square miles) and includes several islands scattered in the Gulf (Kuwait Ministry of Information, 2002).
The emergence of Kuwait as an oil-rich country has undoubtedly transformed the nation from a state of poverty to a region with one of the highest per capita incomes within a relatively short time (per capita income was US$17,000 in 2001). This has been helped by the fact that Kuwait has a very small population.

Before the discovery of oil, there was no need for foreign labour. Following the discovery of oil, however, the country has grown dependent upon expatriate workers for the running of oil companies. Moreover, the acceleration of economic developments to absorb part of the oil wealth has necessitated a growing demand for expatriates with various skills and talents in virtually all fields of economic activity, as well as in the civil service. This has been accentuated by a shortage of national manpower, an illiteracy rate among the population, and a refusal by some Kuwaitis to take manual jobs.
2.2.1 Economic background
The Kuwaiti oil industry has contributed on average 95 percent of the Gross Domestic Product (GDP) to the revenue of Kuwait; 98 percent of this comes directly from exports of oil and gas. Nevertheless, oil revenue decreased by 11 percent in 1997 compared with 6 percent in 1994 (Economics Intelligence Unit, 1997).

Government expenditure also decreased by 6.3 percent in 1996 compared with 5 percent in 1994. Climatic conditions and the absence of flowing water also eliminate the chance to expand agricultural production. As a result, the economy is dependent on foreign trade. The ratio of exports to GDP was more than 90 percent in 1995. This ratio has, however, been volatile, declining in recent years due to the reduction of oil exports (Rumaihi, 1986).

The low domestic aggregate demand, due to the small size of the domestic market, hinders industrial expansion and eliminates the benefits of mass production. Kuwait also depends on the rest of the world in many respects, especially in relation to the marketing of oil, which makes it vulnerable to international market forces. Also, the channelling of surplus funds abroad, due to limited local investment opportunities, subjects the economy to external economic pressures and policies (Economics Intelligence Unit, 1997).

2.2.2 Social, cultural and political background
Kuwait is a small country in the GCC yet it is the third richest economy in the Gulf. It is largely liberal. Politically, although the head of state (the Emir) is unelected, the country has an elected parliament.

Despite the devastation of Kuwait during and after the Gulf War, the State is doing well in terms of its human development. In 2000, Kuwait had the highest life expectancy in the GCC, with 75.2 years; the lowest infant mortality (20%); and the third lowest population growth rate (5.6%). Kuwait also has a very high adult literacy rate of 79% (IMF, 1993 & 1999). Overall, Kuwait has the
second highest human index value of 0.84 in the GCC (United Nations Development Programme, 1997).

Kuwait relies heavily on expatriates. Between 1995 and 1997 expatriates represented 84% of the workforce. The activity rate for women in Kuwait is the highest in the GCC, with women representing 33% of the total workforce (Kapiszewki, 1998). This suggests that Kuwaiti society is relatively more liberal than other GCC countries.

2.2.3 ICT status in Kuwait

The Kuwaiti government has urged both the public and private sectors, by different means, to try to build a network of institutions and information resources to enhance the utilisation of modern technology (Ministry of Planning, 2000).

Kuwait is an importer of all kinds of software and hardware components. Because of its large purchasing power, the State is the main domestic consumer of emerging software (Al-Adwani, 2002). Demand for information and communication technology is increasing at unprecedented rates in Kuwait, which is due to the strength of the economic base in the State.

The information and communication technology sector has made a strong showing in Kuwait. Access to the Internet, for instance, is offered throughout the country through three different Internet Service Providers (KFAS, 2000). This trend started with just one service provider known as Kuwait Net. At the time it was difficult to license other Internet service providers to compete with Kuwait Net but due to technology advancing at a very rapid rate, the Kuwaiti government began to realize the importance of competition so it opened the arena for other companies to compete with one another.

Kuwait Net is the primary Internet service provider in the region. It was launched in 1994 and began as an Online Data Service (ODS). The ODS is a
local network that provides information to its subscribers with the connection being only between the company’s server and its subscribers. It provides file sharing, email, and chat room services among ODS users only. By the beginning of 1995 it developed from an ODS to the Internet.

Gulf International, which is known as Kuwait Electronic Messaging Systems (KEMS), is another company that provides Internet access. It was developed after Kuwait Net and, ever since, competition has been tight between the two companies.

Quality Net, which became operational in the late 1998, is the most recent Internet Service Provider in Kuwait. Quality Net has strong partnerships with leading telecommunications and business solutions companies.

The competition today between these three sectors is robust, with each trying to come up with new services to win more subscribers. At the present time, the Internet plays a major role in Kuwait with people of all ages using the Internet for various reasons. If a household does not have connection to the Internet, there are several Internet Cyber cafes throughout the country.

2.3 Charity and its position in Kuwait

This section aims to define charity, its principles and its goals. It also aims to outline its importance to Islamic societies, especially Kuwait.

2.3.1 The definition of a charity organisation

Charity organisations are normally characterised as non-profit institutions that typically are founded to function within and/or outside a country in order to provide support and relief to those in need.

Thus, a charity is an organisation set up entirely for charitable purposes that acts for public benefit. There are four things that are always charitable:

- The relief of financial hardship,
- the advancement of education,
• the advancement of religion, and
• certain other purposes for the benefit of the community.

(Charity Commission for England and Wales, 2004)

Luxton (1990) argues that for any organisation to be charitable it must be able to meet some primary requirements or conditions: "it must promote a purpose recognised in law as charitable, it must be for the public benefit, and it must be wholly and exclusively charitable". He further classified charity organisations into two major types based on their source of funding: firstly, charity organisations that normally receive their entire fund directly from their creator; and secondly, collecting charities or 'pay-as-they-go' charities which rely on outside support as their main source of funds. Usually, charity organisations provide a wide range of services to people such as poverty and disaster relief, education and religious developments etc. A charity organisation, as indicated earlier, is a non-profit body, which means that these types of association depend heavily on the support and encouragement received from a variety of outside sources in order to support their activities.

Clarke and Norton (1999) identified nine sources of funds for charity foundations including individual donors, trusts and foundations, company giving, sponsorship and joint promotions, government grants, the National lottery, the European Union, international sources and funding for international work, membership and other bodies, and income generation and contracts.

2.3.2 Principles of charity

Charity in the Arabic language is translated as ZAKAT. ZAKAT in the Arabic language means increment, growth, and/or purification of the soul and wealth (Al-Tayar, 1997). ZAKAT is the third basic pillar of the Islamic faith which is built on five main pillars. The five pillars of Islam, which form the basic framework of the Islamic faith, are:
- Acceptance of the oneness of Allah (God);
- Praying to Allah five times each day;
- ZAKAT (compulsory charity);
- Fasting for the month of Ramadan each year, starting at the age of fifteen; and,
- Making the pilgrimage to Makkah once in a lifetime and when the individual is able.

ZAKAT became a compulsory religious duty in the year 580 AD. The establishment of this duty is conveyed in many places in the holy Qur'an. According to Sabiq (1985), Zakat is mentioned 59 times in the holy Qur'an. The following are examples of verses which refer to Zakat.

And be steadfast in prayer: Give Zakat, and bow down your heads with those who bow down (in worship). (Qur'an, 2: 43)

Of their wealth take alms (Zakat) that so the mightiest purify and sanctify them; and pray on their behalf. (Qur'an, 9: 103)

Various verses in the Qur'an came to establish the duty of Zakat and the teachings of the Islamic Prophet Mohammad explained its roles and principles. Tawrat and the Bible both urge the faithful to give alms (donate charity), which is a form of Zakat (Sabiq, 1985). In fact, the Qur'an mentioned that the prophets, Ismail, Isaac and Jacob, were all ordered to pay Zakat. Jesus, on the other hand, has been quoted in the holy Qur'an as saying:

I am indeed a servant of Allah; He has given me Revelation and made me a prophet, and He hath made me blessed wheresoever I be, and hath enjoined on me prayer and Zakat as long as I live. (Qur'an, 19: 31)
2.3.3 Goals of charity

Many Muslim scholars have identified three main goals of charity. These goals are religious, social and economic.

Religious goals

The purpose of life, according to Islamic principles, is the worship of Allah (God) by doing what He asked us to do and refraining from what He cautioned us from doing. Allah ordered Muslims to confirm that there is only one God, to perform five daily prayers and give yearly alms on wealth. Prayer and fasting are meant to give thanks to Allah for the gift of the body. On the other hand, charity is to give thanks for the gift of money (Al-Tayar, 1997). The performance of charity means, therefore, that the Muslim has obeyed Allah, which gives the individual the spiritual satisfaction he/she needs (Sabiq, 1985). Some scholars have mentioned that charity helps individuals to overcome greed, which is considered by many to be an undesirable trait (Al-Fanjari, 1982). In this respect, the Qur'an states:

If ye had control of the treasuries of the mercy of my Lord, behold, ye will keep them back; for fear of spending them; for man is (ever) niggardly. (Qur'an, 17: 100)

Therefore, the payment of charity is an act which helps Muslims to purify their souls of such weaknesses and makes them feel better.

Social goals

By asking able Muslims to perform charity, Allah has given the poor an established right to the wealth of the rich. This relieves the Muslim who happens to be poor from the onerous task of asking for charity, together with the humiliation that this brings. The rich, on the other hand, are given an opportunity to feel part of the entire social environment when giving charity since they are then not isolated in their own economic group. Thus, charity payers may feel that they are contributing to the shared human environment.
Performing charity acts as a mechanism for the distribution of wealth which helps in closing the gap between the poor and the rich (Kahf, 1989).

**Economic goals**

There are two obvious economic goals for charity (Al-Fanjari, 1982). The first is the redistribution of wealth within society. This increases the purchasing power of the poor, which, in turn, enables them to contribute positively to the economic cycle that aids economic growth and the well-being of others.

Charity is levied on many types of wealth including money in the bank. If this money stays for a long time without being invested, charity will lead to its depletion. By paying charity each year, a person will hopefully be motivated to invest the idle money. Charity, therefore, encourages investment, which adds to economic activity.

**2.4 A review of charity organisations in the State of Kuwait**

This section offers a comprehensive review of the charity organisations in the State of Kuwait. These organisations will be distinguished, based on their governance, into two main groups: government charity organisations and non-government charity organisations. Zakat House is a type of government charity organisation while the non-government charity organisations will include Khairia, Islah and Turath. In reality, all these organisations, whether government or non-government charity organisations, perform a combination of activities that fundamentally aims to provide humanitarian relief nationally and internationally.

**2.4.1 Zakat House**

Zakat House is the only government charity organisation in Kuwait. It was founded in 1982 and its headquarters is in Salmiya City in Kuwait (Zakat House, 2002). It has field missions in 78 countries to promote growth and development, to offer humanitarian aid, and to promote health and educational improvement.
From the point of view of employees, Zakat House is considered to be the most preferable institute amongst other charity organisations in terms of promotions and bonuses for employees.

**Structure**

Zakat House is based in Kuwait but has field offices in many countries where programmes are running. The major units of the organisation as a whole are called bureaus with each bureau headed by an assistant administrator. There are two distinct types of bureau:

1- Geographic bureaus: These are situated in the areas where Zakat House is involved with programmes and are responsible for the overall activities in these areas.

2- Functional bureaus: These conduct programmes which are world-wide or which cross geographic boundaries. They are The Bureau for Global Programs, Field Support and Research, and The Bureau for Humanitarian Response. Certain functions of major headquarters are also assigned to these bureaus in the areas of management, legislative and public affairs, and policy and programme coordination.

All operations of Zakat House are inspected, appraised and audited by the office of the Inspector General in the Kuwaiti Audit Bureau. Its organisational structure, as shown in Figure 2.2, consists of a Board of Directors whose main responsibilities are reviewing all reports submitted by the higher management and replying accordingly to the recommendations (Zakat House, 2002). The Resource Development Committee, the External Work Committee and the Investment Committee all submit their reports and recommendations to the Board.
Chapter Two

Kuwaiti Charity Organisations

Figure 2.2 Zakat House: organisational structures

Activities

The activities of Zakat House can be summarised under the major headings of health, education, agriculture, project development and emergency aid.

Zakat House has committed itself from its inception to perform a variety of activities that can be divided into national and international. At a national level, its typical activities are benevolent loans, shy-needy families, material contributions, the student school bag project, free drinking fountains, the clothing for orphans project, and supporting local establishments and firms.

At an international level, the major activities are orphans' sponsorship project, students' funding project, relief, and supporting other charitable organisations.
Zakat House aims to achieve certain objectives, including maintaining the highest performance possible in order to earn the donors' trust, to increase the number of donors, to collect and circulate charity funds and disperse them in lawful channels, to perform all kinds of charitable work nationally and internationally, to educate the public in matters of charity and its role in our lives, and to encourage the spirit of solidarity and mercy among individuals.

2.4.2 Khairia

The Khairia charity organisation is a non-governmental and non-profit charity organisation that was established in 1986 and is based in South Surra City in the State of Kuwait. Khairia works in countries worldwide and its financing, investment and all its activities are global, regardless of geographic boundaries or racial differences.

It concentrates on helping people to help themselves by promoting self-help development programmes together with health and education initiatives. It also provides relief for victims of natural disasters and war, aiding refugees.

Mission

Khairia's mission statement focuses on the support and enhancement it offers to its members in carrying out its work, rather than the work that the agencies actually do. The mission involves enabling members to carry out their humanitarian efforts effectively and professionally by fostering partnership and collaboration (KJRC, 1993).

Khairia works to fulfil the following objectives:

- Offering global and humanitarian help for the needy, regardless of their race or nationality.
- Providing relief aid in case of wars, natural disasters, epidemics, famine and similar circumstances.
• Providing the basics for the needy such as food, clothing, medicine and shelter.

• Assisting in the development and advancement of poor communities by helping such communities to invest their human and financial resources in the most efficient ways so that they become self-sufficient.

• Assisting in developing the human resources of needy communities by eradicating illiteracy, and by introducing education and training.

• Working according to well-designed plans and a management system that is characterised by proper organisation, clarity of responsibilities, and greater flexibility.

• Encouraging coordination and cooperation with other local or international charitable organisations in humanitarian work of mutual interest.

• Increasing the understanding of voluntary practices through studying voluntarism and philanthropy in order to promote public awareness and to attract volunteers to share in its activities (IICO, 1997).

Organisational Structure
Khairia has “grassroots chapters” in many towns and cities throughout the State receiving support across the nations. It has a number of standing departments to cover key areas of its work. These include departments for disaster response, refugees and the development of policy and practice (Abdulrahman, 2000).

Khairia accepts all sorts of donations appropriate to its mission. These include alms, Zakat (compulsory charity), bequests, waqf, and designated or general donations.
Activities
Khairia was formed with the intention of supporting, relieving and recovering poor societies in the world. The work of this charity is purely humanitarian and is involved in supporting people who live under severe conditions that result from famine, disease, illiteracy, war, floods etc. It is an international charity organisation that is aimed, firstly, to assist in constructing social, education and health centres in poor nations. Secondly, it provides financial and material support to people in disaster and/or starvation situations. Thirdly, it encourages and supports development enterprises in poor countries (The Kuwaiti Philanthropic, 1996).

Khairia's areas of work, as maintained previously, revolve largely around providing immediate relief and developing longer term self-help projects designed to improve conditions on a more permanent basis.

Khairia lists its main areas of concern as promoting economic development and self-reliance, improving health and education, providing disaster and war relief, aiding refugees and advancing human rights, protecting the environment, addressing population concerns, and increasing understanding and cooperation.

2.4.3 Turath
Turath is a non-government and non-profit charity organisation which was established in 1981.

Structure
Turath is based in Kuwait with field missions around the world (Turath, 2002). Its main headquarters situated in Qurtuba City.
Activities

Turath’s primary aims are: firstly, collecting, arranging and preserving the Islamic heritage from around the globe; secondly, encouraging and supporting scholars and researchers in their studies and publishing their work; thirdly, establishing and funding a variety of social, educational and health centres in several countries worldwide; and finally, requesting and collecting donations from individuals and the private sector in order to fund its existing and future projects and activities.

Since the early days of its foundation, Turath has been actively working towards assisting the individual and/or individuals collectively in most parts of the world, particularly in times of catastrophe and devastation. However, the activities that are normally undertaken by the Turath organisation can be classified into two main categories according to their geographical locations: national and international. National activities are basically defined as those activities which are intentionally directed to those persons who are in need and who have encountered difficulties and harsh living spontaneously (Turath Project Guide, 1998).

Their activities include caring, assisting and sympathising with widows and orphans in the State of Kuwait; satisfying the needs of poor people who have
been deprived of the basic standard of normal living; providing free education to individuals who cannot afford it; providing immediate relief and continually supporting poor people who have been hospitalised; and eventually, providing appropriate guidance and clear direction to donors who wish to be supervised and monitored; and taking full control of the distribution of their donations.

Their major activities at an international level could be described as carrying out emergency relief to alleviate the suffering of those affected by an immediate tragedy. In addition, its activities include constructing humanitarian projects around the world, such as schools, health centres, wells or farms, as well as encouraging economic self-sufficiency: this facilitates the resettlement of displaced persons or refugees (The Kuwaiti Philanthropic, 1996).

2.4.4 Islah
Islah is a Kuwaiti non-government and non-profit charity organisation which was founded in 1963 to achieve worthwhile objectives and to better the conditions of Kuwaiti society. It is based in ALRodha City in the State of Kuwait and boasts the support of many nations worldwide (Management Report, 2001).

Structure
Islah operates world-wide with branches around Kuwaiti cities, as well as having offices in each of the developing countries where Islah works (AL-Atiqi, 1993).

Activities
Islah works together to respond to emergencies to offer more long-term development aid. The activities of the Islah organisation include struggling against social deprivation in Kuwait; guiding young people to follow a moral and clean-living path by taking advantage of their time in order to be positive and useful, both for themselves and for the society in which they live; to lessen poverty and the struggle associated with low incomes among some
portions of society; and to encourage and develop general charitable projects in national and international sectors.

Islah was founded to dispense relief and to aid development. It focuses its efforts on two main areas. Firstly, it offers emergency humanitarian aid and, secondly, it supports individuals and communities who are struggling to survive in poor conditions. Islah sets out to provide for the people to whom it offers aid the basic requirements in terms of food, shelter, education and health care.

Mission
Islah's own mission statement asserts that it serves individuals and families in the poorest communities throughout the world, promoting change by empowering people to help themselves, providing financial aid to offer opportunities for development, and offering emergency relief (Management Report, 2001).

2.5 Concluding Remarks

This chapter has provided three main sections: The first section considered the main characteristics of the State of Kuwait. The second section outlined the importance of charity giving and alms in Kuwait while the last section involved a review of the charity organisations in the State of Kuwait.

The above information was considered to be a necessary background to this study. Given the fact that the State of Kuwait is a rich country and that donating to charity for the support of the needy is compulsory every year, then the total amount of donations is very large. This significant amount of money needs to be carefully administered so, it is necessary to understand what kind of information is available in order to distribute these funds to the needy and to fulfil the commitment to aid or to humanitarian projects.
This chapter has also shed light on the charitable institutions in Kuwait in terms of their aims, structures and activities. Despite the fact that Kuwaiti charities share common aims and objectives, they are not alike in their financial budgets. One (Zakat House), for example, is a government agency which gains a yearly fixed budget from the Kuwaiti government to the amount of 6 million dollars. Therefore, this yearly budget distinguishes this agency in terms of quality and the larger number of humanitarian projects it can support worldwide compared to other non-governmental charities.

Moreover, the total amount of donations is increasing every year since many new government and private companies are growing. Consequently, studying the current flow of information systems among Kuwaiti charitable organisations appears to be vital. In contrast, the next chapter will focus on the impact of information technology in charitable organisations in developed countries.
3.1 Introduction

ICT has become part of our daily lives; it is dynamic and keeps changing, driven by market needs. These changes have revolutionised business and organisation models and have created ICT opportunities to improve efficiency and to respond to the needs of organisations and businesses. The vast majority of business-driven organisations are implementing ICT to some extent in their activities. This may include interacting with their customers, building an organisation's internal structures, and processing their working systems.

Non-profit organisations do not have the same business drive as other organisations in the market. There is also a lack of literature on the role and impact of ICT on non-profit charity organisations, probably because of this.

There is recognition within the UN that ICT has a potential to combat poverty: one of the main aims of charities. This is stated clearly by the UN:

"Over the last few years, a wide consensus has emerged on the potential of information and communications technologies (ICT) to promote economic growth, combat poverty, and facilitate the integration of developing countries into the global economy. [...] First, our efforts must be based on the real needs of those we are seeking to help. They must be fully and genuinely involved."

(UN Secretary-General, Kofi Annan, 2002)
Chapter Three Literature Review

This chapter presents and analyses the role and impact of ICT in charitable organisations as presented in the literature (see figure 3.1). Section 2 presents and discusses ICT and charity organisations, ICT and charity donors are discussed in Section 3.3, and Section 3.4 explores ICT and charity beneficiaries. Finally, Section 3.5 presents co-operation among charitable organisations.

![Figure 3.1: Literature map](image)

3.2 ICT and Charity Organisations

The section discusses and analyses the advantages and practices of ICT in charitable organisations, which are required for information processing, in particular the use of electronic computers and computer software to support atom, process, instant exchange of information anywhere, anytime (Wikipedia, 2005).

3.2.1 Advantages and Disadvantages of ICT in Charity Organisations

Introduction

Section 3.1

Concluding Remarks

Section 3.6

ICT and Charity Organisations

ICT and Charities' Donors

ICT and Beneficiaries

Charities and Cooperation

There are few research studies that show what effect ICT has on the way non-profit organisations run their charitable programmes to achieve their objectives and to serve their clients effectively (Maudlin and Dwyer-Morgan, 2001; Boaler, 2002; Outen and Forster, 2001).
3.2 ICT and Charity Organisations
This section discusses and analyses the advantages and limitations of ICT in non-profit charity organisations, the applications of ICT in non-profit charity organisations, and the need for ICT in non-profit organisations.

3.2.1 Definition of ICT
For the purpose of this research study, the acronym ICT stands for ‘the technology required for information processing. In particular the use of electronic computers and computer software to convert, store, protect, process, transmit and retrieve information from anywhere, anytime.’ (Wikipedia, 2005).

3.2.2 Advantages and Limitations of ICT in Non-profit Organisations
Information and communication technologies have a substantial impact on transforming, reshaping and advancing various types of organisation including non-profit organisations. Non-charitable organisations have invested massively in developing hardware and software ICT systems to enhance and improve their performance in order to increase profit. One of the key elements in non-charitable organisations is the way in which they use information and communications with their customers. The key learning points for non-charitable organisations are how information is created, stored, managed, disseminated, manipulated and projected. The organisation also learns ICT skills to communicate effectively with their donors and beneficiaries. They also learn how to use ICT to comply with other national and international organisations.

There are few research studies that show what effect ICT has on the way non-profit organisations run their charitable programmes to achieve their objectives and to serve their clients effectively (Macduff and Dwyer-Morgan, 2001; Boeder, 2002; Outon and Forster, 2001).
The advantages and limitations of using ICT by non-profit programmes have been reported by Independent Sector and Cisco Systems which was assigned by Princeton Survey Research Associates (PSRA, 2001) to examine executives about the usage of ICT among non-profit organisations.

The key findings of the study concerning the benefits of utilising ICT in non-profits were that Information Technology has changed the way non-profit organisations operate. 80% of executives saw ICT as a time-saving and production-enhancing tool and believed that enhancing ICT, by developing a website or expanding network organisations, would improve their organisation's programmes such as administrative operations, fundraising, research and the dissemination of reports and other information. Additionally, the significance of ICT in the short-and long-term operations of non-profit organisations has been pointed out by most executive respondents. This is not a surprising finding as the charities are involved in an interacting process with their clients, donors and beneficiaries, and ICT helps and facilitates these interactions.

Nevertheless, this study also showed that ICT is not always viewed so positively. The results showed that there is a relatively small but significant number of executives who assume that ICT may cause them to deviate from their main missions. The study also revealed that non-profits which do not have ICT in their organisations, express negative attitudes towards ICT. This may be due to a lack of awareness of ICT and its role and impact on the charities' performances. There is therefore a need to improve the awareness of the charities' decision-makers towards ICT.

These decision-makers believe that ICT systems should be provided with skilled professionals, as well as with enough funds to cover the cost of purchase or to upgrade, as their main income is based on donations and they have their own priorities.
PKF and CFDG conducted a study of charities across the UK (Weighell, 2004), surveying 308 charities. They investigated the views of charity staff on issues related to the risks that they face. The survey found out that: 'ICT failure was seen as a significant risk by over 70% of respondents, particularly in terms of viruses, loss of hardware or software and loss of data'. This is one of the main disadvantages of implementing and using ICT within charity organisations. Since it controls the charities' activities, any failure in the system causes a severe disturbance in the charity organisation. This problem can be minimised by increasing the staff skills and expertise in using and managing the use of ICT resources within the charity.

Weighell (2004) asserted that the vast majority of charitable organisations are aware of the importance of ICT and the possible impact on their activities if it fails. However, he recommended that providing a little extra in the budget could greatly improve ICT safeguards.

In general, non-profit human service executives agree that the benefits of Information Technology easily outweigh any problems it may cause in their organisations. Indeed, Information Technology has the capacity to play a major role in carrying out all administration functions and in achieving and accomplishing the ultimate mission of human service programmes effectively and efficiently. This is when there is an adequate budget, short and long-term strategic plans, and professional staff. This indicates that the charities' service executives have a positive attitude towards ICT.

Blau (2001) studied the effect of ICT on the activities of non-profit organisations. He indicated that, although ICT has the potential to shift costs, extend markets, expand information flows, change the borders of organisations, and enable new levels of customisation and responsiveness, it requires substantial structural changes. This type of change will extend its effect to embrace, not just the organisations that have utilised ICT, but throughout the fields in which it is adopted. Undoubtedly, the exploitation of ICT by such organisations will facilitate and speed up the flow of information.
ICT has the capability to change how information is created, stored, managed, disseminated, manipulated and projected. Blau (2001) further noted that there is a number of factors which rationalise the utilisation of ICT within charity organisations. These include: first, the falling costs of computer equipment, which in turn reduces the overall service costs of that equipment (including data processing, storage and transport); second, short-lifecycles and the rapid obsolescence of technology-based products; and third, the economic advantage that develops from decentralised information systems.

It can concluded from the above research that the adoption and use of Information Technology by non-profit organisations would improve the efficiency of their day-to-day operations, improve communication with staff and constituents, enhance their profile and presence in the community and ultimately, as mentioned above, save money by increasing efficiency. This can be achieved by facilitating the communications between the charities and their donors and beneficiaries.

Internet has become part of many organisations' activities. Putnam (2002) explored the effects of an Internet network on organisations that dealt with natural emergencies and man-made disasters. The author asserted that Internet technology can be considered to take a recurring role at all stages of emergency information management. Additionally, the Internet offers an active system for information exchange and cooperation; it allows almost immediate communication worldwide.

'During and after a crisis, accurate information is needed quickly — by officials who must determine the best response, by victims who need assistance, by members of the public who want to find out what's happening or offer support, and by reporters who broadcast the news. The Internet is already being used to support many of these information needs.'

(Putnam, 2002: p.2)
In contrast, the negative aspects of the Internet, as Putnam (2002) indicated, are inaccessibility due to infrastructure limitations, governmental restrictions, inadequate plans, questionable information, or fragile technologies. The infrastructure of the ICT has become easier to use and maintain than it was a decade ago. This has been achieved by introducing digital communication through mobile technology.

Putnam also explored the notion that the Internet can be a valuable resource for those who urgently need the right information to make critical decisions. This can help charity staff to make decisions efficiently and effectively in the case of making urgent decisions for emergency applicants for benefits.

Although the Internet is an effective means of cooperation among non-profit organisations, Putnam (2002) asserted that this technology might not be available when it was needed since it relies on electric power, telephone lines and other connections. So, Putnam encouraged disaster relief workers to have contingency plans that do not depend on technology since their work has the potential to save lives and effort. Charities need to have plan in the event of natural disasters and human catastrophes. This includes an optimal user of ICT, mobile and video communications and other means of communication in case of there is a lack of resources to operate the ICT.

ICT needs an experienced technician to maintain and operate the systems effectively. Osten and Kanter (2002) interviewed a number of non-profit executive directors and staff for the purpose of investigating the challenges of technology training on non-profit organisations, and recommending the most efficient training practices to cope with ICT needs.

The results of the study revealed that non-profits currently are facing numerous serious challenges, including a lack of resources such as time and money. In addition, the study found that non-profits also face struggle to change staff attitudes and perceptions toward ICT, since learning how to use technology means changing their working routine. One of the directors stated:
'The biggest challenge I see is the lack of enthusiasm. Those employees who have been accustomed to 'paper and pencil' methods still tend to have a fear of what a computer can do for them.'

However, the study revealed that the best programmes the non-profits experienced are those that use a selection of delivery methods, peer training approaches, motivating staff to participate in training, and keeping training uncomplicated, spotlighting on the needs of staff.

### 3.2.3 The Applications of ICT in Non-profit Organisations

ICT is available in various forms: hardware and software. The question remains why, how, which and where to implement ICT. The successful implementation of Information Technology in non-profit programmes, according to Macduff and Dwyer-Morgan (2001), relies on a number of factors including adequate access to an Internet e-mail account by programmes and volunteers. Additionally, it requires staff time to manage the electronic exchange and special skills to communicate effectively in an electronic environment. However, the researchers further noted that: "these success factors are dramatically impacted by the organisation's and volunteers' access to and ability to practise with technological devices and knowledge". Their paper aimed to comprehend the capacity of non-profit programmes to access and use Information Technology Systems (ITS) to promote and maintain the infrastructure of their workforce. Macduff and Dwyer-Morgan (2001) stated:

*The impact of information technology on a non-profit's work is driven by capacity, and non-profits should be concerned that technology initiatives could be increasing the digital divide and creating new forms of exclusion.*

They reported results from a survey conducted by the Association for Volunteer Administration (AVA), in cooperation with the Points of Light Foundation in late 2000, on the use of Information Technology Systems by managers of non-profit programmes.
Macduff and Dwyer-Morgan (2001) commented on the overall conclusion of the survey that fundraising on the Internet for non-profits depends on providing access to ICT, as well as a sense of motivation on the part of charitable programmes to use ICT. This is due to the fact that ICT facilitates communication between the charity organisation and donors and beneficiaries in the event of natural disasters and human catastrophes. Speed of communication can play an important part in reaching the needy, saving human lives, and fundraising by increasing the awareness of the public towards the needy.

Zimmermann (1998) argued for the application of new ICTs, such as the satellite-based Global Mobile Personal Communication System (GMPCS) for emergency telecommunication by non-profit charity organisations. This provided international humanitarian assistance and thus played an important role, particularly in disaster situations. Zimmermann also outlined a number of limitations which hindered the usefulness of the GMPCS in providing quick response at the time of catastrophes, specifically in the poorest countries of the third world. These include lacking, due to economic weakness, a readily available, adequate and effective ICT infrastructure.

The second factor which may prevent the expansion of ICT in general and GMPCS in particular was the high cost of telecommunications which places a heavy burden on the providers of response initiatives. This is due to the nature of the charity organisations' activities, as well as their priorities. As a result, Zimmermann (1998) noted that all partners in humanitarian assistance work are increasingly looking for cost-saving alternatives for their communication networks (GMPCS). The shortwave radio, which can be installed as part of a private network such as a LAN, WAN and the Internet, will not cause any further expenditure. Zimmermann stated that:

'all partners in humanitarian assistance are increasingly looking for cost saving alternatives for their communication networks'
Certainly this can be true in the developed countries where there is economic prosperity and highly advanced ICT infrastructures. However, the problem remains for most countries in Africa and Asia where there is no adequate ICT infrastructure. (For example, in China and India, there is less than one telephone line per 100 people.)

For the purpose of establishing an adequate ICT infrastructure, especially networking strategies among non-profits that serve various beneficiaries at different levels nationally and internationally, Madon (1999) indicated that information systems among international non-profit government organisations (INGO) have proved to be efficient. These information systems have the ability to:

"Improve the flow of ideas, experiences and information across national frontiers between INGO headquarters, national offices and the grassroots level"

(Madon, 1999: p.255)

However, few charitable organisations exist that have been able to take advantage of the use of ICTs to improve their operations. Madon (1999) confirms that 'in most INGOs, systems for accessing, storing, transferring and disseminating information are underdeveloped'. This is due to the lack of purpose-developed software for charities' needs. This is due to a lack of business drive to attract, motivate and encourage software companies and programmers to develop such software. Charities in the State of Kuwait are lacking any purpose-developed software with which to manage their activities.

Taylor (2001) pointed out that electronic networking has the capability to sustain and nourish deep strategic and operational transformation within non-profit organisations seeking to respond efficiently to the rapid social, economic and political spheres in which they operate. However, he indicated in his study of UK non-profit organisations that they were not fully exploiting these technologies and their applications to support their strategic and operational
transformations. The Kuwaiti charities have not explored the benefits of implementing and using electronic communication to support their strategic and operational activities.

The study was conducted on two major non-profit organisations in the United Kingdom: Friends of the Earth, which employed the Internet; and the Samaritans, a voluntary organisation, which utilised enhanced telephony technology. These case studies were based upon interviews with members of the senior management team and other individuals. The study concluded that the ways in which advanced network technologies are employed within Friends of the Earth and the Samaritans are shaped by the historically embedded values that are the very essence of the organisations. At the same time, the technologies themselves set opportunities and limitations that challenge these values and to which the organisations must respond. Existing relationships within the organisations, between the organisations and other institutions, and between the organisations and their supporters and service users, can be reconfigured and redefined thereby opening up opportunities for further transformations.

Burt and Taylor (2001) explained that electronic networks have the potential to permit seamless information flows and communication, to reshape organisations internally, redefine relationships across networks of organisations and extend business scope. They reported and evaluated the extent of ICT-supported innovation occurring within a number of UK non-profit organisations (the Prince's Trust, Friends of the Earth, and the Samaritans). The study revealed that most of the organisations under investigation were utilising technologies just for enhancing administrative and operational functions.

The study also pointed out that there was a relationship between staff members of these organisations and the appropriation of new technologies. Furthermore, they found that there was a number of elements that enable or inhibit ICT-supported strategies repositioning within these organisations
including resourcing ICT investment, the complexity of institutional realities and the historical trajectories, and the embedded social conditions that they give rise to.

Briefly, the extent to which the technologies are exploited, and the ways in which they are appropriated, are shaped by the inter-play that exists between the social conditions, philosophies and the value systems, and the technology

Hart (2002) is a founder and president of the International ePhilanthropy Foundation, created to foster usage of the Internet for charitable purposes. He asserted that the Internet offers a cost-effective chance to build interaction with supporters, volunteers, clients and the community they serve. It is thought that this method will replace traditional methods of fundraising such as direct mail, telephone, personal solicitation or even planned giving. However, this author argues that the Internet should be used in an integrated fashion alongside traditional fundraising methods because it offers a new dimension of efficiency in enhancing relationships between, for example, donors and the organisation.

So, this study asserts that the Internet should be used as a communication and stewardship tool first and as a fundraising tool second.

Hart (2002) also declared that e-mail is a particularly powerful tool since it is used by so many (e.g. the number of Americans using e-mail has risen from 45% in 2000 to 54% in 2002). Also, donors are able to access a number of philanthropic choices with ease while, at the same time, strengthening the trust between the non-profit organisation and its supporters. To promote this positive relationship, the ePhilanthropy Foundation organisation has created the following code of ethical online practices:

- Ask permission to email everyone you communicate with.
- Do not send unsolicited e-mail or 'spam'.
- Do not over-message supporters.
Do not be afraid to ask for gifts.

Be ready to answer your e-mail messages.

(Hart, 2002: p.355)

Hart explains that these guidelines are important in building a personal relationship between donors and the organisation since these guidelines "will help nonprofits focus on the relationship they are building, increase awareness among supporters and, over time, will lead to fundraising success' (Hart, 2002: p.356).

The ePhilanthropy Foundation (Hart, 2002) has developed the 'ePhilanthropy toolbox' to draw attention to the varied techniques and services available. These include:

- Communication/Education and stewardship.
- Online donations and membership.
- Event registrations and management.
- Prospect research.
- Volunteer recruitment and management.
- Relationship building and advocacy.

(Hart, 2002: p.356)

This mix of tools is expected to vary widely among organisations, according to needs.

Hart (2002) asserts that using only a website as a stand-alone communication solution is not effective but there are a number of opportunities to communicate with potential supporters. These include e-mail, search engines, 'pass along' marketing, and 'send to a friend'. 'Effective sites offer multiple opportunities for visitors to support the organisation through advocacy, volunteerism or donations, often on each page of the website' (Hart, 2002).
From the non-profit charities, there is a need to use a website in more than one activity. There is no website for any of the Kuwaiti charities.

This study also found that 70% of US Internet users are concerned about privacy online and yet many provide sensitive online information when asked. The Foundation recommends that charities:

- Publish their privacy policy on the website and at other places when requested.
- Review and strengthen internal security and the use of confidential data.
- Ensure supporters can control the data collected about them.
- Respond promptly to complaints.
- Consider seeking certification from a well-known privacy trust.

(Hart, 2002: p.359)

Saxton and Game (2002) surveyed 150 of the most advanced charity organisations with the aim of gaining a quantitative view on the use of the Internet among charities and their plans for its use in the future. The research showed that the most common uses of the Internet by the non-profit sector were the provision of information, news and regular updates, links to other websites, and e-mail enquiry services. They further found that very few charities are using the Internet for online job applications or online training and relatively few are able to let users purchase goods or services online. Charities need to seize the opportunity of the full potential of using websites.

The study recommends making sure that the trustees and directors fully recognise the aims and objectives of their organisations and have established a strategy and detailed development plan with a separate budget in order to make the most of the Internet.

In the summary of the report, Saxton and Game (2002) believed that charitable organisations should take advantage of the flexibility, accessibility and ease of use of the Internet to facilitate the way they operate. The authors' study declared certain advantages of the Internet's technology including
3.2.3 The Need for ICT in Non-profit Organisations

Digital and media technology has become attractive in the education and business markets. This is due to sharp changes in this technology and its attraction for these markets; non-profit charities are no different. They need to consider the opportunity for using the potential of this technology to improve their performances.

The Kuwaiti charities fall far short of this technology as there is no digital technology in any of their activities.

'Non-profit organisations can benefit from new developments in digital media technology and will have to adapt new strategies as a result of these technologies' (Boeder, 2002). Boeder's study attempted to explore current issues and debates within the non-profit community regarding the use of the Internet; it also investigates the opinions and attitudes expressed within these debates.

The study, which was carried out in 2001, examined the way non-profit organisations are currently implementing Internet tools and strategies. The author stated:

Not only does the Internet offer an effective platform for communication and fundraising, but also for informing the public about their missions'.

Furthermore, the study concluded that further initiatives to promote non-profit relationships and capacity building, collaboration and technology transfer in order to increase organizational effectiveness in the sector are much needed.
Spencer (2002) examined the potential of the Internet for non-profit organisations. She pointed out five main tasks which non-profit organisations can perform via the Internet. These are fundraising, finding volunteers, information credibility, advocacy and community building. These potentialities, which are offered by developments in Internet technology and its growing acceptance and use, are hampered by a lack of resources, skills and a vision of the Internet's potential. She mentioned that the real potential of the Internet is to develop an understanding of an organisation's work and mission, and enhance the level of trust of potential donors.

Spencer (2002) revealed:

_The Internet offers new and powerful ways to communicate with this supporter community, other organizations and the public at large. However, it is important that the strategy not only focuses on the goals of the organization but also on its biggest asset - their community of members, volunteers and donors._

In practice, non-profit organisations can draw on the experiences of other organisations and consider online volunteer management, discussion forums, information-rich websites, innovative fund-raising, online advocacy and tailored information distribution, to develop an Internet strategy that reflects their needs and resources.

Hooper and Stobbart (2002) investigated, in their study, the creation of charity websites features and considered both the benefits and disadvantages of their use. The writers noted that, in 2002, 42% of all UK households had access to the Internet when the government pledged that: ‘_everyone in the UK who wants it will have access to the Internet by 2005_’ (Hooper and Stobbart, 2002: p.329). At the same time, a recent survey carried out by Saxton and Game (2002, 2004) revealed that the Internet revolution has already been embraced by UK charities. The survey (Hooper and Stobbart, 2002) revealed that many charities have a dedicated budget to spend on their website although some, to
save money, are attempting to develop sites in-house or as student projects due to a limited budget.

These writers, therefore, consider and approach the development of charity websites using facilities provided by third parties to save on development costs while still providing extensive advanced functionality.

Yudkowsky (2001) who outlined three general objectives of non-profit websites: first, to raise money; second, to inform the public; and, third, to interact with the public. These three objectives are considered with suggestions for materials and/or features that can be acquired at minimal costs or even for free.

The main difference between non-profit organisations and profit-based organisations is their motivation and drive. Non-profit organisations are driven by religious and humanitarian motives in order to benefit the needy. The profitable organisations again are driven by business goals.

However, the researchers (Hooper and Stobbart, 2002) indicated that potential problems include the fact that, by using services that are often free and are without contractual agreement, the charity will not be able to ensure that the services are reliable, nor do legal guarantees exist to say a service will be available for a specific time span. It is noted that anything which might reduce a visitor's trust in the organisation must be avoided at all costs.

Landesman (2002) discussed building an attractive and influential website for a non-profit organisation. He believes that the Internet, and especially the Web, are bound to become essential tools for operating a non-profit in the twenty-first century since they offer new and powerful ways to communicate with supporter communities, other organizations and the public at large. However, Landesman (2002) declared that it is important that the strategy not only focuses on the goals of the organization but also on its biggest asset: their community of members, volunteers and donors.
3.3 ICT and Charities' Donors

The amount of donations and the number of donors are an essential part of the charities' success in achieving their goals. In terms of the amount of donations, many charities are suffering from a lack of funds. Kuwaiti society suffered severely during the invasion of Iraq in 1990. The vast majority of the population emigrated to neighbouring countries and to some European countries. The Kuwaiti populace have changed from rich proud individuals to homeless and needy ones. They now feel the importance of charities and their activities. Therefore, individual donations after the liberation of Kuwait has been high due to the awareness of the needs of the general population. It is not surprising that Kuwait has donated $500,000 to the USA in response to the natural disaster following Hurricane Katrina in 2005.

In the UK, Kottasz (2004) stated 'that individual donations to charities in the UK have declined or, at best, have remained stagnant'. As a way to solve this problem, Pharoah and Tanner (1997) recommended that researchers should investigate ways to encourage the young in their twenties and thirties to donate to charities. Therefore, the Internet and the World Wide Web help to reach the young, since most Internet users are between the ages of twenty and forty (Johnson, 1999). This may be the same for the Kuwaiti donors. There is a need to expand the number of donors, particularly the young, as the older generation is usually driven by their religious faith.

Many surveys show that the number of Internet users is expanding and, consequently, the number of new audiences, such as donors, could be growing as well. Boeder (2002) confirmed that the Internet can help non-profit institutions to reach entirely new donors. He further declared that: 'Non-profits have been struggling to keep their established donors while pursuing new ones, but the costs of that pursuit using traditional fundraising channels is significant.'
Johnson (1999) conducted an online survey of non-profit organisations in Australia to determine their use of the Internet. Most non-profits (91 percent) felt the investment in developing and maintaining a website was worthwhile. The majority had established a website to share information but an increasing number of these organisations recognised the importance of interacting with visitors by providing an e-mail subscription option.

The study by also (Johnson, 1999) suggested that the Internet offers non-profits a way of reaching new donors. The author attempted to determine what issues users identified as being of concern when asked about making online donations. The study concluded that most respondents raised concerns about giving their credit card number over the Internet and enquired whether the donated money reaches the needy. However, 65 percent of participants were enthusiastic to donate using the Internet facilities.

Jamieson (2000) argued that the impact of ICT for charitable institutions:

"is likely to be very significant. Whether a charity serves a local, regional, national, or international constituency, both internal and external communications, (voice, text, audio and video) will be Internet and Intranet-based. Database-driven, interactive technology will enable organisations to deal with donors, volunteers, clients and staff on a personalized, as contrasted with a mass level, heightening the potential for relationship-building, while reducing staffing requirements and the cost of management processes".

He suggested that successful charity organizations should take advantage of the Internet to develop good relationships, based on mutual causes with volunteers, supporters and donors at all levels so as to survive and to achieve their mission efficiently. The starting point of building this type of relationship, as Jamieson indicated, is through defining the target audience and their information needs, then articulating communications objectives. The latter might include increasing membership, recruiting and managing volunteers,
advocacy, media relations, team-building, opinion-sampling, public education, various dimensions of fundraising, service delivery and so on.

Good relationship-building will encourage donors to donate generously. As the survey carried out by Putnam (2002) declared, non-profits such as international humanitarian and disaster relief organisations, 'can reach a much wider audience when they are handled by the Internet'.

A website could give Kuwaiti charities a wider audience and could reach a larger number of donors. It could reach donors from countries in the immediate area, the Gulf States, as these populations share culture, religion and interests. It could also reach other Arab countries and the rest of the world by adopting ICT communication with donors.

Examining the utilisation of ICT among non-profits has also been investigated by Ryberg, Mowry and Saxrud (2002). This study was carried out in the western metropolitan area of Wisconsin and attempted to emphasize the level of ICT integration into the non-profits.

They found that non-profit agencies in the surveyed region were beginning to make efforts at integrating ICT into their institutions. It was evident that some technology (i.e. e-mail, networks, fundraising applications etc) were being utilised by non-profits. However, the results showed that many organizations lack of the necessary level of ICT integration.

'Proactive steps, such as planning funds for technology, updating software, maintaining documentation on networks, creating back-up and disaster recovery plans, and considering compatibility in hardware and software are lacking. Without these key aspects, complications in technology use may discourage an agency from attempts to integrate information technology'.

(Ryber, et al., 2002)
The study, in terms of website developments, revealed that the non-profit organisations do not often update their websites and often fail to use them effectively to reach out to their supporters or clients. This, in turn, showed that the possible benefits of ICT integration into non-profit institutions are being lost. This may be due to a lack of technical support for ICT. This further suggests the need for training and technical staff that can update and improve the website. Therefore, any plan regarding ICT needs to include strategic planning for technical staff and staff training in order to achieve the full potential of the website.

The State of Kuwait lacks manpower in general and technical manpower in particular although the State is planning to improve the skilled manpower in order to meet the market's needs. Kuwaiti charities may still face this technical problem although there is a large number of highly qualified non-national workers who are playing an active part in fulfilling the needs of the State.

More research on the topic of obstacles that face the introduction of ICT have been noted by the authors (Ryberg et al., 2002) since there are issues that may indeed hinder the integration of ICT such as staff attitudes, the availability of staff time for ICT training, funding for ICT, and support for ICT integration efforts. The crucial points in adopting ICT generally, and charity institutions in particular, are the authorities and the staff of the charities themselves. They are the main users of the ICT. Therefore, their attitudes play a crucial role in establishing the effective use of ICT. They have to be motivated and aware of the role and impact of ICT on the charity's performance and their own: the charity's success is that of the individual staff. There is a need for a positive attitude towards ICT from both the charity authorities and staff in order to facilitate the implementation and use of ICT within the Kuwaiti charities. The Kuwait charities donations are mainly driven by religion and managed by the older generation of society. It is not surprising they lack awareness towards ICT.
Outon and Forster (2001) reported the results of a self-assessment technology survey of non-profit organisations in Pennsylvania, conducted by the Bayer Center for Non-profit Management at Robert Morris College. This survey provides an excellent image of successful non-profit organisations in their use of ICT because many organisations use effective ICT for their work and are supported by an efficient staff who are well trained and familiar with the ICT equipment. Outon and Forster (2001) stated:

'The high level of interest in technology training for staff in non-profit agencies calls for courses specific to non-profit organisations.

(Outon and Forster, 2001: p.31)

The results of the survey revealed that non-profit organisations have chances to advance their use of ICT and this can be moved forward effectively via cooperation with other non-profit institutions.

In order to build on the appreciation for and complexity of current ICT technology in non-profits, the study argued that there are steps that must be carried out continually. These are as follows:

- Technology should occupy the minds of executive directors and other leaders.
- Sustainable improvement in technology use by non-profits will require a significant investment.
- Government agencies, foundations and corporate and individual donors should value contributions to enhanced technology.
- Organisations need realistically to assess the total cost of technology in constructing their budgets.
- There should be space in the budget for staffing, maintenance, upgrades and training.
- Technology spending must occur in a steady stream rather than in large bursts several years apart.

(Outon and Forster, 2001)
Another case study was carried out by Peter Sweatman (2003), who formed the Charity Technology Trust (CTT) which improves the efficiency of charities by the better use of ICT. The advantages of ICT, according to the author, are reduced costs and jointly developed strategies and fundraising, as well as communication and data management tools. This paper outlines a case study in which CTT worked with 27 of the top 100 UK charities. In its first year, CTT raised over 90 thousand pounds from its charity clients from ten thousand online transactions; over 50% of these were from new donors. In 2002, over 100,000 charity e-mails were sent per month and the trust was invited to tender for e-communications advisory work in the charity sector.

An article by Nick Cater (2002), a consultant and media advisor to UK online donations, pointed out that, in spite of the fact that a recent report suggested that websites took time to cover their original costs, many charities are using online systems to increase their donor base. 250 charities are registered with JustGiving.com and the benefits of such a system include direct donations, free sponsorship pages, automatic Gift Aid reclamation and an online fundraising tool.

The writer noted certain keys to success for fundraising online. These include: superior site content, greater investment in management, more site promotion and linking, and more interactivity. Cater revealed that an effective online fundraising system should be simple, efficient and available all times worldwide.

Cater (2002) also stated that costly design firms are not needed as self-managed solutions are cheaper and more flexible but the writer noted that the facility to receive e-mail updates is of enormous benefit. He offered the following example of a successful online effort:

'Success stories and make-a-donation buttons on every page helped animal welfare charity Blue Cross
take a £5,000 donation online, which instant Gift Aid reclamation turned into £6,400.'

(Cater, 2002)

The writer advises too that power should be handed to clients where possible so that donors can make the causes they support their own.

A report (1995) by The Philanthropic Initiative (1995) was outlined at the 'Wingspread' conference held in 1994 in Wisconsin, USA. The conference participants consisted of 40 philanthropic leaders, donors and advisors to the wealthy. The purpose of the conference was to develop strategies to increase donor satisfaction and to encourage wealthy donors to increase their giving. The participants reached the following conclusions:

- Planned individual outreach at a local level is necessary to increase the involvement of donors and to convert non-donors into donors.
- The huge amount of information available should be disseminated more effectively.
- Grant seekers need to form individual strategies by educating advisors (e.g. accountant, lawyers etc.) about the positive vote of philanthropy in society.
- Specific populations of possible donors should be targeted; strategies should be geared individually to these groups.

The report noted that the rich in the developed world are continuing to accumulate wealth and that there is a vast amount of information available to allow the wealthy to make informed decisions about where they make charitable donations.

In the UK there are more than 185,000 registered charities and this number is rising by 5,000 annually (Kottasz, 2004) although it is clear that the donations of individuals have not risen to the same extent since this is felt to have, at best, only remained stable. Some studies have revealed that charities are having to scrutinise their supporter information in order to target more
target more efficiently those who are likely to support their organisation (Carolus, 1999; Sargeant et al., 2000). However, they also need to encourage and convince a larger amount of the population to donate generously.

Kottasz (2004) carried out a study on the donor preferences of affluent young males. The survey showed that 80% of the sample wanted detailed information on how their donations would be used. It shows that extensive marketing and detailed information must be available concerning a charity’s operations. The study also revealed that donors like to get benefit and rewards from charities, such as invitations to special events and membership schemes.

3.4 ICT and Charities’ Beneficiaries

Turner et al. (1998) carried out a study which was supported by the Education and Planning Committee of OMB Watch’s Non-profits’ Policy and Technology Project. This was aimed to comprehend how non-profit organisations utilised ICT, and specifically the Internet and resulting technologies, for public activities’ purposes. The main objectives of the study were to understand firstly: ‘the types of information technology tools needed for effective and efficient online public policy participation. Secondly, the best, and most appropriate, uses of particular sets of technology tools in various public policy activities for non-profits; and thirdly, emerging issues with regard to non-profits use of technology for public policy purposes’. The research of Turner et al. (1998) found that there are as yet few examples of successful ICT usage by non-profit organisations in public policy activities. Additionally, website content is not updated or disseminated frequently.

The survey concluded that Internet technology provides excellent opportunities for charities which will enhance their visibility and engage prospective volunteers and supporters.
'Nonprofits begin to realise the improvement technology can make in their delivery of services' (McInerney, 2003: p.4). A survey was conducted by McInerney (2003) on non-profit organizations in order to understand the ICT issues facing non-profits. The results show that many pay for ICT out of their general operating expenses. Most respondents believe that ICT plays an important role in non-profit organizations. Consequently, McInerney (2003) suggests that non-profits should be funded for improvements in ICT, as well as for their staff to be properly trained in these technologies.

The study concluded that research should be conducted to investigate the effective usage of ICT in the non-profit sector and how to implement ICT innovatively, as well as how to generate the resources necessary to achieve this.

3.5 Charities and Co-operation

Co-operation could be defined as two or more organisations mutually working together towards a positive outcome in activities such as planning, solving problems and making decisions (Straus, 2002). Non-profit organisations lack co-operation with each other:

'There was a huge, unmet demand in the non-profit and community sectors for the collaborative skills and tools'

(Straus, 2002: p.12)

A study was carried out in the UK by Madon (1999). It revealed that only 35% of information is shared among non-profit organisations. Madon also described the benefits of co-operation among nonprofits as:

Development projects succeed by networking and learning from a history of negotiation, coalition and change in the structure and behaviour of the international non-profit government organisation in response to interaction between the agency and other organisations.

(Madon, 1999; p.256)
A report conducted by Diane Khirallah (2001) noted the important role played by ICT in the aftermath of the Sept 11th attacks as far as charitable organisations were concerned. One of interviewees confirmed that: 'This disaster pushed us into using the Internet'.

The American Red Cross in Greater New York was already experiencing difficulties because of cuts in its revenue after Sept 11th. The charity was also flooded with requests for help and was unable to cope with the input.

A problem faced by many charities in the wake of Sept 11th was that some families would collect more than was necessary because they accessed multiple charities, while others did not get anything because they could not 'find their way around systems'.

> 'That's raised concerns that some families will get more aid than they need if they collect benefits from multiple charities, while others won't get anything because they can't navigate the bureaucracy.'

(Khirallah, 2002)

To prevent this, the N.Y Attorney General, Elliot Spitzer, proposed that a central database was created. This database was to be used by dozens of charities helping the victims. The aims of the database were to:

- Simplify and consolidate the application process for aid
- Track who was already receiving help
- Cut down on fraud
- Monitor charities to ensure that the money they received was properly distributed.

It was planned to build a central data repository using an IBM DB2 database. Data would then be transformed into one consistent format and loaded into the database. A phased approach was used and security safeguards were installed to maintain integrity. Mailing lists of donors would not be shared and it was acknowledged that personal information would be used fairly.
One major problem raised was that many charitable organisations have ICT systems that are unsophisticated compared with for-profit businesses so the ability to fund such systems is limited. However, the aggregated data provided enough information to make valid and wise decisions.

The privacy issue was another concern among charities. Khirallah (2001) quoted from an interview with the Bar Association's Hirschfeld: 'No one would want to share mailing lists of donors'. In order to maintain confidentiality of data, it was decided that the database would exclude any information about donors.

Confidentiality of donors is a critical issue for the Kuwaiti charities. This is due to religious and social factors. From a religious point of view, Kuwaitis donate to charities for a religious reason: for the sake of God. Donations should be made without obtaining any public benefit, according to Islam.

From a social point of view, donating publicly is not well received by Muslim society who perceive this as a donation for the sake of publicity, not for the sake of God. This is generally against the values and norms of Kuwaiti society. Therefore, Kuwaiti donors seek confidentiality for their details and records.

3.6 Concluding Remarks
The literature showed that ICT has revolutionised organisations that are driven by a business motive. This drive has attracted and encouraged ICT companies to invest in order to meet the customers' needs. The non-profit charities lack research into the role and use of ICT. This is due their lack of business drive as the vast majority of their staff and their activities are run by volunteers.

The literature revealed and explored the role and use of Information and Communication Technology in non-profit charities. It revealed that ICT has
an important role and impact on the charities' activities. This includes the role of ICT in improving communication between charities and their donors and beneficiaries. Improvements in communication, such as websites and the Internet, have an impact on help reaching the needy, and on beneficiaries and donors. This will help in saving lives and meet the urgent needs of the beneficiaries. Many studies have urged non-profit organisations to move ahead by taking advantage of Internet technology and its services in order to increase their efficiency.

The Kuwaiti charities need to take on board the above findings and benefit from the experience of non-profit charities worldwide. It is clearly evident that Kuwaiti charities could get enormous benefits from the research findings and experiences mentioned above to improve their communications with their donors and beneficiaries nationally, regionally and internationally and to achieve their goals more efficiently and effectively.

In view of the fact that there is a lack of information about ICT among charities in Kuwait, the next chapter discusses thoroughly the research design adopted for this study.
4.1 Introduction

This chapter presents the main tools used for collecting the information needed to investigate the research's main aims and objectives. These collection tools are needed because there is a lack of information about ICT experiences among charity organisations in Kuwait. This chapter includes discussions of the questionnaire, interviews, case studies, and the focus group, which were implemented in this research as data collection methods. This chapter also identifies these methods, their major advantages and disadvantages, and the procedures for conducting and carrying out each technique autonomously.
4.2 The Research Methods

This research applies a multi-methodology approach which Mingers (2001) defined as "employing more than one method or methodology in tackling some real-world problem". Skyrme (1997, p.219), commenting on the multi-methodology approach, noted that:

"I believe that to try and apply a single methodology, does not reflect the richness, diversity and interdependence of most real-life situations. Therefore a multi-methodology approach, which uses techniques from many other methodologies, would seem to have many attractions."

Mingers (2001) broadly distinguished several ways in which a combination of methodology could be used within a single intervention. One of these combinations is methodology enhancement, using one main methodology but enhancing it by importing methods from elsewhere (Mingers, 2001, p. 308).

A survey was conducted in 2000 by Munro and Mingers which pointed out that SSM works well with other soft methodologies. Mingers (2001: p.304) indicated that:

SSM is used extensively as a methodology that can be combined with many others. SSM itself is very flexible and can be used to structure the whole intervention. It is often used as the dominant method augmented by other techniques.

This research used a multi-methodology approach based on methodology enhancement (Mingers and Gill, 1997). Consequently, this research has used Soft Systems Methodology (SSM) as a whole to gain agreement on desirable changes, and has then enhanced it by bringing in another technique that is
considered as a problem-solving methodology: ETHICS methodology, designed by Enid Mumford.

SSM helps in supporting an investigation of the organisations and their use of information, while ETHICS helps to ensure that any new system is surrounded by a compatible, well-functioning, organisational system. Table 4.1 below explains that this research uses SSM and is enhanced by the ETHICS methodology.

<table>
<thead>
<tr>
<th>Stages</th>
<th>SSM</th>
<th>Stages</th>
<th>ETHICS</th>
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<tbody>
<tr>
<td>Stage 1</td>
<td>The problem situation: unstructured</td>
<td>Stage 1</td>
<td>Description of mission and key tasks</td>
</tr>
<tr>
<td>Stage 2</td>
<td>The problem situation: expressed</td>
<td>Stage 2</td>
<td>Diagnosing user needs and problems</td>
</tr>
<tr>
<td>Stage 3</td>
<td>The root definition of relevant systems</td>
<td>Stage 3</td>
<td>Setting efficiency and job satisfaction objectives</td>
</tr>
<tr>
<td>Stage 4</td>
<td>Building of conceptual models</td>
<td>Stage 4</td>
<td>Developing a number of alternative design strategies and matching them against these objectives</td>
</tr>
<tr>
<td>Stage 5</td>
<td>Comparing the conceptual model with reality</td>
<td>Stage 5</td>
<td>Choosing the strategy which best achieves objectives</td>
</tr>
<tr>
<td>Stage 6</td>
<td>Assessing the feasibility and desirability of changes</td>
<td>Stage 6</td>
<td>Implementing the new system</td>
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<tr>
<td>Stage 7</td>
<td>Action to improve the problem situation</td>
<td>Stage 7</td>
<td>Evaluating the new system</td>
</tr>
</tbody>
</table>

Table 4.1: Parallel linkage between SSM and ETHICS models

Table 4.1 shows that this research study replaces the viable system model (design mode) component of ETHICS (Stages 1 to 4) and Stage 5 with a complete SSM intervention (Stages 1 to 7). ETHICS is preferred since it emphasis on implementation and evaluation (rather than SSM ‘improving the
problem situation'). The outcome of these actions is a fully implemented and evaluated model that has been exposed to the human activity system approach adopted by the SSM. Thus, part of one systems approach (ETHICS) has been replaced by another systems approach (SSM) due to the nature of the design problem.

4.2.1 SSM

Soft Systems Methodology (SSM) was developed during the early 1980s (Flood and Jackson, 1991) by Peter Checkland of Lancaster University as a method for developing information systems in business organisations. This approach is based on the idea that organisations are often highly complex and are composed of individual components of human activity which may react, at an individual level, differently from the organisation as a whole. As such, SSM is at the opposite end of the spectrum from hard systems which seek to break down a complex problem into its component parts. SSM, on the other hand, claims to provide insight into the human processes which are involved in the business system. It therefore has a better chance of achieving the most appropriate long-term solution since it takes into account the ideas and opinions of those who will 'operate' the system.

SSM asserts that complex problems cannot be effectively solved by using hard and fast methods. Instead, SSM attempts to achieve an agreed view concerning the problem situation. SSM adopts the approach that any system must be seen in an holistic context and, since business systems are often complex and unstructured, they cannot be viewed in the deterministic way adopted by hard methodologies. SSM methodology includes seven stages. These stages need not necessarily be taken in strict order, however, as some stages can be tackled simultaneously and others may need to be revisited. These stages are as follows:
1- The problem situation: unstructured. This stage involves gathering the various views of all those concerned with the system under observation.

2- The problem situation: expressed. This stage expresses the problem in a formal, structured way such as by the creation of a rich picture which uses visual symbols, pictures and drawings to describe the problem situation.

3- The root definition of relevant systems. This is a root definition, a tightly constructed, concise definition of the human activity system which states and defines the nature of the system. It is named, at this stage, using the CATWOE mnemonic and is also used to identify the problem in order to prompt the thinking about what a researcher is trying to achieve. Such a definition should include the following:

   \[ C = \text{The customers of the system: those who are on the receiving end of a system.} \]
   \[ A = \text{The actors: those who would actually carry out the activities envisaged in the system being defined.} \]
   \[ T = \text{The transformation process: what the system does to the inputs to convert them into outputs.} \]
   \[ W = \text{The world view: in order to emphasize the consequences of the overall system, the system can be put into its wider context.} \]
   \[ O = \text{The owner(s): the owners of the system, who have formal power over the system to stop it existing if they wish.} \]
   \[ E = \text{The environmental constraints on the system, such as regulations, financial constraints, resource limitations and so on.} \]

4- Building of conceptual models. Once an agreed root definition has been established, a conceptual model is constructed as a diagrammatic representation.
5- Comparing the conceptual model with reality. When the comparison has been carried out, recommendations may be made regarding changes that need to be made to the system's environment.

6- Assessing the feasibility and desirability of changes. Changes felt to be necessary or desirable in the previous stages are analysed to see if such changes are feasible.

7- Action to improve the problem situation. Action is then recommended and taken based on the previous stages. Since this action then changes the problem situation, the whole process may then begin again to consider the new situation.

SSM considers the human activities within system environments; it is viewed as an excellent method for analysing situations. However, it is less definite on aspects relating to the implementation and evaluation of information systems.

Uses of SSM and an Explanation of its Choice in this Study
Soft Systems Methodology was developed through action research where systems ideas are tested out in client organisations. As such, it can be viewed as a useful methodology to adapt in complex situations where conflicting needs and views may well arise.

In this research, the aims of the study are to investigate and analyse the current ICT situations in the charity organisations in Kuwait and provide guidelines to introduce and improve ICT in order to meet the needs of the management, donors and beneficiaries of the charities, and in order to ensure compliance with state legislation. Because of the complexity involved in attempting to design a model which will meet the needs of four separate organisations, a Soft System Methodology had to be adopted as the needs, desires and aspirations of the users themselves were paramount if any workable system was to be arrived at. It
was decided therefore to adopt SSM since this would allow for the active participation of all the users of the proposed system.

Reaching the aims of this study was obviously a difficult task to achieve since different factors had to be considered before initiating such an endeavour. These factors included possible reluctance to change by some decision-makers and by those in the top levels of the administration of these organisational bodies because they may have different interests, perceptions or views regarding the proposed project.

Additionally, these organisations may lack the required funds, expertise, manpower, or even adequate infrastructure (in terms of hardware and software) that are essential in order to start up this study. These features are crucial and must be not underestimated under any circumstances. However, because of this, Soft Systems Methodology, as an action research approach, is regarded as the most suitable technique for this study since it provides a new mode of thinking pertaining to the problem being investigated. This is particularly so when the problem is classified as vague and ill-structured, is described as ambiguous, and involves some of the above-mentioned aspects, requiring a profound understanding of internal and the external environments surrounding the problem situation. This appreciation is extracted from the multiple viewpoints and perceptions of the people interested in the problem under research. Flood and Jackson (1991) noted:

*Essentially, SSM has been developed for use in ill-structured or messy problem contexts where there is no clear view on what "constitutes the problem", or what action should be taken to overcome the difficulties being experienced. In fact, SSM in action should prevent decision-makers from rushing into poorly thought out solutions based on preconceived ideas about an assumed problem."*
Mingers and Taylor (1992) conducted a survey study of 137 participants to investigate their experiences of using SSM. It concluded that SSM is considered to be a practical and successful general-purpose methodology that can be used by a wide range of people in a variety of tasks, particularly regarding organisational structure, performance evaluation and information systems. This study indicated the usefulness and usability of Soft Systems Methodology. It also suggested that SSM is an adaptable technique that can be applied in confronting a great many management system application problems.


In the literature, a number of studies pointed out numerous benefits of using SSM in tackling ill-defined management problem situations. These advantages are:
SSM is a practical approach that permits the investigator to analyse and study complex problems that entail human interaction in a real world situation.

Soft Systems Methodology is a participatory approach that requires the involvement of all stakeholders who are interested in the problem situation to take purposeful action through negotiation and learning in stages without imposing a predetermined solution.

SSM is a flexible, adaptable and useful approach, which can be used satisfactorily in a variety of studies.

SSM looks at an organisation as a human activity system that consists of interrelated elements which must be analysed before any attempts can be made to improve or introduce possible change to the situation.

Due to the importance of cultural and political factors and their effect on any problem situation within an organisation, SSM realizes the importance of this, particularly when dealing with sensitive issues.

4.2.2 ETHICS

ETHICS methodology is an acronym for Effective Technical and Human Implementation of Computer-based Systems but the name of this approach is meant to imply that it is a methodology that embodies an ethical position. According to Mumford (1995), it is an ethical approach because it assists designers to maximise human gains while achieving organisational and technical excellence.
This methodology was first proposed by Enid Mumford of the Manchester Business School in the late 1970s to early 1980s (Jayaratna, 1999) and takes a socio-technical view of the systems development process. In other words, this methodology acknowledges that technology must be closely linked to the human/social factors that are at work within a business organisation and that any problem solution must recognize factors such as the quality of life of the users of the system. These strands recognise that a system will be successful only if its users are satisfied with its operation and its output. As a result, user participation is crucial through the development life-cycle.

Since the development of a computer-based system, as a process of change, is likely to give rise to conflicts of interest among the participants, a process of negotiation takes place among the affected and interested parties. Different interest groups are represented in the design teams and these teams choose from a range of possible solutions by reference to criteria determined in advance. In seeking to involve both direct and indirect users of the system, such as managers, employees, suppliers and customers, the ETHICS methodology aims to overcome, or at least lessen, resentment against the new system, since users will already have significant familiarity with it. This increases communication among employees at all levels and engenders a feeling of empowerment. Within this framework, technical specialists are viewed as facilitators to aid the implementation of the users' requirements.

ETHICS has three principal objectives. These are:

1. To enable the future users of new systems at all organisational levels to play a major role in the design of these systems.
2. To ensure that new systems are acceptable to users because they both increase user efficiency and job satisfaction.
3. To ensure that any new technical system is surrounded by a compatible, well functioning organisational system.

According to Avison and Fitzgerald (1995), the philosophy of ETHICS is different from other information system development methodologies and it is also explicitly stated, which is not common in most methodologies. They say that:

"The philosophy is one which has evolved from organisational behavior and perceives the development of computer system not as a technical issue but as an organisational issue which is fundamentally concerned with the process of change."

(Avison and Fitzgerald, 1995, p. 353)

The steps of ETHICS are shown below. The seven-step version is described in Mumford (1996) as:

1. Diagnosing user needs and problems, focusing on both short and long term efficiency and job satisfaction.
2. Setting efficiency and job satisfaction objectives.
3. Developing a number of alternative design strategies and matching them against these objectives.
4. Choosing the strategy which best achieves both sets of objectives.
5. Choosing hardware and software and designing the system in detail.
6. Implementing the new system.
7. Evaluating the new system once it is operational.
Uses of ETHICS and an Explanation of its Choice in this Study

Effective Technical and Human Implementation of Computer-based Systems (ETHICS) methodology was developed to ensure that the non-technical aspects of systems design are handled efficiently and without stress. ETHICS is considered as a means for enabling everyone concerned with the introduction of new technology to consider human as well as technical factors when embarking on the design of a new system (Mumford, 1995).

One of the aims of this research is to introduce and improve ICT in order to meet the needs of the charities, donors and beneficiaries, and to ensure compliance with state legislation. Because ETHICS is a problem-solving methodology that has as its principle objective the successful integration of technology with the needs of users, it will make an important contribution to this research study.

4.3 Data Collection

The main focus of this research, as indicated in Chapter One, is to investigate and analyse the current ICT situations in the charity organisations in the State of Kuwait. This will also promote greater coordination and will enhance the productivity of work in general. Hence, to understand thoroughly all aspects and elements surrounding the current state of the existing needs of these charity organisations, extensive diagnosis and investigation related to the situation being studied is required.

In order to build the richest possible picture at Stage Two of SSM, it is essential to collect a wide range of data or facts regarding the problem situation. The researcher here has had to use a variety of data collection methods to collect and record the opinions, views and perceptions of all stakeholders.
In order to carry out this investigation, this research has focused on questionnaires, interviews, case studies and focus groups as the primary sources for gathering the necessary data. The reason for this is that if the researcher were to select a very structured approach, such as a multiple-choice questionnaire, and build a model based on the results of that alone, much relevant information might have been lost. Consequently, it was important not to narrow the scope of this research.

4.3.1 Questionnaire
The questionnaire is typically known as one of the most widely used data collection methods in social science research. It is normally used by researchers to gain, in numerical terms, opinions, views, perceptions and reactions of a fraction of an overall population concerning an issue. As a result, the findings can be generalised to include the entire population. Hall and Hall (1996) noted that the purpose of the questionnaire is to generate information in a systematic fashion by presenting all informants with questions in a similar manner, and to record their responses in a methodological way. They further add that it exemplifies a scientific approach to data collection and addresses the issue of reliability of information by reducing and eliminating differences in the way in which questions are asked and how they are presented.

Walliman (2001) highlighted numerous advantages of using the questionnaire survey as a data collection method. These include: lower cost, particularly when the population under study is widely scattered; gathering data from a large number of people; reducing the possibility of bias because all respondents are asked the same questions; allowing respondents to think about their answers or consult friends; it can also be completed anonymously. At the same time, it has some disadvantages. For instance, it requires the researcher to develop easy to understand, simple questions and answers; it does not offer the researcher
opportunities to probe for additional information or to clarify answers; the researcher cannot control who fills in the questionnaire; and response rates are usually low (Bernard, 2000).

There are different methods for using survey questionnaires: the self-administered questionnaire or mail questionnaire, the face-to-face interview, and the telephone interview (Balnaves and Caputi, 2001). Self-administered questionnaires are usually mailed to respondents to answer all the questions individually at their own pace. They may also be dropped off and picked up later, they may be given to people in a group all at once, or programmed into a computer. Face to face surveys are usually in the hands of interviewers. They read questions to respondents and record the responses by writing them on the questionnaires.

The telephone interview is similar to the face-to-face interview. Interviewers ask questions and record the respondents' answers. This research chose to carry out a self-administered questionnaire as there is no cost in terms of the researcher's time and travel; this is particularly significant where participants are widely scattered.

The population

A population frame indicates the thing that can be quantified, for example, people, animals, plants or even objects, with the purpose of collecting the necessary data. This has to be accessible, quantifiable and related to the purpose of the research.

Walliman (2001) defined population as 'a collective term used to describe the total quantity of cases of the type which are the subject of your study'. The population then has to be defined in terms of (1) content, (2) extent, and (3) time. Identifying the target population is one of the primary tasks that the researcher has to carry out, taking into consideration the aim and objectives of the study,
finding an appropriate list of the total population, and then selecting the required sample. The possible target population for questionnaires is employees who are currently working in the following departments within each organisation:

- Information Technology Departments
- External Activities Departments
- Local Activities Departments
- Internal Projects & Commissions Departments
- Management Development Departments
- Financial Affairs Departments

The main reason for selecting the employees from the above-mentioned departments is because these people are experiencing, in some way or another, certain communication difficulties, specifically with outside organisations and agencies. This is, of course, due to the absence of an adequate ICT infrastructure that links each organisation with the outside world electronically. This, in turn, leads to a reduction of efficiency in their external activities which have been observed as one of the cornerstones of their overall mission. The employees are also expected to provide feedback on the ideal system that could achieve the short and long-term goals of these charitable agencies.

Sampling
Sampling is a technique or a procedure that is mostly used by researchers to select representative units, which are thought to represent the whole population under study, with the aim of drawing valid conclusions about that population. It is generally selected for such a study because the population under examination is very large and also when funding and resource issues must be taken into account (Blaxter, Hughes and Tight, 2001).
In order to pull out sampling units from the general population, researchers normally rely on two major approaches. The first is non-probability sampling, which is used when the researcher cannot ensure that every unit in the population has an equal chance of being selected or is suitable for researchers who do not want a simple sampling frame. Three major non-probability sampling designs that are frequently employed by researchers include convenience sampling, purposive sampling and quota sampling.

Probability sampling, on the other hand, involves taking a given number of units of analysis from a list called a sampling frame which represents some of the population under scrutiny. This gives each unit an equal opportunity of being selected. Probability sampling comes in four common designs: simple random sampling, stratified sampling, systematic sampling and cluster sampling. The following paragraph briefly elucidates each type.

**Simple random sampling:** This is the basic sampling technique where the researcher selects a group of subjects (a sample) for study from a larger group (a population). Each individual within this group is selected totally by probability and each member of the population has an equal chance of being chosen in the sample. Simple random sampling is most appropriate when the entire population from which the sample is taken is homogeneous.

**Stratified sampling:** This type of non-probability sampling is obtained by taking samples from each stratum or sub-group of a population. Stratified sampling techniques are more suitable when the population is heterogeneous or dissimilar, and where certain homogeneous or similar, sub-populations can be isolated.

**Systematic sampling:** This is the sampling procedure wherein the $k$th element of the population under study is selected for the sample, with the starting point randomly determined from the first $k$ element. In systematic sampling, the sample
values are spread more evenly across the population; thus, many systematic samples are highly representative of the population from which they were selected. Systematic random sampling will eliminate many of the bias errors found in true random sampling and will give accurate averages of the population.

**Cluster sampling:** Cluster sampling consists of the selection of groups within a population to form a sample (Frankfort-Nachmias, 1996). A researcher selects the sample in stages, first selecting groups of elements, or clusters, and then selecting individual elements from each cluster.

The sample selection
The selection of a sampling strategy is one of the primary tasks that a researcher has to decide prior to executing or carrying out both the pilot and the main study. This researcher selected stratified random sampling as an appropriate technique to be incorporated in this study.

For this reason, the population was divided into two main groups for the sake of description: Government Group consisted of those charity organisations under the direct supervision of the government of Kuwait and Non-Government Group those that were funded by non-government organisations. The total population consisted of about 920 employees. Therefore, in drawing a sample from that total population, the researcher relied on a randomly systematic sampling approach as a means of extracting the required sample, and so every second name from the employees' naming list was chosen at every organisation. This represented about 50% of the overall population. The total sample selection of respondents, as outlined in Table 4.2, was 460 participants.
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<table>
<thead>
<tr>
<th></th>
<th>Government Charity</th>
<th>Non-Government Charity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Zakat House</td>
<td>160</td>
<td>112</td>
</tr>
<tr>
<td></td>
<td>Islah</td>
<td>100</td>
</tr>
<tr>
<td></td>
<td>Turath</td>
<td>100</td>
</tr>
<tr>
<td>Sub-Total</td>
<td>160</td>
<td>112</td>
</tr>
<tr>
<td>Total Distributed</td>
<td>460</td>
<td></td>
</tr>
<tr>
<td>Total Response Rate</td>
<td>54.7%</td>
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</tbody>
</table>

Table 4.2: A breakdown of the distribution and return rate

Questionnaire Design

According to Whitten, Bentley and Ho (1986), an effective questionnaire design should encompass the following:

1. Determine what facts and opinions must be collected and from whom these should be obtained. If the number of people is large, using a smaller, randomly selected group of respondents should be considered.

2. Based on the required facts and opinions, determine whether free fixed-format questions will produce the best answers. A combination format that permits optional free-format clarification of fixed-format responses is often used.

3. Write the questions. Examine them for construction errors and possible misinterpretations.

4. Test the questions on a small sample of respondents. If the respondents have problems with them or if the answers are not useful, edit the questions.

5. Duplicate and distribute the questionnaire.

The questionnaire used for this study was developed by the researcher drawing on two main resources: firstly, previous studies reported later in the literature, which investigated ICT among non-profit institutions; and secondly, the
experience of the researcher with organisational information and communication technology in the country under investigation.

In order to ensure ease of use of the questionnaire, for both the respondents and the researcher, special attention was paid to the ordering of questions on the instrument. Sanders and Pinhey (1983) stated that:

"Questions are not simply placed on a research instrument in a random order, for the order in which they appear can have a dramatic effect on respondents' answers."

Certain guidelines determine the order of the questions in the questionnaire. These include:

1. Placing open-ended questions at the end of a questionnaire. This is because they are time-consuming since the respondents must write out their answers. Consequently, response rates would be low and this would create an incomplete data set.

2. Asking easy to answer questions first. Starting with questions that deal with facts, such as the sex of respondents, age, educational background, and so forth, is preferable. Starting with this type of easy questions will not require much thought from the respondent.

3. Placing questions in a logical order will make it easier for the person to answer. Researchers should avoid asking questions out of sequence since they would confuse the respondents.

4. Using pairs of questions to check reliability. The researcher can depend on paired questions if he/she wishes to detect any unreliable questions. Pairs of questions usually consist of one stated positively and one negatively.
Pre-test and Pilot study
Ideally, the questionnaire should be tried out on a group similar to the one that will form the population of the study. Sanders and Pinhey (1983) declared that:

'A pilot study is a small research effort designed to discover possible problems while there is still time to remedy them....In preparation for a survey it is often a good idea to conduct a pilot study to pre-test the clarity of the questions used in a questionnaire.'

Consequently, the purpose of a pilot exercise is to remove problems from the instrument so that the objectives of the research will be achieved and so that the researcher can carry out a preliminary analysis to see whether the wording and format of questions will present any difficulties when the main data are analysed. For the purpose of this research, two different pilot studies were carried out.

Steps Conducted before the Pilot Studies
Before piloting the questionnaire, three steps had to be undertaken: validation of the questionnaire, translating the questionnaire into the Arabic language, and timing the questionnaire. The following paragraphs explain each step individually.

I. Validation of the Questionnaire
Validity refers to the degree to which a study accurately reflects or assesses the specific concept that the researcher is attempting to measure. Sanders and Pinhey confirmed that:

'When researchers talk about the validity of an item they are referring to its ability to actually measure what it is supposed to measure, and if we are trying to measure one thing with a question, but that question is really measuring something else, then that measure is not a valid one.'
A researcher can utilise various types of validity to prove whether he/she has measured the truth. There is more than one kind of validity that researchers can use to measure the validity of research results, such as content validity, criterion validity and construct validity.

According to Grimm and Yarnold (2000:104), content validity is concerned with the degree to which an instrument assesses all relevant aspects of the conceptual or behavioural domain that the instrument is intended to measure. Criterion validity concerns how accurately an instrument predicts a well-accepted indicator of a given concept or a criterion (Grimm and Yarnold, 2000). Construct validity determines whether a given measure or operational definition actually assesses the underlying conceptual variable or construct that the measure is intended to represent (Grimm and Yarnold, 2000). Each type of validity is tested in a different way. For example, content validity can be achieved by asking independent experts their opinion of the questionnaire's content. This was the approach taken in this study.

Attention was paid by the researcher to ensuring consistency of interpretation by providing jurors, and later respondents, with a letter explaining both the objectives of the questionnaire and the meaning of the various terms used. The panel was composed of two PhD students, one from the Department of Information Science at Loughborough University and the other from the Department of Computer Science at the same university. These were given a copy of the first draft of the questionnaire, in addition to some information related to the research, to give them a clear understanding of the relationship between the questionnaire and the most important issues in the research, such as the research problem, the research questions, and the importance of the study.
The panel was asked to comment on whether there were any questions that were irrelevant and should be omitted, or whether any data were required that were not covered by the questionnaire as drafted. They advised the deletion of some questions, which they considered not to serve the research purposes, and commented on the need to provide respondents with clearer definitions and well-known ICT terms to ensure that the appropriate data were collected. Their comments were acted upon to produce a draft that appropriately addressed the research objectives and questions. The panel was asked for its comments concerning any need for modifications of the questions and it was agreed that the first draft would be returned within a week.

II. Translation of the Questionnaire into Arabic

The English version of the questionnaire was translated into Arabic. Later, this questionnaire went through three stages of evaluation:

- Two Arabic language professionals reviewed the translated draft.
- One doctor and one senior professional, both from Kuwait, were asked to comment on the wording, style and presentation of the questionnaire. Their skill in two languages made their comments especially relevant and these comments and suggestions were taken into account to produce an amended translation.
- A translation back into Arabic was then carried out during the pilot phase by academic staff of Kuwait University. Afterwards, all translations were compared and the necessary changes were made.

III. Timing the Questionnaire

Timing each question response is a way of detecting potentially difficult questions. The researcher was concerned that the questionnaire might look very long to the respondents. Therefore, ten Arabic-speaking employees were asked
to answer the questionnaire in order to find out if any ambiguities and inconsistencies existed and to indicate how long it took to answer the questionnaire. No great differences among the ten employees were noticed. The whole questionnaire took between 15 to 20 minutes to answer.

The First Pilot Study
The first pilot study was conducted in March 2002 to check the satisfaction of the participants in the pilot study with the questionnaire's wording, clarity and length. In this round of testing, six academic IT staff at Loughborough University were approached to evaluate and comment on the questionnaire. These academics were asked to comment on the early draft of the questionnaire containing questions compiled and deemed important after the literature review. All the participants in the first pilot study returned the questionnaire and their valuable comments were used to enhance the questionnaire's clarity and to make it reasonable with regard to the length and the time required to complete it.

The Second Pilot Study
In the second pilot study, the round of testing was tried out on a small number of people from the same population as the one that was to be surveyed: that is, the charity organisations in Kuwait. The questionnaire was piloted via the electronic mail service in April 2002, using a sample chosen at random from the main study population, with 10 participants from two charity organisations. The pilot study revealed a number of problems with the questionnaire.

Some of the questions were not clear to the respondents since several concepts relating to information and communication technology were quite unfamiliar to them. Therefore, all technical terms and jargon were avoided in this survey. In addition, some respondents asked for more options in the closed-ended
questions in order to select an appropriate answer that represented their own point of view.

Consequently, revisions were made to the second draft of the questionnaire, such as rephrasing some questions for greater clarity, and omitting and adding some questions.

**Distribution of the Questionnaire**

After considering all the jurors' comments, piloting the study and making the necessary changes to ensure comprehension, the final version of the questionnaire was ready for distribution. The main questionnaire survey was carried out in Kuwait over a period of three months from May to July 2002.

A total of 460 copies of the questionnaire were printed for distribution in the Arabic language to the four charity organisations. Zakat House received 160 copies and the others received 100 each. The distribution took place in this order: Zakat House, Khairia, Islah, and finally, Turath.

The researcher embarked on the first meeting with the General Manager of each organisation in order to get permission to distribute the questionnaires and perform interviews. In addition, the researcher discussed with them the research topic and its objectives and requested a thirty-minute meeting with them; three other meetings with certain Directors in their organisations were also requested.

All the General Managers were co-operative and provided enough help and support to conduct this study. Each one of them allocated a senior employee to guide the researcher to his study and to carry out tasks such as introducing the Directors to the researcher and so forth. Figure 4.1 displays the mechanics and the process flow chart of the questionnaire survey in this study.
Context of the Questionnaire

The final version of the questionnaires was divided into four parts and consisted of 26 closed-ended questions in a multiple-choice format. This type of question is relatively easier to process and analyse, enabling the researcher to benefit from the standard format of the answers for statistical tests.

This also provides motivation for the respondents to complete the questionnaire and reduces the possibility of boredom which might induce the respondent to give up; thus it was designed to give an impression of answering short sections, rather than one long questionnaire. Additionally it was attractively presented to facilitate ease of response and to encourage the respondent to continue and complete the instrument. In short, the questionnaire was designed in such a way that most respondents would be able to fill in the answers without the aid of the researcher. The four parts of the questionnaire are summarised in the following:

Part I: Respondents’ Personal Background

Part One focused on collecting information about the respondents’ characteristics. These questions were directed towards classifying the respondents’ positions in the organisation and their characteristics. The respondent's gender, age, name of organisation, department name, managerial position, work experience and highest education degree were requested.

Part II: Information and Communication Technology

Part Two focused on collecting information about the respondents' knowledge and experience of ICT applications such as information, database, and communication systems in their organisations.

Moreover, Part Two was also concerned with identifying, in Kuwaiti charity organisations, the availability of ICT such as Local Area Networks (LANs) and
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Internet networks. In this part, a distinction was made between charity organisations, which were already implementing ICT systems, and those organisations which were not. Respondents who identified their organisations as non-users of ICT systems were directed to skip to Part Three in which questions were asked about co-operation with charities and clients.

Part III: Co-operation with Charities and Clients
In this part, multiple statements and answer options were directed to the respondents to indicate the importance of some co-operated activities to be deployed among all charity organisations in Kuwait and with their donors and beneficiaries. Then respondents were asked to rate the importance of methods to facilitate the co-operation of meetings amongst charities. This kind of information was necessary because it could help in identifying and analysing these methods, whether they are electronic or non-electronic.

Part IV: Personal Development
Part Four was designed to obtain information about ICT training at work, especially on computer networks. In addition, respondents were asked to indicate how they rated the importance of methods of training to be implemented in their organisations. In this part, the researcher attempted to find out whether or not charity organisations provided ICT training to their employees and to consider guidelines regarding the best types and methods to facilitate this training. Then, the final question attempted to obtain any comments or suggestions which the respondents could offer towards services enhancement from and within the charity organisations in Kuwait.
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4.1.2 Interviews

According to McMillan and Schumacher (1993), interviews are one of the most commonly used techniques for gathering information, particularly when researchers require specific information that will enable field up on a special topic. It is a way of eliciting certain information from individuals or specific objects, such as the views and responses on the part of the interviewees. The interviews are usually conducted in a face-to-face format, where the interviewer has the advantage of observing non-verbal cues and body language, which can indicate the level of confidence or discomfort of the interviewee. In addition, interviews allow for a more in-depth exploration of complex issues or topics, providing the researcher with the opportunity to ask follow-up questions and clarify any unclear responses. In this study, interviews were conducted with academic staff at Loughborough University and with charitable organisations in Kuwait. The researcher also implemented a semi-structured format, which included both open-ended questions and specific prompts, allowing for a more structured approach while maintaining an element of flexibility. The interviews lasted approximately 45 minutes each, and the researcher ensured that the interview environment was comfortable and conducive to open communication. Following the interviews, the researcher entered and stored the responses and conducted a thematic analysis to identify patterns and trends in the data. The researcher then discussed the findings with academic staff at Loughborough University to gain additional insights and validate the results. The final conclusion of the interview analysis was 81
4.3.2 Interview
Moser and Kalton (1985) described the survey interview as "a conversation between interviewer and respondent with the purpose of eliciting certain information from the respondent". Conducting interviews on the part of researchers requires careful preparation in order to acquire specific information that will shed light on a specific issue. It is a way of eliciting information that cannot be obtained via alternative methods. The interview process encompasses certain requirements that the researcher has to consider including selecting the topic or subject of the interview, the type of questions that should be asked, the approach or technique that has to be followed in the analysis, and the overall schedule preparation.

The interview method can be a very powerful technique for gathering information because inherent in it are the following virtues: it is flexible; this means that the interviewer can include a range of questions from highly structured to non-structured, depending on the research problem under investigation. It also allows the researcher to clarify questions and probe for additional information.

The interviewer has the ability to determine who will answer the question, the place in which the interview will take place, and the order of answering the questions. Normally, interviews provide the researcher with a high response rate, and finally, the interview provides researchers with supplementary information from interviewees, for example, background information.

The interview, as with other data collection methods, has some disadvantages among which are that it is more expensive to implement, particularly when respondents are widely scattered over a large area; the interviewer's personality, manner, attitudes, and the kind of interview technique being used, may affect the
respondents' answers; and the presence of the interviewer in the situation may cause the interviewees to feel insecure (Nachmias and Frankfort-Nachmias).

Reasons for Choosing the Interview
The researcher chose to use the interview as a data-gathering tool for the following reasons:

I. The information obtained through interview was intended to complement that provided by the questionnaire, allowing the researcher to explore issues in more depth and obtain specific information (DeVaus, 2002).

II. Some of the interviewees, such as top managers, frequently lack specific knowledge of ICT jargon, so the interview gave the researcher an opportunity to explain it or use simplified statements.

III. The researcher needed some information in order to obtain a comprehensive view, such as how this type of information system would be utilised, and their future ICT plans. This type of information could not be gathered through the restrictive format of the questionnaire but would need some discussion in detail.

Format of Interviews
Bernard (2000, p.190) outlined four distinguishable formats for interviews: firstly, the informal interview which lacks any type of structure or control. In this sense, the researcher usually relies on this kind of interview when he/she is attempting closely to observe exact phenomena. The interviewer has no control over all the interviewing procedures. Secondly, the unstructured interview is based on the idea that respondents are given the opportunity to express themselves in their own words and at their own pace. In this case, the interviewer has little control
over the whole interviewing process. Thirdly, the semi-structured interview is based on the use of a written list of questions and topics that needs to be covered in a particular order. It is recommended in a situation where the researcher will not get more that one chance to interview someone. Fourthly, the structured or standardised interview is used when the interviewer asks potential respondents the same questions. However, for this study, the semi-structured interview was applied in order to generate the required data.

**Population Frame and Interview Contents**

The purpose of the interviews that were conducted in this study was to gain insights, views and the opinions of the target audience in relation to the aims and objectives of the overall study as it is crucial to acquire an adequate knowledge of all surrounding circumstances relevant to the present study. Interviews were conducted with several key figures in diverse public and private organisations in the State of Kuwait. Eighteen interview respondents were visited in order for them to participate. Interviews were conducted with five main groups within institutions: the general manager, the ICT managers, the internal activities managers, the external activities managers and donors. These interviews were conducted, as illustrated in Table 4.3, to obtain additional information regarding Information and Communication Technology and the systems in the Kuwaiti charity organisations.

<table>
<thead>
<tr>
<th>Types of Interviewees</th>
<th>Numbers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Charities' General Managers</td>
<td>4</td>
</tr>
<tr>
<td>Managers of Information and Communication Depts.</td>
<td>4</td>
</tr>
<tr>
<td>Managers of External Activities Depts.</td>
<td>4</td>
</tr>
<tr>
<td>Managers of Internal Activities Depts.</td>
<td>4</td>
</tr>
<tr>
<td>Charities' Donors</td>
<td>2</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>18</strong></td>
</tr>
</tbody>
</table>

*Table 4.3: The total number of interviewees*
Validity of Interview Questions for this Research

For this research, the researcher chose content validity as being the most useful for this type of preliminary investigation survey. For part of the interview, the researcher formulated the relevant questions in the first draft and then gave this draft to two PhD students from the Department of Information Science at Loughborough University.

On the basis of the feedback from the jurors, some questions were deleted, some modified, and some new ones added. The second draft of the interview questions was submitted to the same panel that had reviewed the first draft to get their feedback for the second time. The researcher also met these people and talked to them to avoid any misunderstanding regarding any of the interview questions. After receiving feedback on the second draft, the researcher made the final corrections. By this time, all questions were agreed to be very important and related to the main research questions and objectives.

Procedure for Conducting the Interview

The interviews were conducted from May to July 2002. At the beginning of each interview, the researcher started by explaining to the interviewee the aims of the interview. Then, the researcher informed the interviewees that all the information would be confidential and would be used only for the purpose of the present research. Each questions was asked in turn, the respondent being allowed to give a full and considered answer before moving on to the next. At the end of all the interviews, the researcher thanked the interviewees for their co-operation.

Each interview lasted between 30 and 45 minutes. The researcher first recorded the question immediately by writing each answer carefully as the respondent answered it, and if the answer was not clear, he asked the interviewee for explanation. Tape-recording was used if interviewees were willing to allow it.
Only one was reluctant to be recorded, and in this case, the researcher took written notes during the interview and transcribed them shortly afterwards. However, in conducting an interview certain points were taken into account. These included:

- Formulating the purpose of the investigation and describing the concept of the topic to be investigated before the interview started.
- Planning and designing the interview with regard to the objectives and questions of the study.
- Conducting the interview based on the interview guide, with a reflective approach to the knowledge sought and the interpersonal relations of the interview situation.
- Preparing the interview materials for analysis, which commonly includes a transcription from oral speech to written text.
- Deciding on the basis of the purpose and topic of the investigation, and on the nature of the interview material, together with which methods of analysis were appropriate for the interviews.
- Ascertaining the generalisability, reliability and validity of the interview findings.
- Communicating the findings of the study and the methods applied in a form that lives up to scientific criteria, takes ethical aspects of the investigation into consideration, and turns the results into a readable product (Burton, 2000).

In order to get the richest picture possible of the current situation relevant to this study, interviews were carried out with the following five main groups of people:
General Managers of Charity Organisations
These are people who are supervising and administering all management and financial procedures at their institutions. The main objectives of the interview were to identify and understand:
- Problems that are currently being encountered among charity organisations in Kuwait.
- Current ICT services.
- Short and long-term ICT plans and the resources which are available to support the accomplishment of such plans.

Internal Activities’ Department Managers
The purpose of the interviews was to understand the following issues:
- The major activities and functions provided by these departments.
- The methods used to communicate with other charities inside Kuwait and deficiencies associated with these methods.
- Short and long-term plans to overcome these difficulties.

External Activities’ Department Managers
The purpose of the interviews was to understand the following issues:
- The major activities and functions provided by these departments.
- The availability of communication links with international charity organisations.
- Methods used to communicate with other charities inside and outside Kuwait in order to accomplish international projects, and the deficiencies associated with these methods.
- Short and long-term plans to overcome these difficulties.

Information and Communication Technologies Managers
The purpose of these interviews was to understand the following issues:
- Functions and structures of ICT departments.
- Availability of ICT infrastructure, networks and the Internet specifically.
- ICT training and technical support for literate or illiterate users.

Donors of Kuwait charities
Interviews with two donors were carried out to identify the views of Kuwaiti donors. These interviews were conducted to examine problems or obstacles associated with the services or facilities provided by charities to their donors.

4.3.3 Case study
Case studies are widely used as a method for collecting qualitative data in Information Systems research. In such research work, a researcher considers a single issue and collects information in detail, using a number of collection approaches to gather the data. Case studies are an effective method for use in research that demands a deeper understanding of what actually happens rather than testing out relationships (Gordon and Langmaid, 1988). Yin (2003) defined a case study as follows:

"An empirical enquiry that investigates a contemporary phenomenon within its real life context, when the boundaries between phenomenon and context are not clearly evident, and in which multiple sources of evidence are used."

As noted above, the approach is an in-depth investigation of a single phenomenon using a variety of sources of evidence within a real life context (Yin, 2003). Advocates of this type of research data tool state that 'the strength of the case study is in the richness of data that can be obtained by multiple means when researchers restrict themselves to a single situation' (Cornford and Smithson, 1996, p. 49).
Types of Case Study
Yin (2003) suggested three types of case study: exploratory, descriptive or explanatory. The type used depends on a number of issues. These include the type of research question, the extent of the researcher's control over the study itself, and how far the work is focused on contemporary, rather than historical events.

Another classification of case studies was provided by Hakim (2000) who suggested the following three categories: descriptive, selective and experimental. The first type (descriptive) can be used to illustrate cases thought typical or representative. They can also be exploratory if little research exists on the topic being studied. Selective case studies can be used if a good deal of literature already exists; these can focus on specific aspects to provide rich detail, thereby refining knowledge. Experimental case studies can be used to assess behaviour in a real-life setting.

Reasons for Choosing the Case Study Method
This research selected the case study method as one of the data-gathering tools in this study because data can be collected and evidence can be obtained from a natural setting, thus arriving at theories from practice. The researcher conducted two case studies to take advantage of the strength that such a technique provides in terms of realism, significance and investigative quality. The case study approach was used as a supportive investigative element to provide a more in-depth examination of the experience of the charity organisations in Kuwaiti.
Chapter Four

Conducting the Case Studies

In order to obtain a complete and deep picture of the current situations among the charities' beneficiaries, the researcher requested permission from the General Managers of each organisation to be allowed to enter one of the assessment interviews with one of their beneficiaries. These interviews are restricted to particular trustworthy staff members only who are aware of the high demand for privacy since the information that is usually discussed and requested from beneficiaries is very personal and confidential.

The staff members of each organisation positively encouraged beneficiaries to have an open and honest discussion about their experiences and problems with current situations.

4.3.4 Focus Group

This technique is a means of interviewing involving more than one and usually at least four interviewees at the same time (Bryman, 2001); in other words, it is a group interview. Such groups generally emphasize a specific in-depth issue. The researcher may be interested in how people respond to each other, building a view from the interaction within the group. A focus group interview is used to collect qualitative data by generating concentrated discussion on topics of interest to the researcher. The interview is led by a moderator who keeps the respondents focused on a particular topic.

The focus group technique has been adopted as a major data-gathering instrument by market researchers to find out about consumer preferences and to design advertising strategies. It has also been used by social scientists as an aid to questionnaire development. Recently, this technique has been used by Information Systems researchers (Morgan, 1998).
According to Greenbaum (1993), there are three different types of focus group: full groups, mini-groups and telephone groups. A full group, as stated by Greenbaum, consists of a discussion of about 90 to 120 minutes, guided by a trained moderator, connecting eight to ten persons. The mini-group is the same as the full group, except that it contains four to six individuals, while with the telephone group, persons join and contribute in a telephone conference call for approximately thirty minutes to two hours.

**Reasons for Choosing the Focus Group Method**

The purpose of a focus group as a research tool is to examine participants' attitudes, feelings, beliefs, experiences and reactions (Adelman and Riedel, 1997). These feelings and views are more likely to be revealed in the group interaction so, compared to one-to-one interviews which obtain individual attitudes, focus groups reveal many views and feelings within a group.

However, individual interviews are easier to control than a focus group as in a group a number of participants take the initiative. Compared to observation, however, a focus group allows the researcher to obtain a large amount of information in a short time period. Focus groups are also useful when there are power differences between the participants, when everyday language and/or culture is of interest, and the degree of consensus on a given topic needs to be explored (Morgan, 1998).

The focus group technique was used in this research simply to enhance the researcher's understanding and knowledge about the ICT environment and perceptions in Kuwaiti charities, and to obtain direct and precise feedback about the ICT experiences of these non-profit organisations in Kuwait.
4.4 Concluding Remarks

This chapter has reviewed the information that needed to be acquired for this study and then considered the research methodologies most commonly used in the field of Information Systems. A combination of quantitative and qualitative methods was selected for this research.

Methods for gathering data were outlined. These included a questionnaire survey, interviews, case studies and focus groups; the advantages and disadvantages of these methods were also considered. Questionnaire and interview schedules were subjected to content validation and both were piloted in advance of the main study. The information obtained is used in the next chapter to present the results and to develop the guidelines for effective and efficient ICT implementation.
Chapter Five

Field-work Analysis

5.1 Introduction

Kuwaiti charities have expanded in the last few decades due to sharp changes in the economy and in society. Recently, the charities have focused on various interested parties. These parties include national and international authorities, individual donors, donor organisations and beneficiaries.

The charities have become an important part of Kuwaiti society and of the state but the main problem facing all the parties involved, including the charities, is the lack of data and information that can be used to meet the needs of these interested parties.

This research is the first research to be conducted in this area and one of its main aims is to collect data and information that can be used as a tool for the analytical discussion of the research area that can be used in open literature.

The fieldwork was designed to reflect the aims and objectives of the research. These include identifying the current situation of ICT in the charities and the problems and obstacles facing the charities. Various methods have been used to collect the relevant data and information, including questionnaires, interviews focus group and case studies.

5.2 Questionnaire Results

This section presents results gathered from the data collected via the questionnaires. These data were obtained in order to understand respondents' views and perceptions regarding providing guidelines to introduce and improve ICT in order to meet needs of the charities, donors and beneficiaries. The
questionnaires were distributed to the charity organisations in the State of Kuwait. The analysis was conducted in terms of the two main groups of participants: the government group consisted of government charity organisations, including Zakat House; and the non-government group comprised non-government charity organisations which included Khairiah, Islah and Turath.

The questionnaire results have been divided into five main sections. The first of these provides an introduction to the techniques and procedures necessary to analyse the results of the questionnaire. The second includes demographic information on the sample: the age, department name and education level of respondents. The third section emphasises the current use of Information and Communication Technology (ICT) within Kuwaiti charities. The fourth is concerned specifically with issues related to co-operation among Kuwaiti charities such as activities needed to enhance methods of co-operation. Finally, personal development is explored, especially with regard to ICT training.

Data Analysis Procedures

In order to enter the collected data electronically, the researcher decided to use the Statistical Package for Social Science (SPSS) application. This is a computer program, which runs under Microsoft Windows; it was used to enter the data and to compute the correlation, frequency distributions, tables and other statistical measurements and tests needed in this study. The data collected from returned questionnaires were cross-tabulated in order to specify responses in terms of frequency and percentage. Mean value was mainly used in this chapter to determine the level and degree of respondents' perceptions regarding the improvement of their ICT requirements, methods of co-operation, and their need for training so that the answers of respondents might reflect the whole study population.
The Chi-square test was applied to identify any potential significance within respondents' viewpoints. The Chi-square is the most frequently used non-parametric test because it is relatively easy to follow and is applicable to a wide range of research problems. For all Chi-square tests, a probability value of 0.05 was taken as the criterion threshold; a p-value lower than this was taken to indicate statistical significance.

Statistical Plan

Once the questionnaires were returned, the work to analyse the data in statistical terms was carried out. The plan of the statistical analysis is based on converting the qualitative values (respondents' prescriptions) to quantitative values, using a Likert-type scale. Then, the dependent scale was weighted and the data were entered into the program (SPSS) to answer the questions which were adopted in the text.

The questionnaire data were first coded. Coding involves assigning a number to each category of answer and to any variables or missing values in the data collected; this makes analysis possible via the computer and converts qualitative values to quantitative ones. It was not difficult to perform numerical coding of the responses to the closed questions of the questionnaire, as each respondent ticked one answer to each part of the question. The following values, noted here section by section, were used to encode the responses:

1. ICT infrastructure evaluation:
   - Always = 1
   - Usually = 2
   - About half the time = 3
   - Seldom = 4
   - Never = 5
2. Methods of co-operation and evaluation of training:
   - Very important = 1
   - Important = 2
   - Moderately important = 3
   - Of little importance = 4
   - Unimportant = 5

Concerning the decoding of the analysis results, the variables mentioned above have been also used. The figure below (Figure 5.1) illustrates both the results, and the coding and decoding procedures.

<table>
<thead>
<tr>
<th>Respondents' Perception (Text)</th>
<th>Coding</th>
<th>Variable (Digit)</th>
<th>Decoding</th>
<th>Results of Study (Text)</th>
</tr>
</thead>
</table>

Figure 5.1 Coding and decoding the questionnaire

Data Auditing
Data auditing, the next stage of the data analysis process, involves examining the scale and direction of the questions in an attempt to avoid missing any of the data. The next section examines and tabulates the data which were gathered from the questionnaires.

5.2.1 Respondents' Personal Background

Age Distribution
In the next sub-section, participants were requested to identify their age group. It was discovered, as indicated in Table 5.1, that most respondents (36.1%; N = 91) were aged between 21-30 years old. The government group had the largest percentage of participants whose ages ranged from 31-40 and from 21-30. They
represented 35.7% and 32.1% respectively. The non-government group, on the other hand, was composed largely of those aged below 21, 21-30, and 51 or over. They represented 2.1%, 39.3% and 7.9% respectively.

<table>
<thead>
<tr>
<th>Age</th>
<th>Gov. Frequency</th>
<th>Gov. %</th>
<th>Non Gov. Frequency</th>
<th>Non Gov. %</th>
<th>Total Frequency</th>
<th>Total %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Under 21</td>
<td>00</td>
<td>00</td>
<td>3</td>
<td>2.1</td>
<td>3</td>
<td>1.2</td>
</tr>
<tr>
<td>21-30</td>
<td>36</td>
<td>32.1</td>
<td>55</td>
<td>39.3</td>
<td>91</td>
<td>36.1</td>
</tr>
<tr>
<td>31-40</td>
<td>40</td>
<td>35.7</td>
<td>47</td>
<td>33.6</td>
<td>87</td>
<td>34.5</td>
</tr>
<tr>
<td>41-50</td>
<td>34</td>
<td>30.4</td>
<td>24</td>
<td>17.1</td>
<td>58</td>
<td>23.0</td>
</tr>
<tr>
<td>51 or over</td>
<td>2</td>
<td>1.8</td>
<td>11</td>
<td>7.9</td>
<td>13</td>
<td>5.2</td>
</tr>
<tr>
<td>Total</td>
<td>112</td>
<td>100</td>
<td>140</td>
<td>100</td>
<td>252</td>
<td>100</td>
</tr>
</tbody>
</table>

Table 5.1: Age distribution within groups

Table 5.2 shows the distribution of departments among respondents.

<table>
<thead>
<tr>
<th>Dept name</th>
<th>Gov. Frequency</th>
<th>Gov. %</th>
<th>Non Gov. Frequency</th>
<th>Non Gov. %</th>
<th>Total Frequency</th>
<th>Total %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Internal &amp; External Projects</td>
<td>31</td>
<td>27.7</td>
<td>45</td>
<td>32.1</td>
<td>76</td>
<td>30.2</td>
</tr>
<tr>
<td>Administration &amp; Financial</td>
<td>29</td>
<td>25.9</td>
<td>33</td>
<td>23.6</td>
<td>62</td>
<td>24.6</td>
</tr>
<tr>
<td>ICT &amp; Public Relations</td>
<td>27</td>
<td>24.1</td>
<td>15</td>
<td>10.7</td>
<td>42</td>
<td>16.7</td>
</tr>
<tr>
<td>Social Affairs &amp; Training Dev.</td>
<td>8</td>
<td>7.1</td>
<td>20</td>
<td>14.3</td>
<td>28</td>
<td>11.1</td>
</tr>
<tr>
<td>Top-Management &amp; Resources Dev.</td>
<td>17</td>
<td>15.2</td>
<td>8</td>
<td>5.7</td>
<td>25</td>
<td>9.9</td>
</tr>
<tr>
<td>Others</td>
<td>0</td>
<td>0</td>
<td>19</td>
<td>13.6</td>
<td>19</td>
<td>7.5</td>
</tr>
<tr>
<td>Total</td>
<td>112</td>
<td>100</td>
<td>140</td>
<td>100</td>
<td>252</td>
<td>100</td>
</tr>
</tbody>
</table>

Table 5.2: Departments' distribution

The above table shows that the majority of respondents were from Internal and External projects departments (30.2%), followed by Administration and Financial departments (24.6%).
In the government group, most workers were employed in the Internal and External Projects departments, Administration and Finance, and ICT and Public Relations (27.7%, 25.9% and 24.1% respectively) whereas the majority of workers in the non-government group were working in the Internal and External Projects departments (32.1%) and Administration and Finance departments (23.6%). The results of this table are used later on in this chapter in order to be correlated with co-operation among charities.

**Level of Education**

Participants were asked to indicate their highest educational qualification. It was observed from analysing the data (Table 5.3) that the highest number of participants had Bachelor degrees (41.7%; N = 105), followed by those with high school or lower certificates (27.0%; N = 68). In addition, respondents who had obtained a Diploma degree represented 25.4%, while participants who gained Masters Degrees represented 5.2% and respondents who had acquired PhDs represented less than 1% (0.8%). In order to determine any potential significance between respondents’ educational qualifications and their ages, the Chi-square test was conducted ($X^2 = 39.231$, df=16, p<0.001, N = 252). The majority of respondents who had Bachelor degrees were aged between 31 and 40 years old. This suggests that the older the respondents, the more highly they were qualified.

<table>
<thead>
<tr>
<th>Education Degree</th>
<th>Gov. Frequency</th>
<th>Gov. %</th>
<th>Non Gov. Frequency</th>
<th>Non Gov. %</th>
<th>Total Frequency</th>
<th>Total %</th>
</tr>
</thead>
<tbody>
<tr>
<td>High school cert. or less</td>
<td>11</td>
<td>9.8</td>
<td>57</td>
<td>40.7</td>
<td>68</td>
<td>27.0</td>
</tr>
<tr>
<td>Diploma (2yr)</td>
<td>37</td>
<td>33.0</td>
<td>27</td>
<td>19.3</td>
<td>64</td>
<td>25.4</td>
</tr>
<tr>
<td>Bachelor (4yr)</td>
<td>56</td>
<td>50.0</td>
<td>49</td>
<td>35.0</td>
<td>105</td>
<td>41.7</td>
</tr>
<tr>
<td>Masters</td>
<td>6</td>
<td>5.4</td>
<td>7</td>
<td>5.0</td>
<td>13</td>
<td>5.2</td>
</tr>
<tr>
<td>PhD</td>
<td>2</td>
<td>1.8</td>
<td>0</td>
<td>0.0</td>
<td>2</td>
<td>0.8</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>112</strong></td>
<td><strong>100</strong></td>
<td><strong>140</strong></td>
<td><strong>100</strong></td>
<td><strong>252</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

*Table 5.3: Distribution of the highest education level*
It was also found from the above table, that the non-government group had the highest number of respondents who held a high school certificate or lesser qualification (40.7 %; N = 57). On the other hand, the government group had only 11 (9.8 %) participants who held such certificates. The main reason behind this big difference between the government and non-government groups is that charities in the non-government sector allow employees who hold a high school certificate to work in their organisations, while the government stopped recruiting new employees who held only high school unless they had been employed by the charity earlier.

5.2.2 Current ICT in Kuwaiti Charities

In order to understand the current situation regarding ICT in Kuwaiti charities, this section shows the present position concerning information systems, database systems, communication systems, and the utilisation of computers and networks.

Current Information System

Respondents were asked to point out their concerns about the existing information systems, stating how important they felt these were. A Likert-type scale was used for the analysis of this response with 1=Very important, 2=Important, 3=Moderately important, 4=Of little importance and 5= Unimportant. The analysis of their responses is offered in the table below.

<table>
<thead>
<tr>
<th>Staff Concerns</th>
<th>Gov. Mean</th>
<th>Non-Gov. Mean</th>
<th>Total Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Security of Data</td>
<td>1.29</td>
<td>1.53</td>
<td>1.42</td>
</tr>
<tr>
<td>Speed of process</td>
<td>2.12</td>
<td>2.18</td>
<td>2.15</td>
</tr>
<tr>
<td>Capacity of storage</td>
<td>2.54</td>
<td>2.09</td>
<td>2.29</td>
</tr>
<tr>
<td>State-of-the-art-technology</td>
<td>2.25</td>
<td>2.37</td>
<td>2.32</td>
</tr>
</tbody>
</table>

Table 5.4: Current information systems
It seems evident from the results above that the most important concern among staff about their information system was the security of data (with a mean of 1.42). These results reflect the staff concerns towards the benefits and importance of information security of the Kuwaiti charities.

Current Database System

Table 5.5 illustrates the respondents' views about the charities' current database system. Results show that overall respondents' attitudes towards the current database system were negative. Respondents disagreed or strongly disagreed that the current database system meets the needs of their charities.

<table>
<thead>
<tr>
<th>Current Database System meets the Charities' Needs</th>
<th>Gov. (%)</th>
<th>Non-Gov. (%)</th>
<th>Total (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strongly Agree</td>
<td>6.8</td>
<td>6.1</td>
<td>6.6</td>
</tr>
<tr>
<td>Agree</td>
<td>3.6</td>
<td>5.3</td>
<td>4.1</td>
</tr>
<tr>
<td>Undecided</td>
<td>4.4</td>
<td>4.4</td>
<td>4.4</td>
</tr>
<tr>
<td>Disagree</td>
<td>51.2</td>
<td>52.6</td>
<td>51.6</td>
</tr>
<tr>
<td>Strongly Disagree</td>
<td>34.0</td>
<td>31.6</td>
<td>33.2</td>
</tr>
</tbody>
</table>

Table 5.5 Database System and Charities' Needs

From the figures shown in Table 5.5 above, it can be seen that the current database system does not meet the needs of the Kuwaiti charities since 33.2% strongly disagree and 51.6% disagree with the statement which stated that current database system meets the charity needs.

In Table 5.6, respondents also pointed out that the current database system is not effective in identifying beneficiaries' fraud. Results revealed that 76.9% of respondents indicated with certainty that the current database system is not effective in identifying fraud. 4.9% were undecided, 11.8% agreed, and 6.3 strongly agreed with the statement in the table below. The respondents who were undecided and agreed might represent staff who do not deal with beneficiaries as part of their work.
Current Database System and Beneficiaries' Fraud

<table>
<thead>
<tr>
<th>Current Database System is effective in Identifying Beneficiaries' Fraud</th>
<th>Gov. (%)</th>
<th>Non-Gov. (%)</th>
<th>Total (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strongly Disagree</td>
<td>33.2</td>
<td>33.3</td>
<td>33.2</td>
</tr>
<tr>
<td>Disagree</td>
<td>44.4</td>
<td>42.1</td>
<td>43.7</td>
</tr>
<tr>
<td>Undecided</td>
<td>3.2</td>
<td>8.8</td>
<td>4.9</td>
</tr>
<tr>
<td>Agree</td>
<td>12.4</td>
<td>10.5</td>
<td>11.8</td>
</tr>
<tr>
<td>Strongly Agree</td>
<td>6.8</td>
<td>5.3</td>
<td>6.3</td>
</tr>
</tbody>
</table>

Table 5.6: Database System and Beneficiaries' Fraud

Current Communication System

As mentioned earlier, this study sought to investigate the current situation regarding the communication system used by employees in Kuwaiti charities. Respondents were therefore asked to indicate whether the current communication system is convenient for their beneficiaries or not. Results showed that most respondents disagreed with the statement which asserted that the 'Current communication system is convenient for the beneficiaries'. Table 5.7 shows the respondents' view about the current communication system.

<table>
<thead>
<tr>
<th>Current Communication System is Convenient for Beneficiaries</th>
<th>Gov. (%)</th>
<th>Non-Gov. (%)</th>
<th>Total (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strongly Disagree</td>
<td>34.0</td>
<td>45.6</td>
<td>37.4</td>
</tr>
<tr>
<td>Disagree</td>
<td>48.0</td>
<td>36.0</td>
<td>44.2</td>
</tr>
<tr>
<td>Undecided</td>
<td>4.8</td>
<td>5.3</td>
<td>4.9</td>
</tr>
<tr>
<td>Agree</td>
<td>8.0</td>
<td>7.0</td>
<td>7.7</td>
</tr>
<tr>
<td>Strongly Agree</td>
<td>5.2</td>
<td>7.0</td>
<td>5.8</td>
</tr>
</tbody>
</table>

Table 5.7: Communication System and Beneficiaries

The next table (Table 5.8) presents responses that indicate whether or not the current communication system is convenient for their donors.
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<table>
<thead>
<tr>
<th>Current Communication System is Convenient for Donors</th>
<th>Gov. (%)</th>
<th>Non-Gov. (%)</th>
<th>Total (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Strongly Disagree</strong></td>
<td>29.6</td>
<td>29.8</td>
<td>29.7</td>
</tr>
<tr>
<td><strong>Disagree</strong></td>
<td>45.2</td>
<td>48.2</td>
<td>46.2</td>
</tr>
<tr>
<td><strong>Undecided</strong></td>
<td>7.6</td>
<td>7.9</td>
<td>7.7</td>
</tr>
<tr>
<td><strong>Agree</strong></td>
<td>12.4</td>
<td>8.8</td>
<td>11.3</td>
</tr>
<tr>
<td><strong>Strongly Agree</strong></td>
<td>5.2</td>
<td>5.3</td>
<td>5.2</td>
</tr>
</tbody>
</table>

Table 5.8: Communication System and Donors

These results illustrate that 29.7% strongly disagreed and 46.2% disagreed that the current communication system is convenient for the donors. Out of the total number of participants, only 7.7% were undecided about this, 11.3% agreed with the statement, and 5.2% strongly agreed. The respondents who were undecided and agreed might represent respondents who do not deal with donors in their work. These outcomes mean that the current communication system that is being utilised by Kuwaiti charities is recognised as an obstacle to donors.

Using Computers at Work

In this section, respondents were asked whether or not they had personal computers (PCs) at their workplace. Table 5.9 shows that the largest percentage of respondents (89.3%; N = 225) had a PC at work. Conversely, respondents who did not have a PC at work represented only 10.7% (N = 27). Figure 5.2 illustrated that the government group represented the largest percentage of respondents who had PCs at their workplace (99.1%; N = 111), while the non-government group represented nearly 81.4% (N = 114). This outcome revealed that ICT is becoming an integral part of the work of most employees, regardless of their classification.
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Do you use a computer at work?

<table>
<thead>
<tr>
<th></th>
<th>Gov.</th>
<th></th>
<th>Non Gov.</th>
<th></th>
<th>Total</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Frequency</td>
<td>%</td>
<td>Frequency</td>
<td>%</td>
<td>Frequency</td>
<td>%</td>
</tr>
<tr>
<td>Yes</td>
<td>111</td>
<td>99.1</td>
<td>114</td>
<td>81.4</td>
<td>225</td>
<td>89.3</td>
</tr>
<tr>
<td>No</td>
<td>1</td>
<td>.9</td>
<td>26</td>
<td>18.6</td>
<td>27</td>
<td>10.7</td>
</tr>
</tbody>
</table>

Table 5.9: Number of respondents using computers at work

Network Applications' Usage

The next section was presented to explore the availability of Local Area Networks (LANs) to each Kuwaiti charity and the variety of applications used through these types of network.

Local Area Network (LAN) Availability

This part of the questionnaire aimed to ask respondents whether or not they had a LAN at work in order to understand the situation regarding ICT in Kuwaiti charities. It revealed that 82.7% (N=186) had this type of network in their organisations. 13.8%, on the other hand, did not think this network was available.
at their place of work. However, 3.6% of the total number of respondents was not sure about the availability of a Local Area Network in their organisation.

<table>
<thead>
<tr>
<th>Do you have a LAN at work?</th>
<th>Gov.</th>
<th>Non-Gov.</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Frequency</td>
<td>%</td>
<td>Frequency</td>
</tr>
<tr>
<td>Yes</td>
<td>107</td>
<td>96.4</td>
<td>79</td>
</tr>
<tr>
<td>No</td>
<td>1</td>
<td>0.9</td>
<td>30</td>
</tr>
<tr>
<td>Not sure</td>
<td>3</td>
<td>2.7</td>
<td>5</td>
</tr>
<tr>
<td>Total</td>
<td>225</td>
<td>100</td>
<td></td>
</tr>
</tbody>
</table>

Table 5.10: LAN availability

Table 5.10 shows that the vast majority of the government group respondents (96.4%) had access to a LAN network, significantly fewer from the non-government group had this facility (69.3%).

**Applications Used with the LAN**

Having determined how many of the respondents have access to a LAN facility, the next question referred to the frequency of use of applications in the LAN. The following categories were offered to respondents: Local e-mail, file sharing and devices, appointment schedulers and tasks’ assignment. A Likert-type scale was also used for the analysis of this response with 1=Always, 2=Usually, 3=Half the time, 4=Seldom and 5=Never. The results are outlined in Table 5.11 below.

<table>
<thead>
<tr>
<th>LAN application</th>
<th>N</th>
<th>Gov. (Mean)</th>
<th>Non-Gov. (Mean)</th>
<th>Total (Mean)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Local E-mail</td>
<td>198</td>
<td>1.35</td>
<td>3.45</td>
<td>2.29</td>
</tr>
<tr>
<td>Sharing Files &amp; Devices</td>
<td>198</td>
<td>2.43</td>
<td>2.94</td>
<td>2.66</td>
</tr>
<tr>
<td>Appointment Scheduler</td>
<td>198</td>
<td>2.56</td>
<td>4.00</td>
<td>3.20</td>
</tr>
<tr>
<td>Tasks’ Assignment</td>
<td>198</td>
<td>3.05</td>
<td>3.95</td>
<td>3.45</td>
</tr>
</tbody>
</table>

Table 5.11: Usage of LAN applications
It can be seen from the table of results offered above that local e-mail was the most frequently used of the LAN applications (with a mean of 2.29). This indicates that the majority of respondents found local e-mail to be important, followed by sharing files, appointment scheduler, and tasks' assignment. The least important use of a LAN was for tasks' assignment. This result suggests that LANs are mostly used within the charity organisations for local co-operations as opposed to carrying out work tasks.

Having explored the availability of LANs at Kuwaiti charities and respondents' usage of LAN applications, the next section explored more deeply the most popular type of network, the Internet network, looking at its uses and applications.

**Internet Usage**
This section focused on respondents who have access to the Internet network and their usage of its applications in these institutions.

**Internet Applications' Usage**
It is certain that the Internet has become more and more important to people, whether in developed or developing countries, in public or private organisations, and in education or training centres. Thus, questionnaire recipients were asked whether or not they regularly used Internet technology. As previously stated in this chapter, only 225 respondents used computers at work so obviously only they participated in the next question below.

<table>
<thead>
<tr>
<th>Do you use the Internet at work?</th>
<th>( \text{Gov.} )</th>
<th>( \text{Non-Gov.} )</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frequency</td>
<td>%</td>
<td>Frequency</td>
<td>%</td>
</tr>
<tr>
<td>Yes</td>
<td>69</td>
<td>62.2</td>
<td>70</td>
</tr>
<tr>
<td>No</td>
<td>42</td>
<td>37.8</td>
<td>44</td>
</tr>
<tr>
<td>Total</td>
<td>111</td>
<td>114</td>
<td>225</td>
</tr>
</tbody>
</table>

Table 5.12: Internet access
Table 5.12 emphasises that more than two thirds of respondents use the Internet network (61.8%; N = 139). Only 38.2% of respondents stated that they did not use this technology. The government group represented the highest percentage of respondents (62.2%; N = 69) who used the Internet and, predictably, the lowest percentage of respondents who did not use this network (37.8%). While the government group showed a slightly higher usage than the non-government group, the percentages of use were similar (62.2% and 61.4% respectively). Figure 5.3 below illustrates these figures in the form of a bar chart.

![Figure 5.3: Internet usage](image)

**Internet Applications**

Table 5.13 shows applications that respondents most frequently used via the Internet. The following facilities were offered as possibilities: e-mail, downloading applications, Internet banking, purchasing products, technical support, web-page design and video-conferencing. The results, which were recorded using a Likert-type scale in which 1=Always, 2=Usually, 3=Half the time, 4=Seldom and 5=Never, are presented in the table below.
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<table>
<thead>
<tr>
<th>Internet applications</th>
<th>N</th>
<th>Gov. (Mean)</th>
<th>Non-Gov. (Mean)</th>
<th>Total (Mean)</th>
</tr>
</thead>
<tbody>
<tr>
<td>E-Mail</td>
<td>139</td>
<td>2.12</td>
<td>1.79</td>
<td>1.95</td>
</tr>
<tr>
<td>Downloading Applications</td>
<td>139</td>
<td>3.03</td>
<td>2.74</td>
<td>2.88</td>
</tr>
<tr>
<td>Technical Support</td>
<td>139</td>
<td>4.00</td>
<td>4.16</td>
<td>4.08</td>
</tr>
<tr>
<td>Internet Banking</td>
<td>139</td>
<td>4.06</td>
<td>4.23</td>
<td>4.14</td>
</tr>
<tr>
<td>Purchasing Products</td>
<td>139</td>
<td>4.09</td>
<td>4.23</td>
<td>4.16</td>
</tr>
<tr>
<td>Web page Design</td>
<td>139</td>
<td>4.26</td>
<td>4.14</td>
<td>4.20</td>
</tr>
<tr>
<td>Video Conferencing</td>
<td>139</td>
<td>4.77</td>
<td>4.57</td>
<td>4.67</td>
</tr>
</tbody>
</table>

Table 5.13: Usage of Internet applications

Here again, as mentioned earlier in Table 5.13, e-mail was viewed as the most important application since, with a mean of 1.95, the majority agreed that it was important. With the exception of downloading applications, the other Internet applications were considered to be either of little or of no importance at all.

5.2.3 Co-operation among Charities and their Clients

There are several formats in which charities can receive and send information to make decisions. This section is intended to pinpoint whether or not co-operation among Kuwaiti charities exists. In addition, this section points out important activities carried out among charities and methods used for co-operation.

Availability of Co-operation among Kuwaiti Charities

The participants were asked whether there is any co-operation between their organisation and any other charity institutions in the State of Kuwait.
Do you think there is any co-operation between your organisation and any other charity organisations in Kuwait?

<table>
<thead>
<tr>
<th></th>
<th>Gov.</th>
<th></th>
<th>Non-Gov.</th>
<th></th>
<th>Total</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Frequency</td>
<td>%</td>
<td>Frequency</td>
<td>%</td>
<td>Frequency</td>
<td>%</td>
</tr>
<tr>
<td>Yes</td>
<td>69</td>
<td>61.6</td>
<td>109</td>
<td>77.9</td>
<td>178</td>
<td>70.6</td>
</tr>
<tr>
<td>No</td>
<td>13</td>
<td>11.6</td>
<td>10</td>
<td>7.1</td>
<td>23</td>
<td>9.1</td>
</tr>
<tr>
<td>Not sure</td>
<td>30</td>
<td>26.8</td>
<td>21</td>
<td>15.0</td>
<td>51</td>
<td>20.2</td>
</tr>
<tr>
<td>Total</td>
<td>112</td>
<td></td>
<td>140</td>
<td></td>
<td>252</td>
<td>100</td>
</tr>
</tbody>
</table>

Table 5.14: Co-operation among charity organisations in Kuwait

As illustrated above in Table 5.14, the largest percentage of respondents (70.6%; N = 178) believed some kind of co-operation exists, while only 9.1% believed that co-operation among the charity organisations is non-existent. However, 20.2% of the entire number of participants was not sure if any such co-operation existed at all. It is interesting to note that the non-government group was generally more positive about the existence of co-operation and links between charity organisations than respondents from the government group.

However, 26.8% (more than a quarter) of government respondents were unsure about the existence of such links. These findings depend on the type of work of each respondent, since participants were not from one department. As mentioned earlier in Table 5.2, there were more than nine different departments. Some departments’ work tasks require dealing and co-operation with other charities while some departments are not involved in any type of co-operation with other charities.
It seems clear from the results above (see figure 5.4) that there is definite cooperation among the Kuwaiti charity organisations though these links are far from clear to many of the workers involved in the organisations themselves since such a percentage (20.2%) is uncertain whether or not these links exist.

**Important Activities for Co-operation**

Respondents were then asked what activities they felt were important in order to achieve effective co-operation among the charities. A Likert-type scale was also used for the analysis of this response with 1=Very important, 2=Important, 3=Moderately important, 4=Of little importance and 5= Unimportant. The results are summarised in Table 5.15 below.

<table>
<thead>
<tr>
<th>Activity</th>
<th>N</th>
<th>Gov. (Mean)</th>
<th>Non-Gov. (Mean)</th>
<th>Total (Mean)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Beneficiary Data</td>
<td>252</td>
<td>1.29</td>
<td>1.53</td>
<td>1.42</td>
</tr>
<tr>
<td>Local Projects' Data</td>
<td>252</td>
<td>1.48</td>
<td>1.62</td>
<td>1.56</td>
</tr>
<tr>
<td>External Projects' Data</td>
<td>252</td>
<td>1.45</td>
<td>1.65</td>
<td>1.56</td>
</tr>
<tr>
<td>Data on Catastrophes</td>
<td>252</td>
<td>1.70</td>
<td>1.61</td>
<td>1.65</td>
</tr>
<tr>
<td>Donor Data</td>
<td>252</td>
<td>1.68</td>
<td>1.93</td>
<td>1.82</td>
</tr>
</tbody>
</table>

*Table 5.15: Co-operation activities*
The above table shows that beneficiary data are viewed by respondents as being most important in terms of the co-operation of charitable organisations. Local projects were seen as more important for joint efforts than external or international projects and donor data were viewed as the least important. However, it should be noted that even the least important area (donor data) was felt to be "important" (mean = 1.82) by the majority of the respondents.

Methods of Co-operation

In order to achieve co-operation, questionnaire participants were asked about the types of co-operation method they felt would best enable them to work closely with members of other charitable organisations. The alternatives offered, together with the respondents' answers, are recorded in Table 5.16 below.

<table>
<thead>
<tr>
<th>Method</th>
<th>N</th>
<th>Gov. (Mean)</th>
<th>Non-Gov. (Mean)</th>
<th>Total (Mean)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Electronic Mail</td>
<td>252</td>
<td>1.21</td>
<td>1.67</td>
<td>1.46</td>
</tr>
<tr>
<td>Telephone</td>
<td>252</td>
<td>1.54</td>
<td>1.46</td>
<td>1.50</td>
</tr>
<tr>
<td>Fax</td>
<td>252</td>
<td>1.60</td>
<td>1.55</td>
<td>1.57</td>
</tr>
<tr>
<td>Internet (chatting, video conferencing)</td>
<td>252</td>
<td>1.42</td>
<td>1.97</td>
<td>1.73</td>
</tr>
<tr>
<td>Formal Meetings (face to face)</td>
<td>252</td>
<td>1.82</td>
<td>1.74</td>
<td>1.78</td>
</tr>
<tr>
<td>Post mail</td>
<td>252</td>
<td>2.09</td>
<td>1.99</td>
<td>2.03</td>
</tr>
<tr>
<td>Informal Meetings (training sessions, conferences, etc)</td>
<td>252</td>
<td>2.02</td>
<td>2.25</td>
<td>2.15</td>
</tr>
<tr>
<td>Sharing Floppy Disks</td>
<td>252</td>
<td>2.05</td>
<td>2.27</td>
<td>2.17</td>
</tr>
</tbody>
</table>

Table 5.16: Co-operation methods

It is clear that, again, e-mail was at the top of the list of priorities (mean = 1.46). However, most of the other methods were still viewed as at least "important" or "moderately important" by the majority. This seems to suggest that, by whatever means, co-operation among the organisations is viewed as vital.
Staff Opinions toward the Concerns of Donors and Beneficiaries

Participants were also asked to point out the concerns of donors and beneficiaries, rating their importance. See Tables 5.17 and 5.18 below.

<table>
<thead>
<tr>
<th>Concerns</th>
<th>N</th>
<th>Gov. (Mean)</th>
<th>Non-Gov. (Mean)</th>
<th>Total (Mean)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Confidentiality of their Records</td>
<td>252</td>
<td>1.24</td>
<td>1.44</td>
<td>1.35</td>
</tr>
<tr>
<td>Speed of Process</td>
<td>252</td>
<td>1.42</td>
<td>1.97</td>
<td>1.73</td>
</tr>
<tr>
<td>Charity Location</td>
<td>252</td>
<td>2.12</td>
<td>2.18</td>
<td>2.15</td>
</tr>
<tr>
<td>Humanitarian Projects</td>
<td>252</td>
<td>2.54</td>
<td>2.09</td>
<td>2.29</td>
</tr>
</tbody>
</table>

Table 5.17: Donors' concerns

<table>
<thead>
<tr>
<th>Concerns</th>
<th>N</th>
<th>Gov. (Mean)</th>
<th>Non-Gov. (Mean)</th>
<th>Total (Mean)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Easy Communication with Charities</td>
<td>252</td>
<td>2.12</td>
<td>1.79</td>
<td>1.95</td>
</tr>
<tr>
<td>Confidentiality of their Records</td>
<td>252</td>
<td>2.05</td>
<td>2.27</td>
<td>2.17</td>
</tr>
<tr>
<td>Speed of Process</td>
<td>252</td>
<td>2.43</td>
<td>2.94</td>
<td>2.66</td>
</tr>
<tr>
<td>Technology Utilisation</td>
<td>252</td>
<td>3.42</td>
<td>3.15</td>
<td>3.29</td>
</tr>
</tbody>
</table>

Table 5.18: Beneficiaries' concerns

It is clearly illustrated in Table 5.17 that donors to charities are mostly concerned about the confidentiality of their records (mean=1.35) while Table 5.18 indicates that the beneficiaries of charities worry mostly about communication with charities.

5.2.4 Current ICT Training

For the purpose of investigating the current situation regarding ICT in Kuwaiti charities, it was crucial to consider data concerning personal development. This section was designed to focus on importance of computer networking; and indicating the best method of training. These issues help the researcher in
assessing the efficiency of training programs and the level of user satisfaction with computer training.

**Importance of Computer Networking Training**

Respondents were also asked how important they felt such training to be. The analysis of their responses is offered in Table 5.20 below.

<table>
<thead>
<tr>
<th>How important is it to have training in computer networking?</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Very Important</td>
</tr>
<tr>
<td>Important</td>
</tr>
<tr>
<td>Moderately Important</td>
</tr>
<tr>
<td>Of Little Importance</td>
</tr>
<tr>
<td>Unimportant</td>
</tr>
<tr>
<td><strong>Total</strong></td>
</tr>
</tbody>
</table>

Table 5.19: Importance of Computer Network Training

As can be seen from the results above (Table 5.20), the majority (69%) felt that training was very important. In fact, a total of 94.4% regarded it as "very important" or as just "important". It is interesting to note that, although the importance of training in ICT was rated so highly, a much smaller percentage of respondents was actually receiving regular training.

**Method of Training**

In the light of the importance accorded to training in ICT, all respondents were made aware of the methods listed in Table 5.21. They were then asked what training methods they felt were most effective. Their responses are outlined in Table 5.21 below, which again are graded on a Likert-type scale with 1=Very
important, 2=Important, 3=Moderately important, 4=Of little importance and 5=Unimportant.

<table>
<thead>
<tr>
<th>Methods</th>
<th>N</th>
<th>Gov. (Mean)</th>
<th>Non-Gov. (Mean)</th>
<th>Total (Mean)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Workshop</td>
<td>252</td>
<td>1.24</td>
<td>1.44</td>
<td>1.35</td>
</tr>
<tr>
<td>Internet On-line Session</td>
<td>252</td>
<td>2.12</td>
<td>2.18</td>
<td>2.15</td>
</tr>
<tr>
<td>Self-teaching (Book, CD-Rom)</td>
<td>252</td>
<td>2.54</td>
<td>2.09</td>
<td>2.29</td>
</tr>
<tr>
<td>Electronic Mail</td>
<td>252</td>
<td>2.25</td>
<td>2.37</td>
<td>2.32</td>
</tr>
<tr>
<td>Lecture and Seminar</td>
<td>252</td>
<td>2.71</td>
<td>2.26</td>
<td>2.46</td>
</tr>
</tbody>
</table>

Table 5.20: Training methods

The results in table 5.21 clearly illustrate that workshop training was felt to be the most useful (mean=1.35). Again, although the other methods of training were felt to be less effective than workshops, none of the training methods outlined above were seen as unimportant as none of these options reached the mean of 3.00.

5.3 Interview Results

The interview section helps to build up a picture that would support the development of the rich picture of the issue. It presents the qualitative information derived from interviews with key informants at the four charity organisations in Kuwait. This part is divided into four sections, which correspond to the main areas covered by the interview questions. The first of these provides responses regarding the current situation of ICT in Kuwaiti charities; the second section includes communication and co-operation systems at a national level; the third is concerned particularly with communication and co-operation systems at regional and international levels; and the final section discusses complying with national and international statutes.

Each question in the interviews was discussed thoroughly for several minutes (see appendix E to I). The researcher was able to develop a greater
understanding of the ICT situation in Kuwaiti charities from these interviews. All interviews were conducted in Arabic; they were recorded whenever possible or written notes were taken. Table 5.22 below indicates that eighteen interviewees participated. Interviews, as explained in detail in Chapter Four, were conducted with four main groups within the institutions: the general managers, the ICT department managers, the managers of internal activities, and the managers of external activities. In addition, the researcher carried out two separate interviews with donors of Kuwaiti charities.

<table>
<thead>
<tr>
<th>Types of Interviewees</th>
<th>Numbers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Charities' General Managers</td>
<td>4</td>
</tr>
<tr>
<td>Managers of ICT Departments</td>
<td>4</td>
</tr>
<tr>
<td>Managers of External Activities' Departments</td>
<td>4</td>
</tr>
<tr>
<td>Managers of Internal Activities' Departments</td>
<td>4</td>
</tr>
<tr>
<td>Charities' Donors</td>
<td>2</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>18</strong></td>
</tr>
</tbody>
</table>

*Table 5.21: Total number and types of interviewees*

The following section offers the responses obtained during the interviews with the personnel recorded above and these have been organised in the following sequence: ICT departments, internal and external activities' departments, General Managers, and donors.

### 5.3.1 Current Situation of ICT in Kuwaiti Charities

In order to explore the current ICT situation in Kuwaiti charity organisations, the researcher sought particular information concerning the current database systems the charities employ, ICT infrastructure, ICT policy and ICT training.

#### Database Systems

Computer databases are useful for most organisations, since databases are basically used to store, retrieve, extract and update any particular information required. So, ICT directors were asked whether or not they had a database and
whether or not it is being accessed by charities and their donors and beneficiaries.

Respondents from the government group indicated that their data are being managed by Oracle's database software. The Oracle database is one of the most powerful databases but its applications have been developed to be accessed for their staff only: none of their clients have access to their database. One of the respondents revealed:

'We do not have any policy or agreement to allow charities, donors, or beneficiaries to access our database system.'

(Respondent A)

Furthermore, the charities in the non-government group utilise Microsoft Access as their main database system. This type of database system has limited functions and only allows a limited number of users access at the same time. Respondent B declared that:

'Our system is not capable of allowing donors or other interested organisations to log on to our database system'.

Respondents were also asked about the security of their database. All respondents revealed that they are at risk since charities do not have clear procedures to secure their databases. Respondent C stated: 'We do not have procedures to keep the database secure'.

ICT Infrastructure

Interviews with directors of ICT departments showed that there are dissimilar types of ICT infrastructure presently available in Kuwaiti charities. A government
group ICT director indicated that the ICT infrastructure within their charity was capable of providing effective services to their users. Non-government charities, however, thought that their organisations had a weak ICT infrastructure in comparison to the government group. Table 5.23 summarises the ICT infrastructure in the charity organisations in Kuwait.

<table>
<thead>
<tr>
<th>Infrastructure</th>
<th>Government charity</th>
<th>Non-Government charities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Database</td>
<td>Oracle</td>
<td>Microsoft Access</td>
</tr>
<tr>
<td>Operating System</td>
<td>Unix - N.T</td>
<td>N.T</td>
</tr>
<tr>
<td>In-house application development</td>
<td>100%</td>
<td>60%</td>
</tr>
<tr>
<td>Number of PCs</td>
<td>350</td>
<td>170</td>
</tr>
<tr>
<td>Number of Servers</td>
<td>14</td>
<td>8</td>
</tr>
<tr>
<td>LAN</td>
<td>100%</td>
<td>50%</td>
</tr>
<tr>
<td>Network Cables</td>
<td>Fibre Optic &amp; UTP</td>
<td>UTP</td>
</tr>
<tr>
<td>WAN &amp; Wireless Connection</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>INTERNET ACCESS</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>INTRANET ACCESS</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>WEB SITE</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Number of Technical Staff</td>
<td>30</td>
<td>12</td>
</tr>
<tr>
<td>Technical Training</td>
<td>100%</td>
<td>30%</td>
</tr>
<tr>
<td>Troubleshooting Team</td>
<td>Yes</td>
<td>No</td>
</tr>
</tbody>
</table>

Table 5.22: ICT infrastructure in Kuwaiti charities

Table 5.23 revealed that both groups were using personal computers of IBM compatible standards. However, the number of personal computers in the non-government group is much lower than the number of computers in the government group. In addition, the government group has 14 high-speed File Servers. Most of these were Sun Microsystems with Intel hardware running the Sun Solaris 8 operating system; a few File Servers were IBM compatible. Other network hardware is incorporated from leading vendors such as Cisco Systems.
The non-government group has 8 standard IBM compatible computers acting as File Servers for their computer network users.

With regard to the availability of LANs within organisations, responses showed that both groups have already installed Local Area Networks (LANs) in their organisations to link their computers. In the government group, all the computers (100%) are connected to their Local Area Network, while in the non-government group 50% of computers were connected to their network. Respondents from the government group indicated that Fibre Optic cables existed in order to link all departments to each other, while UTP cables were used internally to connect all computers in the organisation.

A Wide Area Network (WAN) and Wireless connections only existed in the government group and were not available in the non-government group. The absence of these types of network in the non-government group was because of the high cost of hardware and software, and the management of these types of networks. This means that all computers in their branches are not linked to their main database while the main purpose of installing Wide Area and Wireless networks for the government group was to connect their 27 revenue branches around Kuwait to the main head office.

Internet access was available and provided for users from both groups. However, the government group had more Internet users (about 90%) whereas Internet users in the non-government group represented about 20% since Web access is authorised to a limited number of people.

An Intranet network existed only in the government group. Interviewees indicated that the main usage of the Intranet was to share information among their employees since some documentation was available online on the Intranet for staff.
Charities' web sites were available to both groups (see Table 5.24). However, their web sites were only limited to specific functions, including general information about their institutions, activities, achievements and contacts. The web site addresses of the charities are offered below.

<table>
<thead>
<tr>
<th>Zakat House</th>
<th>Khairia</th>
<th>Islah</th>
<th>Turath</th>
</tr>
</thead>
</table>

Table 5.23: Internet Web addresses of Kuwaiti charities

When the respondents were asked about problems they thought might be encountered in increasing Internet access for their staff, one of the respondents from the non-government group commented that:

"The current servers need to be replaced to allow a higher capacity so a larger number of users can access the Internet."

(Respondent C)

Concerning security issues, non-government respondents mentioned that the current security systems are under threat since they allow their Internet users to access the public Internet without installing firewall servers. In addition, there is a lack of updated anti-virus software installed in all of their servers in order to protect their networks from any virus infections. A respondent revealed:

"This problem occurs since network anti-virus software has to be purchased, but the latest and updated versions have not been provided"

(Respondent D)

There are some other obstacles and problems regarding the current ICT infrastructure in Kuwaiti charities. These include the following:
• Lack of professional and technical human resources.

• Slowness of computer networks: this problem occurs when all users in the network are using the same application at the same time. Additionally, it happens if network components, such as cables, cards, hubs and others, do not support a high-speed transmission.

• Budget constraints: this is the biggest challenge that non-government charities are now facing.

ICT Policy

When respondents were asked who decided their ICT policies and planning, the director of the ICT department in the government group pointed out that their organisation has established a special committee (The Organisation Committee for ICT Follow-up) to be in charge of deciding all issues concerning their ICT progress and advancement. This committee includes the General Manager, two GM assistants, the ICT Director and his assistant. These members meet once every three months, though they sometimes call for other unscheduled meetings when there is any urgent issue which has to be discussed. Objectives of this committee could be outlined as follows: 1) approving and following up the implementation of information technology systems in the institution; 2) following up and implementing work projects for the ICT department; 3) finding appropriate solutions for any barriers or problems which might hinder the implementation of ICT.

A respondent from the government group explained that even though they have this type of committee, they still lack of an effective ICT policy for their organisation. He further stated that:
"We are in need of a written policy that copes with national and international pressure."

In the non-government group, ICT policy is not documented. It is usually decided by a Computer Council, which is composed of a number of experienced staff from inside and outside the organisations. The inside staff include the director of the ICT department and a technical or application developer, while the outside staff are part-time volunteers with experience in the same field. However, there is a lack of ICT policy, since one of the respondents from the non-government group stated:

'In fact there is a problem with clear, well defined ICT policies.'

(Respondent B)

Respondents were also asked about ICT staff in their organisations. The non-government group revealed that their ICT staff are not able to meet their requirements since the number of employees in each organisation is around 300, while the number of technical staff for each of the non-government organisations is only 4. This low number of technical staff causes technical support, troubleshooting, training and the updating of any needed applications to be slow.

ICT Training

ICT departments directors from the non-government group pointed out that there is a lack of ICT training since their budget is limited and their technical staff are too few to provide appropriate training programmes or workshops for their users. Respondent A from the non-government charities revealed that:

'Our staff lack ICT training on many important applications such as the main features of Word, Excel, network services, and common technical problems.'
On the other hand, the government group had allocated a special room with up-to-date equipment and software in its head office building for ICT training. In addition, some funds are allocated every year for ICT staff for their work as instructors.

With regard to users' satisfaction with ICT, the general response was that the information and communication technology services currently provided did not match all their needs.

5.3.2 Communication and Co-operation Systems at a National Level
The researcher sought information about the current methods used among the Kuwaiti charities in order to communicate with other charities in Kuwait and with their donors and beneficiaries. This section includes findings from the interviews, which were conducted with directors of Internal Activities' Departments, and presents information regarding the current communication and co-operation systems at national level.

Current National Communication System
Directors of Internal Activities' Departments were asked to outline the types of communication currently used to communicate with other Kuwaiti charities and with their donors and beneficiaries. It was evident that both government and non-government groups communicate with each other, as well as with their branches around Kuwait on a daily basis. Respondents from both groups revealed that they use similar methods in order to communicate with charities, donors and beneficiaries. These methods include telephone, fax, face-to-face meetings, mail delegate, and post mail.

In addition, some responses showed that informal meetings are also used as a means of communication with officials from other charities during conferences or
seminars. However, none of the respondents reported that electronic connections were being used among them. Respondent B asserted that:

'We do not have any instructions to use e-mail in our daily communication.'

Pertaining to the deficiencies associated with these types of communication, the interviewees indicated that, although these methods were carrying out the work tasks, there were some problems. One of the directors expressed his feelings by stating that:

"Due to paperwork it takes about 10 working days to check the validity of any information provided from a beneficiary ".

(Respondent B)

Respondent C stated:

'We need to communicate with our donors and beneficiaries effectively, since we are still using traditional methods, namely, fax and telephone.'

In order to understand the perceptions of charity donors toward the services and facilities provided by their charities, two interviews were carried out with donors. Donor A represents regular donors to a Kuwaiti charity while Donor B reflects donors who donate to national and international disasters or catastrophes.

Both donors agreed that the current communication system is not convenient for them since it represents an obstacle for their donations. Donor A stated that:

'I found the communication with the charities bizarre. I need to go in person or spend hours and sometimes days to communicate with the charity to declare and pay my donation.'
He also added that:

"Kuwaiti charities need to change their communication as I found it very difficult.'

The current transactions that are being used represent a problem for donors. This is due to the lack of ICT transaction methods. Donor B declared that:

"I do not have time to go personally to donate at the charity's location."

According to the previous interviews with directors of Internal Activities' Departments and donors, it was apparent that many deficiencies have been explored concerning the current types of national communication systems. These are summarised as follows:

- Lack of communication among charities and with their donors.
- Lack of capability to accept online transactions which hinder or reduce donations.
- Lack of speed: when the delivery of documents or information is delayed, it causes a bigger problem, especially if the case is urgent.
- Lack of data accuracy: the decision-making of charities depends on accurate information. When data are exchanged via tools such as the telephone or fax machines, there is always the chance of there being missing or incorrect numbers or letters which invalidate the data.
- Lack of security: charity work depends heavily on data privacy. There are two reasons behind this. Firstly, data that are usually collected from the needy or from those requesting help, are very detailed and contain personal information that none of the other employees in the institution are allowed to see without authorisation. Secondly, when donors contribute to any relief fund they usually request data privacy. They prefer their names to be unknown or not written in any receipt or documents. This is due to a
relational belief which urges people to make donations secretly for the sake of God, not for the sake of popularity or reputation.

**Current National Co-operation System**

Respondents were asked to indicate whether or not they have any guidelines and procedures for co-operation among the charities. All responses indicated that co-operation with other charity organisations in Kuwait is very important in order to conduct their work tasks. However, none of them have had any guidelines to facilitate co-operation among other charities in Kuwait. Respondent A from the non-government group charities stated that:

‘There is no committee to regulate cooperation.’

Respondent B from the same group explained that:

'It is difficult to build any cooperation with the current available communication system as it requires physical information exchange and personal attendance.'

Respondent C from the government group charity asserted that:

‘There is a need for effective and efficient cooperation to ensure high performance and stop fraud and reduce risk.’

Respondents were also asked to explore the importance of co-operation with other charities. They replied that there are several reasons for this co-operation including:

- Curbing fraud by requesting brief reports on the needy person applying for aid or assistance and to check the validity of any information provided by a beneficiary.
- Arranging local charitable and philanthropic projects, such as providing free meals during the month of Ramadan and distributing revenue from kiosks.
- Holding periodic meetings to organise all national aid work.
- Improving work efficiency for revenue branches and kiosks by arranging to provide training sessions free of charge from government (Zakat House) to non-government employees.
- Non-government group charities usually request reports concerning needy people in Kuwait from all other Kuwaiti charities in order to donate to these families.

Having explored the methods of co-operation used among the charitable organisations within Kuwait itself, the next interview questions focused on communication and co-operation system in an international level.

5.3.3 Communication and Co-operation Systems at an International Level
This section is concerned with the communication and co-operation systems among Kuwaiti charities regarding international activities or projects. The following interviews were conducted with directors of External Activities' department.

Current International Communication Systems
Respondents were asked to explore the current communication systems that were available in order for them to perform their international charitable purposes with their international branches and other charities. Responses revealed that the current communication systems that are utilised to communicate between Kuwaiti charities and international branches or charity organisations are as follows: telephone, fax, email, post mail, formal face-to-face visits, and conferences and seminars.

However, a respondent from the government group expressed his opinion about the current communication systems by stating that:
"I am not satisfied at all with the current traditional communication systems that exist between us and other charities out of Kuwait."

Pertaining to the deficiencies associated with these methods of communication, the interviewees indicated that while these methods were enabling them to carry out their work tasks, they did experience some difficulties and drawbacks regarding their use. A director, Mr C, stated that:

"Often we find out that some orphans have gained a double amount of help... because we have no updated databases."

A director, Mr B, asserted that:

"Scarcity of information sharing among charity agencies caused loss of lives during the famine in Ethiopia."

Overall, responses revealed some weak points that were associated with the current international communication systems. These weak points have been summarised in the following:

- Lack of security and privacy: for example, when sending a fax letter to a charity, it is hard to prevent other staff from seeing it; it may even get stolen or damaged.
- Slow responses: this makes it difficult to keep track of sent or received information.
- Cost consuming: overseas calls are expensive.
- Lack of efficient and fast provision of information regarding available statistics, such as a database of orphans, donors, projects, etc.
- Probability of making a wrong decision.
- Most of the communication methods are traditional, not high standard technologies.
Chapter Five

Fieldwork Analysis

Such problems and obstacles were further probed in the section that follows. This part covers what respondents perceived to be the problems which face the development of ICT technology within the Kingdom and their future plans for coping with these difficulties.

Current International Co-operation Systems

When interviewees were asked whether or not there is any co-operation with international charities, they all asserted that they indeed co-operate with international charity organisations. They clarified that the main reason for this is that most of their humanitarian and aid projects were conducted outside Kuwait.

Consequently, respondents showed that factors that would encourage their charity organisations to co-operate with other international charity organisations around the world could be outlined as follows:

- Sponsoring and supporting orphans around the world.
- Construction projects, such as schools, hospitals, water wells, etc.
- Natural catastrophes, such as earthquakes, floods, etc.
- Requesting information, such as advice, suggestions, experience etc.
- Organising conferences and seminars.

5.3.4 Complying with National and International Statutes

This section provides comments on any national or international statutes that Kuwaiti charities should or must be complying with. These interviews were conducted with General Managers of the Kuwaiti charities. Respondents were asked to explain whether or not their current systems comply with national and international statutes.

A respondent from the governmental charity (Zakat House) explained that they must meet the requirements of the Kuwaiti government regarding compliance
with electronic government (do you mean regulations?). He showed that none of the government agencies are able to access their current system since their system has limited capacity to provide the data that needs to be exchanged with other government institutions. The General Manager of the government group stated that:

'The charity has no choice. We need to comply with the government requirements regarding electronic communication'.

Due to recent changes worldwide, it has been requested that many charitable organisations in the world have been inspected on their charitable activities for auditing funds purposes. Respondents respected and agreed with these international requests. Respondent B declared:

'We do not mind allowing any charity commission officials from Kuwait or out of Kuwait to view our records, because this action ensures that there is no suspicion about Kuwaiti charities being involved in terrorist activity.'

5.4 Case Studies

This section presents two case studies which represent personal interviews with charities' beneficiaries.

5.4.1 Case Study A

The first case study was conducted in a charity which holds assessment interviews everyday since this charity has the highest rate of daily beneficiary requests.

Mr. A is a man in his mid fifties. He lost his sight five years ago. This led him to lose his job which was his main income. Mr A married an Egyptian lady from outside the country. She decided to leave him with his nine children after he lost his sight and his job. He looked after his children without help and support from
anyone, depending mainly on his savings and government support. Unfortunately, government support is not enough as it has become more expensive to live in Kuwait since the country has seen sharp changes in life style.

In the interview, Mr A posed for a minute and then said ‘I have tried several times to contact the charities representative without any success, as the lines are busy. I am really upset as my situation is very difficult and I cannot wait further and that is why I have come in person. I have spent all my savings on my family, I fall short to meet my family needs. He said my dignity does not allow me to ask for other help and I will never ever do that. I am asking for help as my bathroom is collapsing and I do not have the funds to repair it. I have brought the quotation for your attention. I would like your charity to support me in this case

Mr A arrived with the help and support of his youngest son, an 8-year-old boy. He also showed a sense of humour by saying: “You need to pay for my travel and effort in reaching you as well as paying for my son’s education as he is absent from school. It was very difficult, costly and inconvenient for me to reach you in your own time”. He suggested that, next time, the charity should go to his home to discuss any future requests.

5.4.2 Case Study B
The second case study was conducted in a charity which holds assessment interviews once a week at the end of the day to evaluate individual cases. In this case study, the beneficiary was a widowed mother who looks after her family on a very low and inadequate income.

Mrs A sat quietly and shyly opposite to the charity representative, a committee member, while the researcher took a seat somewhere between them. The charity representative started the conversation slowly and quietly by asking her to
introduce her case to the charity. Mrs A looked around the table without saying a word and kept her eyes on the representative’s pen and paper. The room was silent for almost a minute as the lady tried to find words in response to the question. She replied, without raising her eyes, by saying:

“Before I reveal anything, I want you to assure me that my personal details and my case will be kept confidential. If you are not sure, I do not want to explain my case any further.”

She also added that I am a fifty-five year old Kuwaiti citizen. I am currently unemployed, I need to take care of my children, particularly my disabled child. I used to get support from my only brother, however sadly he has died in a traffic accident. My two sisters are married to Saudi citizens, as you will understand, it is embarrassing to ask them for help.

Mrs A is a widow with six young children and with insufficient income. She receives help from the government but it is not enough meet her family’s needs. She has a child with special needs (physically disabled) and he has taken most of her savings over the years. She showed official documents concerning her case and debts and showed how debtors are in the process of evicting her from her house if she failed to pay her monthly rent.

The representative assured her that her details would be confidential, with no one having access to her details apart from decision-makers. Consequently, she explained her personal circumstances openly in detail. Halfway through the interview, the representative sympathised with her case. He asked her: “Why have you not approached the charity earlier to support and help you to overcome your problems?” Mrs A replied without hesitation: “There is no easy way to contact you. It is difficult to come to you in person due to financial and social factors as I live far from the charity.”
The main outcomes of the case studies can be summarised briefly in the table below:

<table>
<thead>
<tr>
<th>Case Studies: Main Findings</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Beneficiaries were concerned about the confidentiality of their personal details.</td>
</tr>
<tr>
<td>2. Beneficiaries struggled in contacting the charities.</td>
</tr>
<tr>
<td>3. The charities are still using traditional methods in interviewing and filling forms.</td>
</tr>
</tbody>
</table>

Table 5.24: Main findings of the Case Studies

5.5 Focus Group

A focus group meeting was held at the premises of one of the main charities. Some of the authorities attended the focus group and the number of participants totalled approximately twenty-five persons. They consisted of the top manager, directors and employees. This meeting was arranged a week before the date proposed by the administration of one of the charities.

The top managers, as mentioned earlier, were present during this meeting and contributed positively by encouraging the participants to talk frankly and openly about their organisations' experiences and problems with the situation of the current information systems.

In this meeting one of the managers introduced the research to the group. The researcher started by presenting a general introduction about the research's main aims with a slide show using a Power Point application. The researcher opened the discussion and focused mainly on how to improve the charities' performance efficiently and effectively.
The first speaker in the focus group was Mr A. He discussed the issues of cooperation and coordination among the charities in the State. He said:

'Cooperation and coordination among the charities is still unconvincing. We have heard a lot about this cooperation but we never have well-planned cooperation'.

Mr B continued Mr A's argument by emphasising the need for official cooperation and coordination. He emphasised the need for policies, rules and regulations.

'Our cooperation and coordination are based on individuals' contacts. There are no official policies, procedures and guidelines for this cooperation and coordination'.

When Mr A finished making this point, Mr B raised his hand in agreement. Mr B was worried about fraud. He stated:

'Without serious co-operation and coordination among the charities, it will be difficult to identify fraud. The current system used in cooperation is traditional, expensive, tedious and inconvenient'.

The main findings of the focus group can be summarised in the following table (Table 5.26)

<table>
<thead>
<tr>
<th>Focus Group: Main Findings</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. There is a lack of cooperation and coordination among the charities.</td>
</tr>
<tr>
<td>2. There is a need to control fraud.</td>
</tr>
<tr>
<td>3. There is a need to improve co-operation among the charities.</td>
</tr>
</tbody>
</table>

*Table 5.25: Main findings of the Focus Group Meeting*
5.5 Concluding Remarks

This chapter has reviewed the information that needed to be acquired for this study and then considered the research methodologies most commonly used in the field of Information Systems. A combination of quantitative and qualitative methods was selected for this research.

Methods for gathering data were outlined. These included a questionnaire survey, interviews, case studies and focus group; the advantages and disadvantages of these methods were also considered. The questionnaire and interview schedules were subjected to content validation and both were piloted in advance of the main study.

The information obtained will be used in the next chapter to present an analysis of the results and to develop the guidelines for devising an effective and efficient ICT system for charitable organisations in Kuwait.
CHAPTER SIX

System Intervention

6.1 Introduction

The preceding chapter, which considered the questionnaire, interview, case studies and focus group results, were aimed at collecting together all the necessary components to fulfil the requirements of the first and second stages of the Soft Systems Methodology (SSM).

This study involves the use of the soft systems approach to obtain the desired systemic description. Checkland (1981) adopted a phenomenological approach in the SSM, employing systems as a description of actual real-world activity but also tools of an epistemological kind can be used in a process of exploration within reality.

This methodology (SSM) can be described as a seven-stage process of analysis which uses the concept of a human activity system as a means of getting from 'finding out' about the problem situation to 'taking action' to improve it.

This chapter presents the systems intervention using a multi-methodology approach as this study combines the applications of SSM methodology from Stage 1 to Stage 7, as well as the ETHICS methodology from Stage 6 to Stage 7. See Chapter Four for justifications.
6.2 SSM (Stage One): Considering the Problem Situation (Unstructured)

In this stage a fairly neutral account was offered concerning how processes were functioning. The following questions were asked in order to elicit such an account: What are the major activities that are being carried out in these processes? How are they undertaken? What information is being produced by such varied activities? How is that information being transferred? Who uses it? For what purposes is it used?

A critical analysis of the fieldwork, that included the questionnaire survey, interviews, case studies, focus group and document analysis, indicated a set of problem issues in two levels. These levels are the organisational and organisations’ subject levels. Figure 6.1 shows the levels of the problem issues. In order to discuss and investigate the unstructured problem situation within the charities in detail, four perspectives were taken. These four perspectives were:

- Charity Authorities
- Charity staff
- Donors
- Beneficiaries

Figure 6.2 illustrates the main issues that emerged from the critical analysis of the fieldwork and the document analysis.
Charities in The State of Kuwait

Organisation Level

Zakat  Khairia  Islah  Turath

Subject Level

Authorities  Staff  Donors  Beneficiaries

Figure 6.1: Main Elements of the Fieldwork
Figure 6.2: The Problem Situation
6.2.1 Organisations

External aspects

The responses to the above questions provided by stakeholders form an outline of the diverse opinions and views within and outside the charity institutions. All of these points of view are illustrated in the rich picture (see figure 6.5).

The survey revealed that the main factors that charities need to comply with are national and international compliances. The Kuwaiti charities are currently under pressure from two sources. The first is national compliance and the second involves regional, GCC, and international compliance. The opinions of various stakeholder groups are offered below:

The Government’s Views
Interviews conducted with the charities’ authorities indicated that the Kuwaiti government is moving towards electronic government. It is introducing policies to address this issue, encouraging governmental organisations to use electronic management and an electronic style of administration. Charities need to comply with government rules and guidelines, specifically declaring their income and expenditure.

National and International Pressures
There are regional and international pressures to control the income and expenditure of charities. The charities are using traditional documents as evidence based on hard paper working. Therefore, there is a need for an effective and efficient system to monitor the income and expenditure of charities.
6.2.2 Authorities

Cooperation
Kuwaiti charity organisations have agreed on a cooperation pact which centres mainly on international work to respond to disasters such as earthquakes, floods, famines etc. In practice, however, this coordination is virtually non-existent since each institute has its own branch in certain countries. This means, in effect, that each charity is still working separately with little coordination with other Kuwaiti charities. As a result, there are very few support benefits from such supposed cooperation. An analysis of the interviews and the focus group shows that cooperation among Kuwaiti charities is still based on traditional cooperation, faxing between individuals without an electronic database and electronic communications. There is a lack of policies, procedures and guidelines to control the cooperation system.

Coordination
Coordination is needed among the charities as there is also evidence that there is fraud within the donation systems.

ICT Facilities
A review of the charities' documents, interviews and the focus group showed that there is a lack of access to the networks and a lack of use of high-speed networks and multimedia systems.

- Members of staff in computer centres and departments, as well as top management, were dissatisfied with their current information services.
- ICT performance was not monitored.
- The security control of data was inefficient.
- There was no evaluation and monitoring of ICT performance by ICT committees within departments.
- ICT committees within the charities were ineffective since they depended on the decisions of computer centres.

From the analysis of the fieldwork, it is evident that the Kuwaiti charities lack the following facilities: an adequate quantity of computers and computer networks and access to the Internet and other electronic resources.

**Financial**

Financial support was insufficient for some of the charities from both internal and external sources. This meant they were unable to increase their networking activities.

**Policies**

The survey indicated that the organisations lack policies, procedures and guidelines for ICT resources and ICT training.

**6.2.3 Staff**

**Training**

An analysis of the charities' documents and from interviews carried out with relevant charity authorities, the following were revealed:

- Staff training was needed, especially for staff in the computer centres in non-government charities.
- Computer centre staff lacked established channels when they needed advice on ICT.
- Technical advice in computer centres was insufficient to satisfy the needs of staff.
- Staff lacked the necessary knowledge to manage computer equipment and programs efficiently in their departments. Staff were dissatisfied with the procedures that were in place for obtaining advice from computer centres.
The Lack of Suitable ICT facilities

In spite of the fact that some organisations (e.g. Zakat House) have more advanced ICT facilities than others, the general insufficiency of ICT was of great concern to all members within the charities. This problem, which was indicated through the interviews, was the result of the absence of sufficient funds for the purchase, installation and maintenance of ICT; it was also due to a lack of training in these institutions. These problems affect the spread of ICT which could otherwise be exploited in many local departments and branches.

Since financial issues are a definite focus of concern leading to the dissatisfaction of the charities with regard to their ICT systems and infrastructure, these are examined in more detail below.

Financial Issues

Financial Resources for ICT
An analysis of the interviews showed that the financial support which is available to improve ICT in the charity organisations is still insufficient. There is no link between ICT development and the decision-makers' strategic planning and policies and the present budget are still not adequate to meet the users' needs. This is perhaps because of the lack of awareness of the need to incorporate policies and strategic planning on the part of decision-makers.

Lack of Awareness towards ICT
The survey indicated that the charity authorities are not aware of the impact, role and importance of ICT in improving their organisations' performances, as well as in avoiding fraud and other serious catastrophes.
ICT Training and Education
The interviews and document analysis showed that the authorities lack ICT training as well as an awareness of the role and use of ICT in the charities’ systems.

6.2.4 Donors
The questionnaire and interviews with donors indicated that the main issues regarding donors can be summarised by the following:
- Confidentiality of their personal details,
- Confidentiality of their donations,
- Targeted beneficiaries,
- Communication with the charities,
- Fraud within the charities, and,
- Bogus claims.

6.2.5 Beneficiaries
There is evidence from the questionnaire, interviews and case studies that the main issues regarding the beneficiaries can be summarised by the following:
- Confidentiality of their personal details,
- Communication, and,
- Time of the delivery of the benefit.
6.3 SSM (Stage Two): Expressing the Problem Situation (Structured)

The main element of this stage is building the rich picture (RP) of the problem situation within the Kuwaiti charities. The rich picture helps in selecting particular issues and allows the relevant systems to be identified. Figure 6.3 indicates the problem solving system.

---

**PROBLEM SOLVER**

The Research Student

**RESOURCES**

* Survey indication
  - Questionnaires
  - Interviews
  - Focus Group
  - Case Studies.
* Knowledge of problem situation.
* Existing literature.
* Supervision of specialists

**BOUNDARIES**

* Time constraint: submit a PhD thesis in a limited time.

**PERSPECTIVE**

Contribution to knowledge in relation to organisational information handling and system thinking insight

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*Figure 6.3: Problem Solving System*
Chapter Six

PROBLEM OWNER
Staff, authorities and clients

STRUCTURE
- Charity organisations, Ministry of Finance
- Organisations' top management
- Computer centres
- Network infrastructure
- Information and communication technology providers

PROCESS
- Expanding the use of ICT
- Exchanging experiences and knowledge
- Supporting and promoting non-profit research activities
- Storing and retrieving information
- Providing and facilitating ICT services
- Managing training courses

CLIMATE
- Efficient communication system
- ICT professionals
- Charity organisations' users
- ICT providers

Figure 6.4: Problem Content System
6.3.1 The Problem Improving System

To fulfil the aims of the study as explained in Chapter 1, and using the insights gained from the literature review and the results of the data analysis (questionnaire, interviews, focus group and case studies), the research attempts to examine the situation as a whole and then suggests what steps might be taken to improve those issues revealed in the problem statement; this constitutes the central purpose of the research. As a result, the system proposed in this research will be able to be established carefully and systemically, and will function effectively and efficiently in the following ways:

- The system must be cost effective when compared to the costs involved in running the present, conventional system.

- It must ensure that the aid to beneficiaries is equally and equitably distributed by way of unlimited access that crosses barriers of space and time.

- It must be capable of providing a high-speed, state of the art network that meets the needs of a variety of human development styles.

- The envisaged system must minimise, or even eradicate, the drop-out rate of donors by allowing them to donate at any time, anywhere, and at their own pace.

- It must succeed in overcoming the lack of ICT facilities noted in this research by providing a well-established ICT infrastructure in order to deliver charitable materials and goods.

- The system must aid reciprocal decision-making responsibilities among the organisations concerned.
- It must have the potential to improve the job satisfaction of members by providing support, incentives and recognition.

- It will be designed to make the exchange of information more efficient and fast.

- It will prevent aid and relief being duplicated, thereby improving efficiency.

- It must aid the supply of information.

- It should help in increasing the number of donors.

- The system must be capable of ensuring high security and privacy for the data contained within it.

- The system must be able to support any number of volunteers in participating in charitable projects via an online volunteer directory.

- It must help to improve the economic and social lives of those in poor countries.

- The system must be able to provide a wider selection of projects for donors.

6.3.2 The Problem Content System

The main principle of the problem content system is to have a rich picture of the 'problem situation' without imposing any particular emphasis. Figure 6.4 illustrates the main elements of the system, which are: structure, process and climate. Questions can be drawn based on the determination of these elements. These questions can be used as examples.
Problem Owner

- Staff
- Donors
- Beneficiaries
- External users

The Elements of the Structure

- Zakat House
- Khairia
- Islah
- Turath
- Government
- Regional and international organisations

Process

- To store information
- To retrieve information
- To communicate with beneficiaries
- To communicate with donors
- To ensure confidentiality
- To secure the information

Climate

- Charities
- Beneficiaries
- Donors
- Staff
- Authorities
- External users
6.3.3 The Rich Picture

Figure 6.5 shows the rich picture, a pictorial form of the system situation. It represents an illustration of the holistic view taken of the system interest. It contains various pictorial elements that represent the particular system interest.

The "big eyes" in the picture represent the influence of external perspectives. These include national legislation and guidelines, and international pressures. The key actors of the system are presented by a set of human figures of various depictions. The picture scissors represent the conflicts within the system while the bubbles indicate the system's main concerns. The brick wall indicates obstacles among elements of the system.
Figure 6.5 Rich Picture
6.4 SSM (Stage Three): Root Definitions of Relevant Systems

One of the main aims of this stage is to define notional systems by investigating the situation from different points of view that are relevant to the problem situation.

Problem Themes

The first step of this stage is to identify problem theme situations in the analysed situation. The main themes identified for the charity organisations from the rich picture are:

- Lack of effective cooperation
- Lack of an appropriate ICT system
- Lack of ICT training
- Lack of an effective website
- Lack of network access at workplace
- Traditional communications
- ICT infrastructure
- Authorities' attitudes and awareness of ICT
- Staff attitudes toward ICT
- Decision-making
- ICT policies
- ICT skilled manpower
- Confidentiality of the records of donors and beneficiaries
- Security of the system
- National, regional and international compliance

In order to establish the relevant system issues, the above fifteen issues were aggregated into five:
1. **Relevant System for Communication Issues**
This combines:
- Lack of an effective website
- Lack of network access at workplace
- ICT infrastructure

2. **Relevant System for Technical Issues**
This combines:
- Lack of an appropriate ICT system
- National, regional and international compliance
- Lack of ICT training
- ICT skilled manpower

3. **Relevant System for Confidentiality and Security Issues**
This combines:
- Confidentiality of the records of donors and beneficiaries
- Security of the system

4. **System for Cooperation and Coordination**
This combines:
- Lack of effective cooperation

5. **System for Awareness and Attitudes**
This combines:
- Authorities' attitudes and awareness of ICT
- Staff attitudes toward ICT
- Decision-making
- ICT policies
From the above relevant systems, a root definition can be structured.

6.4.1 Root Definition of Communication System Issues
The root definition mission statement of communication issues can be stated as follows:

The charity authorities owned system to improve communications among themselves, as well as with their representatives, by means of introducing and implementing the hardware and software needed in order to communicate to the beneficiaries at the right time in the right location.

The above root definition will be tested against CATWOE. CATWOE, as defined by Checkland (1990), is a mnemonic for a checklist for problem or goal definition. It is used to identify the problem in order to prompt thinking about what a researcher is trying to achieve.

Consequently, in order to examine the analysis of the above root definition (the communications system), the following is revealed:

<table>
<thead>
<tr>
<th>C</th>
<th>Staff, managers and authorities</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Charity authorities</td>
</tr>
<tr>
<td>T</td>
<td>To move from poor on the spot communications to a better and efficient communication system</td>
</tr>
<tr>
<td>W</td>
<td>Communication can lead to avoiding catastrophe and speeding up decision-making</td>
</tr>
<tr>
<td>O</td>
<td>Charity authorities</td>
</tr>
<tr>
<td>E</td>
<td>Political, religious, social, cultural, security and confidentiality issues.</td>
</tr>
</tbody>
</table>
6.4.2 Root Definition of Technical System Issues
The technical issues root definition mission statement can be stated as:

Charity management owned system to improve ICT facilities by means of increasing ICT hardware and software, staff training and awareness of ICT in order to improve the charities' performance in reaching the beneficiaries as well as the donors.

A CATWOE analysis of the technical system reveals the following:

C Charity staff, managers and authorities
A Charity staff, managers and authorities
T Inadequate and poor facilities and capabilities to better
W ICT can help in improving performance and in avoiding catastrophes
O Charity management
E Infrastructure, awareness, facilities, training, resource base

6.4.3 Root Definition of Confidentiality and Security System Issues
The root definition mission statement of confidentiality and security issues can be stated as:

Charities' management owned system to improve the confidentiality and security of both beneficiaries' and donors' records by means of increasing awareness, the infrastructure, staff training and ICT resources in order to encourage donors and reach deserving beneficiaries.

A CATWOE analysis of the confidentiality and security system reveals the following:
Chapter Six System Intervention

C Donors, beneficiaries, charity staff, managers and authorities
A Charity organisations
T From low levels to high levels of security and confidentiality
W High level of security and confidentiality can raise the number of donors and reduce any social embarrassment to beneficiaries
O Charity management
E Awareness, training and ICT resources.

6.4.4 Root Definition of Cooperation and Coordination System Issues

The root definition mission statement of cooperation and coordination issues can be stated as:

The charity authorities owned system to improve cooperation and coordination among themselves by means of the efficient and effective sharing of information resources in order to avoid fraud and to use their physical resources effectively.

A CATWOE analysis of the cooperation and coordination system reveals the following:

C Charity organisations
A Charity authorities and staff
T From lack of cooperation to productive cooperation
W Cooperation can stop fraud and permit better management of financial resources
O Charity authorities
E Social, religious, cultural and traditional environment and speed of technology change
6.4.5 Root Definition of Awareness and Attitudes System Issues

The root definition mission statement of awareness and attitudes issues can be stated as:

<table>
<thead>
<tr>
<th>C</th>
<th>Charity authorities, staff, donors and beneficiaries</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Authorities and managers</td>
</tr>
<tr>
<td>T</td>
<td>From poor perception to good perception</td>
</tr>
<tr>
<td>W</td>
<td>Good awareness and attitudes towards ICT will help in introducing and implementing ICT services</td>
</tr>
<tr>
<td>O</td>
<td>Charity organisations</td>
</tr>
<tr>
<td>E</td>
<td>Changes in social, traditional and cultural attitudes and fear of change</td>
</tr>
</tbody>
</table>

A CATWOE analysis of the awareness and attitudes system reveals the following:

The charities' authorities owned system to improve awareness and attitudes towards ICT by means of increasing awareness of ICT in order to improve the strategic planning and decision making for ICT.

6.5 SSM (Stage Four): Building a Conceptual Model of the System

Checkland and Scholes (1990, p. 40) defined a conceptual model as a diagram of the activities showing the system described by the root definition. For each root definition introduced in the previous section, conceptual models are presented in Figures 6.6 to 6.11. These models become an iterative process of debate and modification towards establishing final agreed models.
The basic activities derived from the root definitions for each system are shown below:

A. Communication System

- To manage ICT communication
- To improve Internet facilities
- To create and use a shared website
- To increase ICT communication training
- To communicate with donors
- To communicate with beneficiaries
- To avoid catastrophe and speed-up decision-making

B. Technical System

- To manage ICT
- To increase ICT facilities, hardware and software
- To improve staff ICT training
- To improve staff ICT awareness and attitudes
- To optimise performance, speed-up decision-making and help in avoiding fraud

C. Confidentiality and Security System

- To manage and control the confidentiality and security of the system
- To improve confidentiality for donors and beneficiaries
- To improve security of the data and information
- To encourage donors
- To encourage beneficiaries
- To improve staff ICT awareness
- To curb fraud, attract donors and increase the number of beneficiaries
D. Cooperation and Coordination System

- To improve the efficiency of sharing information resources among charities
- To share costs
- To exchange experience
- To increase staff awareness of cooperation
- To avoid catastrophe, speed-up decision-making and discover fraud

E. Awareness and Attitudes System

- To increase awareness and improve attitudes towards ICT and communication among charities
- To increase awareness of the role of ICT in discovering fraud
- To increase awareness of the role of ICT in avoiding human catastrophes
- To increase awareness of the role of ICT in speeding up decision-making
- To increase awareness of the role of ICT in attracting donors
One of the main problems for the charities is to reach quickly those in urgent need, for example, in the case of an earthquake. It is very important to identify the interaction between the beneficiaries, communication systems and the charity response. This can be illustrated in the conceptual model shown below.
Input depends on difference between what is required on the site and actual charity

Charity response: C

Comm. System

Required

Feedback from the beneficiaries

Signal fed back related to the actual case of the beneficiaries

Beneficiaries’ situation: Output

Figure 6.7: Conceptual Model of the Interaction between the Beneficiaries
Chapter Six System Intervention

Monitor B1-B5

B2: To increase ICT facilities, hardware and software

B3: To improve staff ICT training

B4: Staff ICT awareness and attitudes

B5: To optimise performance, speed-up decision-making and help in avoiding fraud

Figure 6.8: Conceptual Model of the Technical System
Chapter Six

System Intervention

Figure 6.9: Conceptual Model of the Confidentiality and Security System

C1: To manage and control confidentiality and security of the system

C2: To improve confidentiality of donors and beneficiaries

C3: To improve security of data and information

C4: To encourage donors

C5: To encourage beneficiaries

C6: Staff ICT awareness

C7: To curb fraud, attract donors and increase the number of beneficiaries

Monitor C1 – C7

Take control action

Establish performance measures

Figure 6.9: Conceptual Model of the Confidentiality and Security System
Chapter Six System Intervention

D1: To improve efficiency of sharing information resources among charities

D2: To share costs

D3: To exchange experience

D4: To increase staff awareness towards Cooperation

D5: To avoid catastrophe, speed-up decision-making, and discover fraud

Figure 6.10: Conceptual Model of the Cooperation and Coordination System
Chapter Six System Intervention

E1. Increase awareness and improve attitudes towards ICT and communication among charities

E2. Increase awareness of the role of ICT in discovering fraud

E3. Increase awareness of the role of ICT in avoiding human catastrophes

E4. Increase awareness of the role of ICT in speeding up decision-making

E5. Increase awareness of the role of ICT in attracting donors

Figure 6.11: Conceptual Model of the Awareness and Attitudes System
6.6 SSM (Stage Five): Comparing Models with Real World Situations

This stage involves making a comparison between the data collected from the questionnaires, interviews, focus group and case studies which were presented in the rich picture (Stage Two) and the proposed conceptual model (Stage Four).

The key factor in this comparison is to initiate a debate in relation to the problem situation; this is supposed to point out what possible agenda change might be appropriate and feasible in the system under investigation. This will lead to an agenda of change which is the ultimate output of this stage. The agenda is concerned with highlighting what activities are present, missing, problematic or questionable in the system. Based on the structure of the comparison previously described, Tables 6.1 to 6.5 demonstrate how such an agenda can be generated at the end of this stage. In order to undertake this process, an agenda in the form of a table was constructed for each relevant system.
# A. Agenda for Possible Change: Communication System Theme

<table>
<thead>
<tr>
<th>Activity in conceptual model</th>
<th>Present in real world situation</th>
<th>Comments on real world situation</th>
<th>Add to agenda</th>
</tr>
</thead>
<tbody>
<tr>
<td>A1: To manage ICT Communication</td>
<td>Currently ICT communication does not exist in fieldwork. Charities lack the hardware, software and a shared website.</td>
<td>A well-established communication system with shared websites among the charities will improve charities’ performance as well as helping to avoid human catastrophes.</td>
<td>Yes</td>
</tr>
<tr>
<td>A2: To improve Internet facilities</td>
<td>There are partial Internet facilities to meet the needs of charity staff, beneficiaries and donors.</td>
<td>Internet facilities will help and support communication among charity staff, beneficiaries and donors to save time and effort. The Internet also can help in speeding up decision-making.</td>
<td>Yes</td>
</tr>
<tr>
<td>A3: Create a shared website</td>
<td>There are no websites for the charities to share information, neither are there front information resources for both donors and beneficiaries.</td>
<td>There is a need for a website to reflect the charities’ aims and objectives as well as a site for information, consultation, advice, help and discussions.</td>
<td>Yes</td>
</tr>
<tr>
<td>A4: To increase ICT communication training</td>
<td>ICT communication training within the charities is partially recognised and understood.</td>
<td>There is a need to introduce and implement a well-established training programmes for charity staff.</td>
<td>Yes</td>
</tr>
<tr>
<td>A5: To avoid catastrophe and speed-up decision-making</td>
<td>The importance of communication is partially recognised in avoiding human catastrophes.</td>
<td>There is a need to introduce communication systems among the charities and their fieldworks.</td>
<td>Yes</td>
</tr>
<tr>
<td>A6: To Communicate with donors</td>
<td>Communication with donors is partially recognised.</td>
<td>There is a need to introduce communication systems to communicate effectively with donors.</td>
<td>Yes</td>
</tr>
<tr>
<td>A7: To Communicate with beneficiaries</td>
<td>Communication with beneficiaries is partially recognised.</td>
<td>There is a need to introduce communication systems to communicate effectively with beneficiaries.</td>
<td>Yes</td>
</tr>
</tbody>
</table>

Table 6.1: Communication System Theme
Chapter Six

With sharp changes in ICT hardware and software, and particularly in database software, the current ICT within the charities partially meets the charities' staff needs and satisfaction.

### B. Agenda for Possible Change: Technical System

<table>
<thead>
<tr>
<th>Activity in conceptual model</th>
<th>Present in real world situation</th>
<th>Comments on real world situation</th>
<th>Add to agenda</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>B1</strong> To manage ICT</td>
<td>With sharp changes in ICT hardware and software, and particularly in database software, the current ICT within the charities partially meets the charities' staff needs and satisfaction.</td>
<td>Up-dated ICT facilities to use in charities' functions will help improve, optimise and support charities' activities and tasks.</td>
<td>Yes</td>
</tr>
<tr>
<td><strong>B2</strong> To increase ICT facilities, hardware and software</td>
<td>ICT hardware and software partially meets the charities' staff needs.</td>
<td>Introducing up-dated databases, financial management packages with up-to-date hardware will help to improve charities' performance.</td>
<td>Yes</td>
</tr>
<tr>
<td><strong>B3</strong> To improve staff ICT training</td>
<td>There is a partial recognition of training needs and recognition of the need for up-to-date methods/techniques to be used in modern training.</td>
<td>Improving staff knowledge, understanding ICT facilities and the use of up-to-date techniques in training will help increase the charities' performance.</td>
<td>Yes</td>
</tr>
<tr>
<td><strong>B4</strong> To improve Staff ICT awareness and attitudes</td>
<td>The importance of staff awareness and attitudes towards ICT in improving charities' performances is partially recognised by the charities' staff.</td>
<td>There is a need to improve the awareness and attitudes of charities' staff towards using, implementing and training in ICT in order to improve charities' performance.</td>
<td>Yes</td>
</tr>
<tr>
<td><strong>B5</strong>: To optimise performance, speed-up decision making and help in avoiding fraud</td>
<td>The importance of technical ICT is partially recognised as an important tool in speeding-up decision-making and helping in avoiding fraud.</td>
<td>Charities' authorities must provide strategic planning for introducing and implementing up-to-date ICT facilities.</td>
<td>Yes</td>
</tr>
</tbody>
</table>

Table 6.2: The Technical System Theme
### C. Agenda for Possible Change: Confidentiality and Security System

<table>
<thead>
<tr>
<th>Activity in conceptual model</th>
<th>Present in real world situation</th>
<th>Comments on real world situation</th>
<th>Add to agenda</th>
</tr>
</thead>
<tbody>
<tr>
<td>C1</td>
<td>One of the crucial elements of charities’ activities is the confidentiality and security of the donors’ and beneficiaries’ data details. Beneficiaries and donors require their data details not to be accessed or revealed to any others apart from the charity. This partially exists.</td>
<td>A well-established confidentiality and security system will encourage donors to donate and beneficiaries to apply for benefit.</td>
<td>Yes</td>
</tr>
<tr>
<td>C2</td>
<td>There is no well-established security and security systems for the charities.</td>
<td>There is a need to introduce a confidentiality and security system for the charities.</td>
<td>Yes</td>
</tr>
<tr>
<td>C3</td>
<td>Donors are the key element to the charities’ survival and for them to reach needy beneficiaries. Currently, there is no well-established plan to encourage donors to donate.</td>
<td>There is a need to establish ICT communications system with donors in order to reach donors by breaking the physical barriers. This will help increase fundraising.</td>
<td>Yes</td>
</tr>
<tr>
<td>C4</td>
<td>The importance of staff awareness and attitudes towards ICT in improving charities’ performances is partially recognised by the charities’ staff.</td>
<td>There is a need to improve charities’ staff awareness and attitudes towards using, implementing and training in ICT in order to improve charities’ performance.</td>
<td>Yes</td>
</tr>
<tr>
<td>C5</td>
<td>The importance of technical ICT is partially recognised as an important tool in speeding-up decision-making and helping to avoid fraud.</td>
<td>Charities’ authorities must provide strategic planning for introducing and implementing up-to-date ICT facilities.</td>
<td>Yes</td>
</tr>
</tbody>
</table>

Table 6.3: Confidentiality and Security System
D. Agenda for Possible Change: Cooperation and Coordination System

<table>
<thead>
<tr>
<th>Activity in conceptual model</th>
<th>Present in real world situation</th>
<th>Comments on real world situation</th>
<th>Add to agenda</th>
</tr>
</thead>
<tbody>
<tr>
<td>D1  To improve the efficiency of sharing information resources among charities</td>
<td>There is no real attempt at cooperation among charities to share information based on beneficiaries and donors.</td>
<td>Sharing information resources among charities can help in discovering any fraud among beneficiaries and in encouraging donors.</td>
<td>Yes</td>
</tr>
<tr>
<td>D2  To share costs</td>
<td>There is no plan to share costs among charities.</td>
<td>Charities can share costs for exchanging information. For example, there is no need for more than one charity to be in the area of a human catastrophe</td>
<td>Yes</td>
</tr>
<tr>
<td>D3  To exchange experience</td>
<td>There is no plan to share information experience among the charities.</td>
<td>Authorities should introduce a plan to share and exchange information.</td>
<td>Yes</td>
</tr>
<tr>
<td>D4  To increase staff awareness towards cooperation</td>
<td>There is a lack of awareness toward the importance and benefits of cooperation among the charities.</td>
<td>A better staff awareness will facilitate and enhance the cooperation process outcomes</td>
<td>Yes</td>
</tr>
<tr>
<td>D5  To avoid catastrophe, speed-up decision-making and to discover fraud</td>
<td>This is partially recognized and considered.</td>
<td>Well-established cooperation and coordination among the charities will better serve the charities.</td>
<td>Yes</td>
</tr>
</tbody>
</table>

Table 6.4: Cooperation and Coordination System Theme
### E. Agenda for Possible Change: Awareness and Attitudes System

<table>
<thead>
<tr>
<th>Activity in conceptual model</th>
<th>Present in real world situation</th>
<th>Comments on real world situation</th>
<th>Add to agenda</th>
</tr>
</thead>
<tbody>
<tr>
<td>E1 Increase awareness and improve attitudes towards ICT and communication among charities</td>
<td>There is a lack of awareness towards the importance and benefits of the role and use of ICT</td>
<td>A well-established confidentiality and security system will encourage donors to donate and beneficiaries to apply for benefit.</td>
<td>Yes</td>
</tr>
<tr>
<td>E2 Increase awareness of the role of ICT in discovering fraud</td>
<td>There is no well-established security and security systems for the charities.</td>
<td>There is a need to introduce a confidentiality and security system for the charities.</td>
<td>Yes</td>
</tr>
<tr>
<td>E3 Increase awareness of the role of ICT in avoiding human catastrophes</td>
<td>Donors are the key element of the charities' survival to ensure they reach the needy beneficiaries. Currently, there is no well-established plan to encourage donors to donate.</td>
<td>There is a need to introduce an awareness system for avoiding human catastrophes.</td>
<td>Yes</td>
</tr>
<tr>
<td>E4 Increase awareness of the role of ICT in speeding up decision-making</td>
<td>The importance of staff awareness and attitudes towards ICT in improving charities' performances is partially recognised by the charities' staff.</td>
<td>There is a need to improve charities' staff awareness and attitudes towards using, implementing and training in ICT in order to improve charities' performance.</td>
<td>Yes</td>
</tr>
<tr>
<td>E5 Increase awareness of the role of ICT in attracting donors</td>
<td>The importance of technical ICT is partially recognised as an important tool in speeding-up decision-making and helping in avoiding fraud.</td>
<td>Charities' authorities must provide strategic planning for introducing and implementing up-to-date ICT facilities.</td>
<td>Yes</td>
</tr>
</tbody>
</table>

**Table 6.5: Awareness and Attitudes System Theme**
6.7 SSM (Stage Six): Assessing the Feasibility and Desirability of Changes

In this stage it is assumed that the agenda will be debated with the actors working in the system, along with the clients, the problem-owner(s) and the problem-solver. This debate is intended to generate ideas of possible changes that are regarded as systematically desirable and culturally feasible.

Tables 6-6 to 6-10 present the main activities on the agenda for change. It also indicates whether each presented activity is systematically desirable and/or culturally feasible.

A. Communication System Theme

Following the liberation in 1991 after the Iraqi invasion, Kuwait is still in the process of re-building the State. This re-building process has given the State authorities an opportunity to modernise the State’s institutions. For example, the State has introduced electronic government. One of the sectors that has received attention is the State’s communication and the latest technologies in communication are now used and implemented in Kuwait. Therefore, the national infrastructure for communication is available to the charities to take advantage of and to use in order to improve their activities. Therefore, the activities shown in Table 6-6 are systematically and culturally feasible.

<table>
<thead>
<tr>
<th>Activity in conceptual model</th>
<th>Systemically desirable</th>
<th>Culturally feasible</th>
</tr>
</thead>
<tbody>
<tr>
<td>A1 To manage ICT communication</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>A2 To improve Internet facilities</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>A3 To create a shared website</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>A4: To increase ICT communication training</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>A5: To avoid catastrophe and speed-up decision-making</td>
<td>Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>

Table 6.6: The Communication System Theme
B. Technical System Theme

Technical systems within the charities’ activities are essential to meet the needs and satisfaction of their main actors. There is a need for a purpose-built system for the charities’ activities. The main problem is awareness of the development and/or existence of such a system. There is also a lack of awareness of the potential of such a system and its impact on the performance of the charities.

<table>
<thead>
<tr>
<th>Activity in conceptual model</th>
<th>Systemically desirable</th>
<th>Culturally feasible</th>
</tr>
</thead>
<tbody>
<tr>
<td>B1 To manage ICT</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>B2 To increase ICT facilities, hardware and software</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>B3 To improve staff ICT training</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>B4 To improve staff ICT awareness and attitudes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>B5 To optimise performance, speed-up decision-making and help in avoiding fraud</td>
<td>Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>

Table 6.7: Technical System

C. Confidentiality and Security System Theme

The confidentiality and security of donors, beneficiaries and staff records play an important role in the success and image of charities; the main reasons for this are due to religious and social factors. The charities are keen to improve their confidentiality and security system. The main problem currently is the lack of a system and the needed secure communication. The activities in Table 6.8 are systematically and culturally feasible.
### Activity in conceptual model

<table>
<thead>
<tr>
<th>Activity in conceptual model</th>
<th>Systemically desirable</th>
<th>Culturally feasible</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>C1</strong> To increase the confidentiality of the donors' and beneficiaries' details</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td><strong>C2</strong> To improve the security and confidentiality system</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td><strong>C3</strong> To encourage donors</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td><strong>C4</strong> To improve staff ICT awareness and attitudes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td><strong>C5</strong> To stop fraud and increase the number of beneficiaries</td>
<td>Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>

Table 6.8: Confidentiality and Security System

### D. Co-operation and Coordination System Theme

Although the four Kuwaiti charities have the same main aims: to help and support needs, they lack cooperation and coordination to optimise their performances and to avoid fraud. There is no practical problem which hinders such cooperation and coordination, however. The main problem is the lack of awareness and understanding of the tools needed for such cooperation. The activities indicated in Table 6.9 are systematically and culturally feasible.
<table>
<thead>
<tr>
<th>Activity in conceptual model</th>
<th>Systemically desirable</th>
<th>Culturally feasible</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>D1</strong> To improve efficiency of sharing information resources among charities</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td><strong>D2</strong> To share costs</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td><strong>D3</strong> To exchange experience</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td><strong>D4</strong> To increase staff awareness towards cooperation</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td><strong>D5</strong> To avoid catastrophe, speed-up decision-making and to discover fraud</td>
<td>Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>

Table 6.9: Co-operation and Coordination System

**E. Awareness and Attitudes System Theme**

Table 6.10 shows the awareness and attitudes system theme. Awareness and attitudes towards ICT are important elements of any successful organisation in a state where decision-making and strategic planning is usually in the hands of authorities with very little space for negotiation. Improving the awareness and attitudes of decision-makers and staff towards ICT is desirable as it helps in ICT decision-making and strategic planning.
Activity in conceptual model | Systemically desirable | Culturally feasible
--- | --- | ---
E1 | Yes | Yes
To increase awareness and improve attitudes towards ICT and communication among charities
E2 | Yes | Yes
To increase awareness of the role of ICT in discovering fraud
E3 | Yes | Yes
To increase awareness of the role of ICT in avoiding human catastrophes
E4 | Yes | Yes
To increase awareness of the role of ICT in speeding up decision-making
E5 | Yes | Yes
To increase awareness of the role of ICT attracting donors

Table 6.10: Awareness and Attitudes System

6.8 SSM (Stage Seven): Action to Improve the Problem Situation

This stage mainly involves the implementation of the changes to improve the problem situation. Some of these changes relate to what the ideal organisational structure should be and this will be discussed in this stage.

Communication System Changes

The current communication system does not meet the organisations' objectives regarding performance and does not meet the satisfaction of donors and beneficiaries. The objectives of the organisations' performance are to identify and reach the beneficiaries efficiently and effectively; to do this the following changes are needed:
1. Changes in attitudes and awareness
2. Changes in priorities
3. Changes in ICT policies and planning

Technical System Changes
There is a need to have an appropriate change in the present information and communication technology systems. These changes include the following:
1. Change in training strategies
2. Changes in ICT purchasing strategies
3. Changes in ICT investments

Cooperation and Coordination System Changes
The existing co-operation and coordination system is traditional and lacks the updated electronic techniques for more efficient co-operation and co-ordination. There is a lack of co-operation and co-ordination in identifying frauds and a lack of management style in achieving the co-operation and co-ordination tasks. This is currently based on personal contact and occasional meetings, called whenever someone felt like calling one, and often as a result of a suggestion. Therefore there is a need to change their procedures by changing this traditional contact into a well-established form of co-operation and co-ordination. This may include access to certain data and information. The awareness and attitudes among employees and managers need to be changed from seeing themselves as competitors to viewing themselves as helpers. This can be achieved by strategic training planning to identify the strengths and benefits of co-operation and co-ordination among the charities.

Confidentiality and Security System Changes
There is a need to change to improve the confidentiality of donors' and beneficiaries' details as these constitute the most important element of the charities' activities. This should include implementing well-protected database
package, increasing the awareness of employees and managers towards confidentiality, introducing a well-protected electronic system in communicating with the beneficiaries and donors, and introducing training programmes for the employees and managers.

Awareness and Attitudes System Changes
Electronic communications and hardware and software technology are improving continuously. Therefore, organisations should be aware of these developments to improve their performance and support their functions. The main problems concerning these changes are the awareness of such changes and a willingness on the part of the management and the employees to change, although they may fear change. Therefore, the awareness and attitudes systems should take in considerations these two factors. This can be achieved by regular training, seminars, and co-operation with well-advanced organisations.

Changes towards Compliance
There is a need to comply with national and international rules, guidelines and laws that charities need to work within. There is a need to adapt to ICT as a tool in helping, supporting and enhancing the compliances.

6.9 ETHICS (Stage Six) Implementing the New System
The current situation regarding the Kuwaiti charities has been described in detail and the problems have been analysed through the presentation of the applications of the SSM methodology in its logical sequence from Stage 1 to Stage 7. Now, the ETHICS methodology leads on to the implementation of the proposed system in detail, followed by an evaluation of the new system.
Definition of Prototyping
Prototypes are experimental and incomplete designs which are cheaply and quickly developed. Prototyping, which is the process of developing prototypes, is an integral part of iterative user-centred design because it enables designers to try out their ideas with users and to gather feedback (Preece, 1994).

The main purpose of prototyping is to involve the users in testing design ideas and get their feedback in the early stage of development, thus reducing the time and cost. It provides an efficient and effective way to refine and optimise interfaces through discussion, exploration, testing and iterative revision (Isensee and Rudd, 1996). Early evaluation can be based on faster and cheaper prototypes before the start of a full-scale implementation. The prototypes can be changed many times until a better understanding of the user interface design has been achieved with the joint efforts of both the designers and the users.

Prototyping Techniques
Prototyping can be divided into low-fidelity prototyping, medium-fidelity prototyping and high-fidelity prototyping. In some literature, it is only simply classified as low-fidelity prototyping (also called Lo-Fi) and high-fidelity prototyping (also called Hi-Fi), where low-fidelity prototyping is mainly about paper-based mock-up and high fidelity is mainly about computer-based simulation. The determining factor in prototype fidelity is the degree to which the prototype accurately represents the appearance and interaction of the product, not the degree to which the code and other attributes invisible to the user are accurate.

Low-fidelity prototypes are quickly constructed to depict concepts, design alternatives and screen layouts, rather than to model the user interaction with a system. Low-fidelity prototypes provide limited or no functionality. They are
intended to demonstrate the general look and feel of the interface but not the
detail of how the application operates. They are created to communicate and
exchange ideas with the users but not to serve as a basis for coding and testing.
A facilitator who knows the application thoroughly is generally needed to
demonstrate the prototype to the users (Isensee and Rudd, 1996).

In contrast, high-fidelity prototypes are fully interactive, simulating much of the
functionality in the final product. Users can operate on the prototype or even
perform some real tasks with it. High-fidelity prototypes are not as quick and easy
to create as low-fidelity prototypes but they faithfully represent the interface to be
implemented in the product. Medium-fidelity prototypes partially simulate the
system's interaction and functionality. This research study considered a medium-
functioned prototype as a medium-fidelity web prototype.

**Reasons for Developing this Prototype**

This prototype is a web-based skeleton, which was developed and designed to
provide a practical solution to the problem situation. This prototype system aims
to meet all the needs of the Kuwaiti charity organisations, their beneficiaries and
donors.

Due to the lack of time and resources, it was not the intention of the researcher
to develop the whole web site prototype with full dynamic and active functions
since these different functions need expertise in different areas which are outside
the scope of this research. Instead, the researcher is presenting the design of the
prototype and leaving filling the block to experts in the relevant areas. However,
for the purpose of presentation and evaluation, the researcher included in the
web prototype all the necessary and relevant information collected during his
field visit to the State of Kuwait.
Objectives of this Prototype

Every prototype that is well designed must have one or more objectives. This prototype is engaged in main and additional objectives, the main objectives focusing on the following:

- To improve and strengthen communications among Kuwaiti charities.
- To improve ICT facilities such as hardware and software, and to improve staff training.
- To improve confidentiality for both beneficiaries and donors as well as the security of their information.
- To improve awareness and attitudes towards ICT.
- To avoid any fraud on receiving aid.

The additional objectives of this prototype are:

- Setting up national and international forums to address key concerns.
- Providing volunteer recruitment opportunities for non-profits through posting and exchanging personal skills.
- Providing a variety of links to relevant charitable resources and services.
- Keeping non-profit professionals up-to-date with relevant information.

Audience of the Prototype

It is essential to be able to identify the audience for whom the web-based prototype is developed (Lynch and Horton, 2001). Due to security requests by the respondents, this proposed prototype system is a private accessed system. Consequently, the primary functions of this prototype are restricted to the main
target audiences, which are non-profits' staff and authorities, donors and beneficiaries.

However, this prototype system is also intended to allow access to public audiences such as academics and researchers, government auditors, and international non-profit institutions. In addition, this prototype is intended for English and Arabic language speaking audiences.

Contents and Features of the Prototype
The contents of this prototype have been included to meet the needs of the targeted audiences mentioned above. These contents are all displayed on the first page when opening the site (see Figure 6.12 in English and Figure 6.13 in Arabic). In the following, the contents of the prototype are explored:

- Main Secured Database Applications
- Discussion Group
- Volunteer Directory
- News Letter
- Event Calendar
- Links
- Online Training Courses
- Latest News
- Questions and Answers
- SMS Sign-up
- Research and Study Centre
- Online Donations

The site starts with a welcome message at the top-middle of the first page, which identifies the purpose of the site and its intended users.
Chapter Six System Intervention

Welcome to the First Network of Kuwaiti Charity Organizations

The Kuwait Aid Network is the first charity web portal which links all charity organizations in the State of Kuwait.

Figure 6.12: The Appearance of the Home Page in English

الشبكة الخيرية الكويتية

The Kuwait Aid Network is the first charity web portal which links all charity organizations in the State of Kuwait.

Figure 6.13: The Appearance of the Home Page in Arabic
Main Secured Database Applications

This feature includes the main database applications. These applications are organised for easy access by authorised users only. The applications include the following:

- Beneficiary data
- Local project data
- External project data
- Natural crises

![Lock Icon]

For staff authorities please
Enter your Extranet account

Figure 6.14: The Icon for the Main Secured Database Applications

The lock icon (Figure 6.14) was chosen to inform the users that the coming applications are confidential and access is available to privileged users only. Every one of these authorised users has their own unique username and passwords assigned from their authorities.

Discussion Group

The purpose of this discussion group feature is to establish a forum of communication as a channel for exchanging knowledge, information and experiences, and adopting it as a communication system that is open at any time and in any place. The interface of this feature is displayed in Figure 6.15 and enables charities' staff members to share information and experiences.
This discussion forum gives the members of charities the facility to start discussion easily with other colleagues among the charities. Users will be able to send messages to the entire group of charity members by typing only one email address. This feature will allow all members to communicate quickly, directly, cheaply and easily with other colleagues all over the world.

Volunteer Directory

This prototype system encourages public individuals to volunteer by providing the service of accessing the site and filing out an electronic volunteer form (Figure 6.15: Contents of the Discussion Forum Screen).
6.15). An individual can indicate what help he/she can offer or what services he or she can provide. Individuals are able to show their special skills as they can be greatly needed by the charities that are seeking volunteers. After the user posts his/her profile, the data will be saved in a special database where the charities' authorities match their needs with volunteers' skills.

**Newsletter**

This newsletter feature is very beneficial to non-profit organisations. This is because it is flexible, cost-effective, target-specific, and highly suitable for explaining complex issues or distributing large amounts of information to groups or individuals in an interesting and compact format (Lake, 1996).

The newsletter feature is a free subscription system which is available to any individuals to join. This activity is much more profitable than pursuing new donors. Newsletters can be issued for internal (staff) members and external donors or beneficiaries.

Charity organisations can benefit from this feature by keeping donors posted about the activities they are taking up. This will increase the credibility of the organisations. In addition, it can run promotions to existing donors and send announcements of new philanthropic projects of likely interested to those on the existing list of donors. Since these customers have already registered, they are more likely to make use of the promotions than new customers.

**Event Calendar**

The event calendar feature is a simple all-day appointment and event manager that makes managing all-day events and appointments very easy. The event calendar is suitable for tracking events such as training, annual or monthly meetings, anniversaries, holidays, festivals, important dates and vacations.
Multiple views allow the user to view entire list of events for all profiles to one type of event for a single profile, weekly or monthly (see figure 6.16). The event calendar feature can manage events for multiple people.

![Calendar](image)

**Figure 6.16: The Appearance of the Event Calendar**

**Links**

This feature provides users with links to a variety of Arabic and English charitable and non-profit websites that are important to them. It is divided into scientific centres and philanthropic institutions.

**Online Training Courses**

In order to improve the charities' performance this prototype system includes online training courses. These courses are offered via the Internet without any extra applications or software; they only require an Internet browser. These online courses are considered as one type of long distance learning method and are suitable for non-profit organisations since they are cheaper than instructor-
led courses. A trainee can learn at his/her own pace and is in control of where and when to learn with unlimited access twenty-four hours a day.

**Latest News**

The Latest News feature is a screen of news designed to inform all visitors of any updated and relevant information throughout the prototype site. This feature is provided in order to keep non-profit professionals up-to-date with information.

**SMS Sign-up**

This service intends to ask any user of this system to type in his/her mobile phone number to be alerted in the event of any urgent catastrophes by having an electronic message sent to his/her mobile handset (see Figure 6.17). This feature is designed especially to meet the needs of the charities' authorities and decision makers since these people are the first who respond to victims of any catastrophe. Delays in providing help and support for the needy or victims might lead to worse situations.

![Figure 6.17: The Appearance of the SMS Sign-up Feature](image-url)
This service was developed and designed especially for the decision-makers of all charity organisations in Kuwait since the charities' authorities are the most important group to be informed of any catastrophes that have occurred in the world, such as earthquake, flood or any other natural disaster. These authorities have the right to act on these news alerts by making quick decisions concerning relief aid to the needy.

**Research and Study Centre**
The button for the Research and Study Centre in this prototype is linked to the largest electronic research centre in Kuwait which presents different and wide-ranging subjects concerning charitable issues. This research centre is provided free of charge and can be accessed from Zakat House via its web server: http://info.zakathouse.org.kw.

Visitors to this centre are allowed to access and search for a particular subject from variety of sources, such as conferences, seminars and workshops. In addition, they are able to search the database through a keyword option.

**Online Donations**
The Online Donations feature has many advantages for the charities and for donors as well. One of these advantages is to make funds available quickly and to eliminate paperwork. When a donation is made online, charities do not wonder whether the cheque is in the post, and do not need to send pledge reminders to the donor, type the donation information into the database, or send the paperwork to the bank. Most important, online fundraising is cheap and provides a high rate of return.
6.10 ETHICS (Stage Seven): System Evaluation

Stage Seven of ETHICS evaluates the proposed prototype, the Information Exchange System amongst Kuwaiti Charity Organisations (IESKCO). This stage in ETHICS in turn ensures that this system meets its objectives. The ETHICS methodology has three objectives and one of these is to ensure that new systems are acceptable to users. Evaluation also provides an opportunity to improve on it. Preece (1994) defined evaluation by stating that:

'Evaluation is concerned with gathering data about the usability of a design or product by a specified group of users for a particular activity within a specified environment or work context'

Evaluation uses a range of methods to come to a balanced judgment concerning a system in its current state.

6.10.1 Evaluation Techniques

Evaluation can be conducted in either of two ways or techniques (Dix et al., 2003):

- Empirical evaluation: this method involves a sample of users who evaluate the usability of a prototype and find flaws in its design.

- Analytical evaluation: such methods involve the prototype designer or an interface expert who tries to anticipate how users will behave.

The empirical evaluation method was chosen to evaluate the IESKCO prototype. The reason behind this choice is that this method involves actual users and this prototype was created in the first place to meet their needs so the results generated are representative of how the prototype will function in practice. It was decided to prepare a written questionnaire for the end users to evaluate the system. Preece (1994) noted that filling in long and complicated questionnaires is
prohibitive to most evaluators so the majority of the questions used a rating scale to provide quantitative results and also to cut the completion time. Preece (1994) also suggested that open questions can sometimes generate interesting responses. Therefore, this questionnaire was designed to contain open and closed ended questions in order to generate qualitative and quantitative results.

In order to gain suggestions and to modify an early prototype design process, it was decided to conduct a mock-up evaluation session. The initial draft of the questionnaire was used in a mock session with three Kuwaiti PhD researchers at Loughborough University to act as participants. Responses from the participants lead to some modifications in the script. After the remarks and comments of the participants involved, the script was revised and emailed in its final form (see Appendix J).

The questionnaire was electronically mailed to one hundred real end users at charity organisations in the State of Kuwait. These questionnaires were sent with an initial letter to inform them of the process, asking for their participation in the evaluation survey. The second week, a reminder letter was sent to the sample users. If no reply had been received by the third week, overseas phone calls were made to try to encourage participation. The response rate for the questionnaire was 83%. The number of responses was high and it was possible to draw reliable conclusions from the results.

The questionnaire was created containing a series of questions to discover three types of information: prototype contents, general user reaction, and comments and suggestions. The prototype contents part included database applications, discussion forum, online training courses, events calendar, newsletter, what's new, questions and answers, SMS sign-up, research and study centre, volunteer directory, web links, online donations, and browsing in the English and Arabic languages. The general user reaction part included the users' feelings regarding
their overall satisfaction toward the system. In addition, participants were asked whether they would recommend others to visit the system's website and whether or not this system was useful for them. The final part, the comments and suggestions part, asked the participants to add any comments or suggestions in order to improve the proposed prototype.

6.10.2 Evaluation Results

The results of the questionnaire were studied and analysed, the conclusions of which were as follows:

Part One: Prototype Contents

This part consisted of thirteen questions and provided three choices of answer (agree, undecided or disagree).

<table>
<thead>
<tr>
<th>Q</th>
<th>Do you agree that the following functions meet your needs?</th>
<th>Agree (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Database applications</td>
<td>100%</td>
</tr>
<tr>
<td>2</td>
<td>Discussion forum</td>
<td>100%</td>
</tr>
<tr>
<td>3</td>
<td>Online training courses</td>
<td>100%</td>
</tr>
<tr>
<td>4</td>
<td>Events calendar</td>
<td>99%</td>
</tr>
<tr>
<td>5</td>
<td>Newsletter</td>
<td>100%</td>
</tr>
<tr>
<td>6</td>
<td>What's new</td>
<td>100%</td>
</tr>
<tr>
<td>7</td>
<td>Questions and answers</td>
<td>100%</td>
</tr>
<tr>
<td>8</td>
<td>SMS sign-up</td>
<td>100%</td>
</tr>
<tr>
<td>9</td>
<td>Research and study centre</td>
<td>100%</td>
</tr>
<tr>
<td>10</td>
<td>Volunteer directory</td>
<td>99%</td>
</tr>
<tr>
<td>11</td>
<td>Web links</td>
<td>99%</td>
</tr>
<tr>
<td>12</td>
<td>Online donations</td>
<td>100%</td>
</tr>
<tr>
<td>13</td>
<td>Browsing in English and Arabic</td>
<td>100%</td>
</tr>
</tbody>
</table>

Table 6.11: Summary of Prototype Contents Evaluation Results
Table 6.11 shows the opinions of the charities' staff towards the functions of the prototype website. All the respondents agreed that the functions of the prototype meet their needs and satisfaction. Nevertheless, the results indicated some minor improvements and the suggestions about these improvements are summarised below as follows:

- **Events Calendar**: A participant commented that this feature is a brilliant idea but to implement it in practice is not easy due to a conflict with their current calendar.
- **Research and Study Centre**: it was suggested that this was renamed as the Philanthropic Encyclopaedia.
- **Volunteer Directory**: a participant indicated that having a volunteer and a government employee work at the same place assigning the same work tasks might be a critical situation because of financial issues.
- **Web Links**: suggestions were made to include the web addresses of other charity organisations.

**Part Two: General User Reaction**

This part of the questionnaire was intended to discover whether or not this prototype provides useful contents, and whether these contents were sufficient accurate, comprehensive and up-to-date.

The overall reaction of the users confirmed that they were very satisfied, as the results of the evaluation questionnaire show. The users were willing to recommend others to visit the system's website. Additionally, this part of the questionnaire indicated that the users found this system useful.
Part Three: Comments and Suggestions
This part of the questionnaire showed that this prototype system met the users’ needs and requirements. All the comments were positive and many helpful comments were made, such as:

- Provide a virtual video conferencing facility,
- Include chat in electronic rooms on relevant topics,
- Provide a greater selection of languages for those who speak neither English or Arabic,
- Include a historical brief of philanthropic work in Kuwait, and,
- Include video clips of projects to encourage donors to donate.

The results of this evaluation indicated that this prototype system satisfies the end users’ objectives, though minor improvements could be made.

6.11 Concluding Remarks
This chapter has explored thoroughly the applications of SSM methodology in order to examine all the data generated from the fieldwork survey, which included questionnaires, interviews, case studies, focus group, and document analysis.

SSM was then enhanced by adopting ETHICS methodology in order to ensure that the proposed new system met its objectives. The final part of ETHICS (Stages 6 and 7) outlined the steps that have been taken to implement and evaluate a prototype of the Information Exchange System amongst Kuwaiti Charity Organisations (IESKCO).

The aim of this system was to meet the needs of the Kuwaiti charitable organisations, their beneficiaries and donors. The design of the system was based on the results of a thorough users’ requirements analysis.
An empirical evaluation was undertaken by end users in Kuwait via an electronic mail questionnaire. The results of the survey evaluation were analysed and showed that the prototype system was satisfactory in meeting their requirements and needs.
CHAPTER SEVEN

Discussion

7.1 Introduction

Donating to charities is an important part of Muslim practice. Individual Muslims are obliged to pay part of their income, Zakat, to charity to fulfil their religious beliefs. It is not surprising that Islam, as well as other religions, encourages individuals to support the poor and needy, especially in the case of disasters. Kuwait is a conservative, small and rich country and Islam plays an important role in the life of society, as well as in the practices of individuals. The vast majority of Kuwaiti citizens, therefore, are obliged to pay their Zakat, the amount of which depends on their income. Administered charities are not new in Muslim countries; these started in the earliest days of Islam and have continued throughout history. Until recently, the management of charities has been part of the religious institutes and the mosques, collected by the head of the mosques, the Imam, and distributed to the needy members of the population.
The charities in Kuwait are expanding due to sharp changes in the State's economy which is reflected in the increase in the charities' income. This has led to pressure on the charities to improve their performance and show their activities more openly, as they have become more independent from the religious institutes. Previously, it was difficult to challenge, check and inspect the charities' performance. ICT has become part of our daily lives and has been used widely in various aspects of administration and management.

This chapter presents key elements that have been discussed in this research, highlighting the contributions of the variety of data collection methods, which include questionnaires, interviews, case studies and a focus group. For ease of discussion, this chapter is divided into five sections which reflect issues that have been discussed in this research.

Section 7.2 discusses the main findings of the research. These include the impact of Information and Communication Technologies in Kuwaiti charity organisations. Discussion on the role of ICT in charities' internal and external communications can be found in Section 7.3. Section 7.4 points out the cooperation and coordination among Kuwaiti charities while Section 7.5 examines the need for change. Both specific and general conclusions of this study follow in Chapter Eight.

Figure 7.1 shows the discussion elements. It reflects the main objectives of the study and outlines the need for change in the charity organisations to improve their performance efficiency and effectiveness. It also shows the pathways that lead to drawing the main conclusions of the research, together with recommendations and suggestions.
**Impact of ICT on**

(Objectives 1 & 2)

- Charities' Systems
- Charities' Communication
- Charities' Donors
- Charities' Beneficiaries
- National and International Compliance
- Cooperation and Coordination
- Decision Making
- Attitudes & Awareness

**Impact of ICT on**

(Objective 3)

Need for Change

Conclusions, Recommendations and Suggestions (Chapter 8)

Figure 7.1: Discussion Elements
7.2 Impact of ICT on the Charity System

One of the main objectives of this research is to investigate the impact and use of ICT in Kuwaiti charities, as it is evident from the problem content system in the SSM stages that the charities have systemic problems. These include national and international pressures, fraud and the security of the systems. This section discusses the impact of ICT on the above problems.

The charities today have pressure from various sections of their interested parties, both internal and external. Internal parties consist of the charities' managements which demand a high positive image of the charities within society while external parties include national and international authorities. The charities are also facing pressures from individual donors and beneficiaries.

The first, most pressing need is to stop fraud within the charities, which mainly stems from bogus beneficiaries. The second pressure emanates from the donors. The vast majority of both donors and beneficiaries demand a high level of confidentiality regarding their personal details. However, the charities' current systems are based mainly on a manual system and primitive information systems developed in-house. The manual activities include dealing with application forms, storing information, and collecting and checking details. This system is failing to identify or investigate fraud when fraud is costing the charities dearly and threatening their image within society. There is a need for charities to take serious action to stop such fraud before donors lose trust in the charities and move elsewhere to donate. This is happening with some donors already; they donate directly to people who they believe are needy. This view is shared with Zanck who stated that:

*It's time for action! Non profit organisations must take action to prevent fraud and abuse, before the public trust is lost.*

(Zanck, p. xvii)
Chapter Seven Discussion

ICT and Charity Fraud
One of the main findings regarding problems within the current system is fraud. This section discusses this and the impact of ICT on this issue. Fraud committed against non-profit organisations can be classified into two broad categories, based on the perpetrator: internal fraud and external fraud. Internal fraud is committed by insiders, such as employees, while external fraud is committed by outsiders.

One of the major problems facing the Kuwaiti charities is beneficiary fraud. The most common fraud in the Kuwaiti charities occurs at any time when an applicant intentionally acts to receive benefits from the charities by providing false details and/or omitting critical facts about him or herself.

External frauds are the common kind experienced by the Kuwaiti charities, as identified by the fieldwork analysis of the SSIVI and this is one of the greatest problems facing the charities. Most external frauds are committed by:

- **Misrepresentation of facts by the charities' beneficiaries**
  One of the most common cases: an applicant applies based on his/her financial situation due to social problems. For example, an applicant provides information that she is divorced with four children to care for without any form of support. The current charities' system and their communications cannot check her claim.

- **Omission of critical facts by the charities' beneficiaries**
  The charities experience many applications where beneficiaries deliberately omit a critical fact. This includes the fact that beneficiaries have received benefits from other charities. This has happened when an applicant to the Zakat house charity stated that he had not received any benefits from other charities. By
chance, the charity discovered that the beneficiary had received a benefit from the Turath charity.

There is no way to detect and check on international beneficiaries; most of these decisions are based purely on information provided by the beneficiary him/herself. The charities' current database system and communication with other charities are failing to detect such fraud so consequently frauds have a negative impact on the charities, including the bad image that the charity is given. This may lead to a loss of confidence on the part of donors to the charity. It also costs the charities a lot of money and effort so the charities need to take action to improve this situation.

Beneficiaries' fraud is our main concern. I have not heard of or seen a staff fraud during my 15 years experience with the charity. It may happen but I like to say we need to do something about beneficiaries fraud.

(Interviewee B)

The current system is failing to identify bogus applicants. The majority of decisions are based on good faith but the problem with good faith and deeds is that they have led to many beneficiaries applying to the charities and taking advantage of the system used them. There is no way of identifying bogus beneficiaries unless information is obtained from a third party, individual or organisation.

One-half of the frauds studied were initially detected by tips from employees or external parties with whom the organisation did business, if there is a lesson to be learned from these statistics, it's that every organisation should establish and publicise a variety of methods by which employees and external parties can communicate suspected fraud and abuse or other forms of dissatisfaction.

(Zanck, p. 261)
The charities' good faith and kind deeds have been abused according to one of the interviewees who stated that the charities need to introduce a more reliable system.

Our good faith and trust have been taken advantage of by some bogus beneficiaries. Our current system is failing to identify them. We need a system that helps in identifying and investigating bogus beneficiaries.

(Interviewee C)

Adopting a system based on ICT provides an easy and practical method of providing a database and communication that will have an important part to play in detecting frauds at an early stage of a beneficiary's application. ICT provides tools, hardware and software that can search and check applicant details, previous application records and can then share the information, promptly and accurately, with other national and international charities. This will minimise the charities' losses and improve their image in society, which is crucial for the charities' survival.

The Kuwaiti charities need to implement a system and a security plan to reduce the frauds and abuse.

Regardless of how simple or complex an organisation’s information technology systems are, a security plan is an important element of controlling fraud and abuse.

(Zanck, p. 253)

Impact of ICT on Access and Security of the Systems

One of the main problems of the current system used by the charities is accessing the system. Current access is based on physical access to records and information as the majority of the recording and communication is traditional. The other problem is the fact that there is no clear policy and guidelines on data and information control. The Kuwaiti charities should apply
their access control policies to both the external users, namely national and international authorities; and internal users, that is, charity staff. This can be achieved by adopting two levels of control. The first level of control is to distinguish between authorised and unauthorized system users. This will help to stop any unauthorised user using and abusing the system. The second is to distinguish between the levels of data a particular authorised user may access. Access should be allowed only to authorised staff, staff who work in the specified area. Staff working with donors should not have access to the beneficiaries' personal records. Reducing the number of authorisations for access will increase confidentiality in the handling of data.

\[\text{Access to data should be restricted in a manner that permits each user to carry out only those functions for which that user is authorised.} \]
\[\text{(Zanck, p. 254)}\]

The charities' management should commit themselves to avoid the embarrassment, difficulties and damage to their reputation that can occur if the confidential details of donors or beneficiaries are lost or disclosed through their systems. At this point in time, there is no national legislation concerning this matter.

Kuwaiti charities handle important and confidential information about individuals with whom the charities have some sort of relationship. Charities retain confidential information regarding their donors.

\[\text{While it is necessary for nonprofit organisations to receive, process, and store a lot of important information about various people, how the organisation protects this information from abuse has emerged as a critical issue for nonprofits.}\]
\[\text{(Zanck, p. 250)}\]

ICT can provide an excellent control for access authorisation by establishing user ID and passwords. This also will increase the security of the system by blocking any unauthorised person from accessing the system. It also
provides the communication needed for accessing certain information from various terminals to the authorities' subjects.

7.3 Impact of ICT on Charities’ Communication System

Communication with Donors

It is possible to define charity as the link between donors and beneficiaries to facilitate financial transactions and information exchange. It is the controller element of a control system, see figure 7.2. Therefore, the charities need to adopt and implement a system that serves this link efficiently and effectively. This includes channels for fast information exchange and fast financial transactions.

![Figure 7.2: Charity as a System Controller](image)

Effective communication is needed, especially in the event of natural catastrophes and disasters as donors need to know the accurate details of the beneficiaries in order to justify their donations.

The Kuwaiti charities rely on donors. Their donations are based on religion, humanity and the relation of donors to the beneficiary. Therefore, the charities' income depends highly on donors though this will depend on the number of donors and the amount of the donation. Therefore, the main purpose of charities should be to reach the donors and provide them with information, see figure 7.3, at the right time as there is no point in reaching donors after a catastrophic has ended. The key issue is reaching donors with the right information at the right time.
The sharp changes in ICT have led to the development of communications hardware and software with the merit that they come at a very reasonable price. ICT has become part of all levels of the education system in Kuwait starting from primary schools. This is an indication that ICT education is a target of the Kuwaiti authorities as they are planning to install an electronic government system. The main problem of the Kuwaiti institutes and organisations are that they are still not using ICT communication facilities efficiently and effectively. They are still relying on traditional communication methods and the popular use of web sites by Kuwaitis.

As previously mentioned, donors are the main targets of charities and represent the key element of their success. Charities are the link between the donors and beneficiaries; they manage donors' resources and the important function of their work is to transfer these resources to the beneficiaries. One of the main aims of the charities is to hold onto their current donors and to seek new donors. The key issue of keeping existing donors and recruiting new ones depends, to a large extent, on the information received and effective communication among the donors and the charities. The current communication system used by the Kuwaiti charities is failing to
reach potential donors nationally. It seems that this problem is not faced by the Kuwaiti charities only but is felt by other charities.

*Non-profits have been struggling to keep their established donors while pursuing new ones, but the costs of that pursuit using traditional fundraising channels are significant*

*(Boeder, 2003; p. 16)*

There is a large number of potential donors within society that have not been reached. The main reason for this is the lack of information received by the donors. This was stated by one of the interviewees:

*We failed to reach many Kuwaiti donors due to our current communication systems. We need better communication to reach our donors effectively.*

*(Interviewee A)*

ICT communication methods can help the charities to reach new potential donors by using ICT through the Internet, as an example. With the expansion of Internet use in Kuwait and worldwide, there are now more people coming online.

The Internet is used widely as a tool for internal and external communication. The Kuwaiti charities do not use the Internet as a tool for communication but are still using traditional paper, FAX and telephone methods. There is a lack of any research on the Kuwaiti charities in this area. This is true in many charities worldwide.

*Very little empirical material exists that assesses the actual presence and performance of nonprofit organization on the Internet.*

*(Boeder, 2003; p. 15)*
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*Very little empirical material exists that assesses the actual presence and performance of nonprofit organization on the Internet.*  

*(Boeder, 2003; p. 15)*
As commercial and public sectors move into the electronic age, it is crucial that the non-profit sector keeps pace.

(Pharoah and Welchman, 1997: p. 21CAF)

Unsurprisingly, paper-based communication is dominant in internal and external communications within Kuwait. Paper-based communication includes letters, leaflets and advertisements materials. It is also important to indicate that the paper-based communication systems involve various signatures and approvals. This traditional method is inconvenient, time consuming and costly. Therefore, it is not surprising that charities consider cost as an important factor in their decision when they choose their external communication.

The vast majority of respondents (93%) said that cost was a factor in their decision about what communication method to use to approach their donors.

(Pharoah and Welchman, 1997)

Not only does the Internet offer an effective platform for communication and fundraising, it also offers a way of informing the public about their missions.

Saxton (2000) was the first to explore how non-profit organisations were applying customer relationship management strategies on their websites from a marketing perspective. The result of her research confirms that a vast majority of surveyed non-profit organisations have not yet implemented customer relationship management strategies.
7.4 Impact of ICT on Donors' Behaviour

Information on non-profit performances is becoming increasingly important for individual society and corporate sponsors.

*Donors evaluate and compare charities, monitor their performance, and generally require more effective operating practices. They demand greater accountability in order to make a balanced decision as to where their money should go, and to be able to give with greater confidence*  
(Boeder, 2003; p. 35)

Donors are the essential subjects of the charities and success of the charities depends highly on their donations. The number of donors and the amount of their donations are the key elements of the charities' success as organisations that reach the needy beneficiaries and cover their costs.

There are three main factors that contribute in driving Kuwaiti donors to donate to charities. These factors include (see Figure 7.4):

- Religion
- Humanity
- Social aspects

The religious factor: one of the Islamic pillars is the 'Zakat'. An individual pays a percentage of his/her income to the needy. Islam also encourages donations outside the 'Zakat pillar'. Such donations are highly recognised by Almighty God on the day of judgement. One of the key issues of donation according to Islam is that the donation should be carried out without any publicity: donation should be made for the sake of Almighty God, not for the sake of publicity.
Therefore, it is not surprising that charities are seeking to improve the confidentiality of their records and communication systems. The majority of Kenyans are large number of individual and professional donors and are influenced by donors' needs and expectations. To handle their records and communicate, there are several solutions to introducing effective ICT systems. The system is successful and practical, and therein lies the main advantage. Donors' requirements usually focus on fast, convenient channels and confidentiality of their records. The system is intended to ensure their quick response to adopt ICT to communicate and maintain confidentiality. Figure 7.4: Charity Donor Model
Therefore, it is not surprising or unusual for donors of this type to insist on confidentiality of their records and/or the record of any donation.

The majority of Kuwaitis are Muslims who actively practise Islam. There is a large number of individual and groups who are potential donors to the charities and are influenced by a religious drive to fulfil their religion practices and commitment to their community.

The charities are obliged to keep donor records confidential to meet the donors' needs and satisfaction. This needs an effective and efficient system to handle their records and communications and this can be achieved by introducing effective ICT systems.

The other type of donation is the humanity-based donation. On many occasions, especially in natural disasters and catastrophic events, individuals and groups donate in response to these events. The human nature of the individual will be the main driver of this type of donation. This type of donation usually occurs for a short period of time when emotion is high. The donors usually look for fast, convenient channels in order to donate. From the charities' point of view, in this type of event, they need a quick response from donors to ensure their quick response to reach the needy. The charities need to adopt ICT to communicate and manage effectively in order to meet the donors' and beneficiaries' needs.
7.5 Impact of ICT on Beneficiaries

One of the main duties of the charity is to provide donations to beneficiaries. Therefore, the beneficiary is an important subject for the charities' activities. The main issues of the relationships between the charities and the beneficiaries are: identifying the beneficiary, effective communication, quick decision-making, social factors, and confidentiality of the records.

The Kuwaiti charities are still using traditional methods in communicating with their beneficiaries. They are still using letters, faxes and telephones as means of communication. Individual beneficiaries need to come in person to complete application forms and submit any further necessary details. This is a problem to many beneficiaries from a social point of view. Individual Kuwaiti beneficiaries do want to be seen as in need of charity. The beneficiaries need easy communication as, on many occasions, it is difficult for the beneficiaries to come in person for various reasons, particularly international beneficiaries.

The other important need of the beneficiary is the confidentiality of their records due to social factors. Beneficiaries also require a convenient method of receiving their benefit, i.e. financial transactions. The current method is based on receiving a cheque and cash from a bank. The other stress for the beneficiaries is the slow response; it takes a long time for decisions to be made about their applications. The charities need to adopt ICT systems in order to meet the beneficiaries' needs, and to ease and accelerate the flows of information between the charity and the beneficiary. This may include online application forms and interviews through video conferencing, for example.

Electronic networks dramatically ease and accelerate the flows of information among participants in a market.

(Blau, 2001; p. 8)
Figure 7.5 shows the charity beneficiaries model. The model identifies the donors' requirements, needs. This includes easy communication, confidentiality of the records, and easy transactions. These requirements contribute toward charities fundraising.

The model also reveals the charity system needs. This includes recording system, information system, and communication system. Adopting the model design in figure 7.5 aims to improve charity performance and meet beneficiaries' needs.

**Figure 7.5: Charity Beneficiary Model**
7.6 Impact of ICT on Charities' Compliance

Since the disaster of September 11th 2003, the charities' activities worldwide in general, and in the Middle East in particular, have been under pressure from national and international authorities to ensure that donations reach deserving beneficiaries and that there is no misuse of donated funds.

There is considerable pressure on charities to provide evidence and records of their activities. Pressures on the charities come in statutory and regulatory forms. There are expected and unexpected national and international inspections of the charities' activities. These pressures demand details of charities' financial transactions, easy access to their activities, and access to donors' and beneficiaries' records. These pressures exist in most of the countries that are supported by regulatory directives.

We have regular inspections from the State authorities. They are demanding details of our projects and records of our donors and beneficiaries.

(Interviewee D)

Therefore, charities must comply to ensure they are meeting the regulatory requirements. The Kuwaiti charities are under continuous pressure from national and international authorities to provide evidence of their activities.

After the 11th of September disaster in the USA, we had inspections from international bodies. They were demanding details of our past and current funded projects, records of our donors and beneficiaries.

(Interviewee B)

Charities are also facing pressure from their donors and beneficiaries for their right to keep their personal details confidential (see Figure 7.6). This figure shows four main sources of pressure: the international authorities, national
authorities, donors and beneficiaries. The international authorities exert pressure on the national authorities, i.e. the Kuwaiti government and the charities' donors. The main drive for this pressure is that the donations go to deserving beneficiaries and that fraud is avoided. The donors' pressure is exerted due to two main factors: the religious factor (i.e. the donor should not get any publicity for his/her donation) and from national and international authorities (that donations are not misused). Beneficiaries exert pressure because of the social factor: it is embarrassing to live on charity.

The literature survey and SSM intervention identified that there is a lack of a recording and accessing system that meets the authorities' requirements. The system needs to be easy to access by the national and international inspection bodies and easy to navigate through (see Figure 7.7). The charities need to comply with the authorities by providing evidence of...
compliance. The key issue of compliance is the transaction records. Therefore, the charities need to be very careful about handling the records of donors and beneficiaries. The charities authorities need to establish a recording system that is effective and efficient in providing the information to satisfy the compliance issue. The current traditional systems: paper work and the primitive use of in-house programmes in some of the charities, are failing to cope with these pressures. The current systems take time and are costly to prove compliance; they need the personal attendance of inspectors as it is difficult to navigate through the records.

ICT has an impact on coping with the pressures and stresses that charities face through inspection. Compatible, purpose-developed databases, accessible through network communication, will help to validate compliance efficiently and effectively.

Figure 7.7 shows the charities' compliance model. The model shows the various pressures on the charities: these include national pressure in the form of the Kuwaiti government, namely the Ministry of Al-Awkaf, a ministry responsible for managing and supervising religious activities in the State. The charities also need to cope with international pressures to ensure their activities come within their rules and that donations reach the deserving beneficiaries. To comply with these pressures, charities need to provide evidence of their financial transactions, and the records of their donors and beneficiaries. This can be achieved by adopting a database recording system and ICT based communication systems. These systems should be easily accessible, and easy to monitor and navigate, (see Figure 7.7).
Charities' Compliance Model

Figure 7.7: Charities' Compliance Model
7.7 Co-operation and Collaboration among Kuwaiti Charities

One of the problem themes in the SSM was related to the co-operation and collaboration among the Kuwaiti charities and international charities. There is no form of official links to share and exchange information to serve their interests and benefits.

The current co-operation system lacks information exchange and the sharing of information in international projects, such as those which respond to catastrophes and natural disasters. The charities are working separately in such events with their own information and resources. On many occasions, the information either is not enough, exaggerated or is incorrect. Therefore, co-operation could contribute positively to the richness of information and could help in making the right decisions.

In some international projects, charities have found themselves duplicating resources, efforts and costs. This could actually reduce cooperation and information among the charities through sharing and exchanging information in international projects. The other important point is cooperation with international charities as they share the same mission and possibly serve the same beneficiary in the case of international disasters and natural catastrophes.

In recent natural disasters, namely the tsunami disaster in 2004, the charities worked separately without any serious coordination with other charities; the same applied to the support of beneficiaries in neighbouring Iraq. Therefore, there is a need for co-operation among the national and international charities to contribute effectively to help the beneficiaries and to avoid duplication of resources, effort and costs.

_Three charities delivered tents to a project in Iraq._

_At arrival, the number of tents exceeded the_
needed number while there were severe shortages of blankets.  

(Interviewee A)

The fieldwork analysis indicated that the charities are happy to cooperate and coordinate the majority of their activities, apart from sharing information about their donors. One reason is the fact the donors are the main source of income to the charity and, second, donors request to keep their records confidential. However, charities need to cooperate in and coordinate other activities. It is essential for charities to understand they are not competitors in a profitable business. They are competing to serve their community in particular and humanity in general. Charities need to establish co-operation with their local charities, regional charities (especially in the Gulf States), and international charities.

The first step is to establish effective and efficient cooperation among the four Kuwaiti charities. This can be achieved by establishing a set of policies and procedures for cooperation. This can be done by establishing a cooperation committee to discuss and establish the policies and procedures. Using ICT can play an important part in facilitating and enhancing the building of effective cooperation and coordination. ICT can be used to share and exchange the information that needs to be shared, leaving the confidential information for authorised staff only. ICT will speed up the sharing and exchange of information compared with the current traditional system that has been used to keep contact among the charities. This includes the use of letters, fax and telephones.

While there is increasing evidence indicating that technology can have a significant positive impact on any non-profit’s ability to achieve its mission, there is very little measurable data supporting this assumption.

Figure 7.8 indicates the cooperation and coordination model for the Kuwaiti charities. The four charities need close links among themselves and the heart
of this link should be establishing a set of policies, procedures and guidelines agreed by all the charities. This can be achieved by establishing a committee consisting of members from each charity. The core of the cooperation and coordination should be easy communication, quick response to each other's requests and easy access to certain information and data that can be used to benefit other charities. These needs can be achieved by adopting compatible recording systems, a purpose-developed database recording system, an ICT based communication system, and information exchange systems. These systems help in stopping fraud by preventing beneficiaries from applying to more than one charity as an example. The systems will improve charities' performance by sharing resources, especially in international projects and by providing better services to beneficiaries.
Figure 7.8: Cooperation and Coordination Model
7.8 Authorities' Attitudes and Awareness
Kuwaiti society is now a mix of two generations. The first generation is the generation which has little or no experience of ICT due to the lack of ICT training within the Kuwaiti education system; implementation of ICT in the State institutions is relatively new. The second generation, the younger generation, is the generation which has experience of ICT due to the integrated nature of the technology curriculum.

The vast majority of decision-making stems from the first generation. Due to their lack of ICT awareness, it is difficult to persuade and/or motivate them to take decisions in favour of ICT.

'Whenever we propose an ICT system, they always bounce it back to us as we are finding it difficult to persuade the decision makers'.

(Focus Group)

Therefore there is a need to change the decision-makers' attitudes towards ICT. The change in attitudes is not a straightforward solution and cannot be achieved in a short time. One of the main reasons for such attitudes is fear of change. They prefer the traditional, tested methods rather than trying something new.

Therefore there is a need to change this attitude through effective communication between the decision-makers and ICT teams within the charities.

Donors' and Beneficiaries' Attitudes and Awareness
Donors and beneficiaries are key elements of the charities' activities. The first is the main source of income while the second is the subject that the charities aim to serve; there are links between the two. Therefore, it is essential that they are aware of the availability, effectiveness and appropriateness of using ICT as a source of finding information and of communication with the charities.

There is a need to increase awareness of the ICT facilities available through the charities once they are implemented and adopted. The awareness and
attitudes can be improved through advertisement campaigns through various media.

7.9 Disadvantages of Using ICT

The above comments have indicated that the charities will benefit hugely from implementing ICT throughout their activities. However, it is also important to explore the disadvantages that charities may suffer from implementing ICT. This section briefly discusses these disadvantages.

One major disadvantage of implementing ICT is an increase in competition among the regional, national and international charities as ICT will break the physical barriers. Modern communications enable donors to communicate to get information and donate from their office or home. These communication facilities give the Kuwaiti donors the option to donate regionally, i.e. to other Gulf State charities, or to international charities. This represents a threat to the local Kuwaiti charities.

Firms, including nonprofits, that had been protected naturally, by geography, suddenly find themselves facing new regional or national competitors

(Blau, 2001; p. 8)

There is increasing competition for donations between humanitarian organisations

(Husemann, 2001; p. 2)

Another disadvantage is the fact that ICT is changing regularly and organisations need to cope with these changes financially and technically. Financially, they need to have the potential to fund the changes and the expertise to cope with them.
Chapter Seven

7.10 Need for Change

This section discusses the need for change in Kuwaiti charities to improve their systems. This is part of objective three of the research. The change in ICT, suggested by the SSM and ETHICS, outlined in Chapter Six, indicated that Kuwaiti charities need to implement ICT throughout their activities. This includes the development of a website to communicate information between the charities and their donors and beneficiaries.

The Development of the Website

The findings of this study have led to the development of a prototype Information Exchange System amongst Kuwaiti Charity Organisations (IESKCO). This prototype was a web-based system which has a unique domain name and can be accessed via www.kuwaitaid.net. This web-based prototype has been included to meet the needs of the main target audiences, including non-profits' staff and authorities, donors and beneficiaries.

An empirical evaluation was undertaken by end users in Kuwait via an e-mail questionnaire. The results of the survey evaluation were analysed and showed that the prototype system was satisfactory, meeting their requirements and needs.

ICT Infrastructure in Kuwaiti Charities

The Kuwaiti charities are under pressure from two directions. The first is the need for ICT that will improve their performance and meet the needs and satisfaction of both donors and beneficiaries; the second direction is the need to meet the authorities' guidelines. This section presents the changes needed from an ICT point of view.

The Need for an ICT Communication Infrastructure

A charity's main activity is based on communication with its donors and beneficiaries. The charities currently use a traditional communication system and the physical attendance of the beneficiaries to fill in forms and explain
his/her case. This is not convenient from the beneficiary's point of view as it may represent a social embarrassment. The Arabic culture and values are against asking for help and support from charities. The literature shows that there are several individuals who are really in need of help and support but refused to go to the charities for assistance.

The current communication system does not meet the needs of the charities or the authorities. Therefore, the charities need to change to a more effective communications system. They need to introduce on-line application forms, on-line enquiries and an Internet emailing system for their beneficiaries and donors.

There is also a need to introduce satellite and video communication to their activities. This will help in improving their performance.

The Need for ICT Hardware

The charities need laptops with communication software that allows communication with the charities' headquarters. This will help the charities' beneficiaries, agents, representatives and staff to communicate with each other.

The Need for ICT Software System

The charities are currently using software that is not specifically designed for charity activities. It needs continuous changes to be made to meet the basic needs of the charities.

Needs for Guidelines and Legislation

The research indicated that there are pressures on the charities from national and international bodies to ensure there is no misuse or abuse in any of the charities' activities. The other factor is that the Kuwaiti authorities are moving towards electronic government. The above two factors are enough for the
Charities to introduce changes to ensure compliance to respond to national and international pressures. This section provides the changes needed to comply with national and international rules, guidelines and legislation.

**Change in Policies and Procedures**
The first step is introducing policies and procedures within the charities to comply with the statutory and regulatory authorities. The procedures should give the staff guidelines and rules on how to deal with the transactions, beneficiaries and donors.

**ICT Systems**
The charities need to introduce ICT systems that can help with compliance. The system should be purpose-built to meet the charities’ needs. The system should be easy and friendly to use and have specifications that meet the charities’ needs. This includes ease of installation, ease of access, possessing excellent recording and communication facilities, and be highly secure.

**Internal Auditing**
The charities need to introduce an internal auditing mechanism to ensure continuous assessing of their performance. This should be carried out by staff within the company.

**External Auditing**
The charities should introduce external auditing to assess their performance against their quality standard. External auditing is needed to identify and establish if there is any gap or failure to comply with national and international regulatory bodies.

**Decision-Makers’ Attitudes and Awareness**
There is a need to change the attitudes of decision-makers towards favouring the use of ICT. There is a need to increase their awareness of adopting
websites as tools for information provision and using the Internet for internal and external communications. This can be achieved by involving decision-makers in ICT discussions and proposals.

Training Approach
Training and staff development have become part of any successful organisation. They are needed for two main reasons. The first reason is the change in the work place environment and the second the need for motivation and drive for both the individual and for the group.

ICT use is expanding and changing regularly. This is due to three main factors. The first is market needs: from a business point of view, there is a potential market for the use of ICT in various aspects of the market. The second is the sharp changes in ICT hardware and software. The third factor is the reasonable price and maintenance of ICT. The changing nature of ICT leads to a need for regular training and organisations are well aware of the need for training and its effect on their productivity. The other important issue is that the adopted system, which is likely to be an off-the-shelf software system, needs to be changed to meet the charities' specific needs. This can be achieved only by a highly trained software specialist with the expertise necessary to modify the software to meet the charities’ needs.

The Need for a Specialised Training Department
The Kuwait charities need to establish a specialised department within their organisation to manage and plan their staff training to ensure that their staff are well trained in the use and development of ICT. This may help in raising staff awareness and attitudes towards ICT.

Internal and External Training
The charities should plan for both internal and external training provision. The internal training should be directed to new recruits and should be organised whenever there is an internal change in the system or in the procedures used.
External training is also needed. This can take place outside the State by staff attending training courses, training workshops, seminars or short courses.

**Training Motivation**

It is essential that organisations use a motivational strategy to encourage and persuade their staff to join and contribute effectively to the training. The charities can use staff development points that can lead to financial rewards or promotion.
CHAPTER EIGHT

Conclusions and Recommendations

8.1 Introduction

This research was concerned with investigating and analysing current ICT situations in Kuwaiti charitable organisations and how to implement ICT to improve performance and cooperation. The study also facilitates an improvement in the satisfaction of donors and beneficiaries.

This research study comprised a combination of two systems research methodologies, the multi-methodological approach undertaken combined the SSM and ETHICS. By applying the methodology in an appropriate scientific way, this research has achieved results which allowed a richer picture of Kuwaiti charitable organisations to be gained. Kuwaiti charitable organisations play an increasingly important role in Kuwait society. They are regarded as important in their capacity to influence global policy on development issues, such as poverty alleviation, aid and sustainable development.

Kuwait is moving toward electronic government. Therefore, all sectors including non-profit institutions should comply with the government strategy by developing modernisation plans that support electronic information sharing and exchange. There are national and international pressures to control financial transactions. Charitable organisations should comply with this new
national and international legislation by providing flexible supervision of their programmes and financial transactions.

This chapter presents the outcomes of this research based on the research aims and objectives, including sections on recommendations drawn and suggestions for future research. The outcomes of this research can be used as a guideline for the strategic action plan for implementing ICT in the State of Kuwait charities.

8.2 Conclusions

8.2.1 Impact of ICT on Charities Activities (Objective 1)

This section presents the main findings of the impact and use of ICT. These findings are drawn from the critical analysis of the impact and use of ICT on charities drawn from the literature and how Kuwaiti charities can benefit from their findings. The literature reveals that ICT has become an important tool that facilitates the activities of the charities. This includes use of ICT in communication with the charities main subjects, plus cooperation and coordination with external interested organisations. The findings also revealed that Kuwaiti charities should benefits from these findings by adopting and implementing ICT strategies throughout their activities.

8.2.2 The Current Situation and Future Impact of ICT in Kuwaiti Charities (Objective 2)

The Current Situation of the Kuwaiti Charities

1. The charities in Kuwait have expanding rapidly in the last decade due to economic and social changes. Charities today are managing large financial transactions since their annual primary revenue is expanding,
and they are finding effective ways to expand the programmes that they support.

2. Current cooperation and coordination are inefficient. Cooperation is needed among Kuwaiti charities to prevent their information systems from becoming susceptible to deliberate actions, such as fraud.

3. Charities are under severe pressure to comply with national and international legislation.

4. Donors and beneficiaries are demanding confidentiality and security of their data.

5. The main problems and obstacles to improving ICT among Kuwaiti charities are:
   a. Attitudes and awareness of decision-makers;
   b. Insufficient ICT policies, regulations and guidelines set by the charities to ensure the effective exploitation of ICT hardware and software;
   c. Lack of a skilled ICT workforce that leads to insufficient technical support; and,
   d. Lack of ICT training for charity workers.

Impact of ICT in Kuwaiti Charities

1. ICT can encourage donors and meet their needs to improve the capabilities of the funds by:
   a. Ensuring confidentiality of the donors’ records;
   b. Providing convenient methods for communication;
   c. ICT can provide the answer for the charities communication problems and obstacles by designing and developing the EISCKO website model. This study proposed the development and design of the IESCKO prototype model, which is unique in combining all the key elements together.
2. ICT can meet the needs and satisfaction of charities beneficiaries by:

   a. Ensuring confidentiality of the beneficiaries' records to avoid any social embarrassment; and,

   b. Providing convenient methods for communication. This includes on-line applications and direct debit payment. This provides a convenient method especially for beneficiaries with special needs and people who do not offer the current application process.

3. ICT can meet the needs and satisfaction of charities staff by:

   a. Easy access to the beneficiaries and donors records;

   b. Effective communications with charities donors, beneficiaries and external interested bodies, governmental offices, for example; and,

   c. Facilitate and enhance cooperation and coordination with other charities.

4. ICT can help in coping with national and international pressures by:

   a. Introducing easy access to the donors and beneficiaries records; and,

   b. Convenient communication methods

The charities may face a conflict issue between the donors and beneficiaries needs and the national and international authorities from breaching the confidentiality of the records. This issue is irrelevant from the ICT point of view. The charities have a duty of the educating both sides of the issues of the interests of both parties in the issue.
8.3 Recommendations and suggestions for change (Systematic Improvements (Objective 3))

This section presents the conclusion drawn from identifying the changes needed to improve the charities performances. This objective will be achieved by:

1. The research study has established models to represent issues that exist within the current charities;

2. Used a system intervention to improve the problem situation, recommend strategies and practical solutions for the improvement of information exchange systems among the charity organisations; and,

3. Proposed model shows full satisfaction among the users, since this model has been tested and evaluated using empirical evaluation methods.

Based on the findings of this research, it is recommended that the following changes are made in system design and implementation.

Communication changes

- Need to establish information, experience, and resource-sharing agreements among charitable organisations in Kuwait, by establishing guidelines and procedures.
- Stakeholders need to organise conferences, seminars, and workshops to enhance the knowledge and communication skills of all.
- Stakeholders should encourage their staff to adopt the use of office technology applications such as Microsoft Word, Excel and any other standard office applications which could enhance internal information management.
- The implementation of the proposed network model requires very significant investment in terms of financial and human resources, and
ICT infrastructure in order to maintain its operation. Also the network should be provided with qualifying specialist faculty members through regular training in order to work in this new environment, as well as establishing an adequate telecommunication infrastructure and data-sharing system which must be updated and upgraded whenever necessary.

- The Ministry of Awqaf should act on behalf of the Kuwaiti government, and should have supervision of the proposed network system.

**Technical changes:**

- Internal paper work should be switched to electronic work in order to be published easily in the EISCKO model, as a support of needed information to be exchanged for other charitable organisations.
- Providing sufficient personal computers to users in the charity organisations.
- Replacing dial up Internet connections with broadband connections, in order to speed up the processes, to link more unconnected users in the organisations, and to avoid line cutting while connected.
- All personal computers should be upgraded where possible from old operating systems to latest Microsoft Windows Operating Systems, such as Windows XP, in order to have full interoperating ability with the proposed system.

**Confidentiality and Security changes:**

- Since information a valuable asset to any organisation, all charitable organisations in Kuwait should implement their own information security policy in order to support the confidentiality of personal information of donors and beneficiaries. Therefore, an affective security policy will increase the confidence of staff, donors, and beneficiaries.
- Charities in Kuwait should appoint one senior manager to be responsible for the new information system security.
Charities should ensure that all relevant threats and vulnerabilities are identified and analysed to assess the risk to the organisations.

Charities should establish procedures for the information system security risk management ensuring that they meet the objectives defined in this security policy in order to implement, monitor and audit of security measures.

Stakeholders should commission a study into issuing reliable smart card technologies, which could benefit from retention of private data (such as donors and beneficiaries personal data), and the retention of security data (such as physical or logical access permissions or private keys).

Cooperation and Coordination changes:

- Integration of ICT policy among State of Kuwait government and charity organisations in Kuwait.
- The charities in Kuwait need to work closely with other humanitarian and relief organisations worldwide, in order to get benefit of sharing information, experiences and resources.
- Stakeholders of the Kuwaiti charities should establish a strategic committee to encourage effective cooperation among all charities in Kuwait.
- This strategic committee should meet a minimum of once per month to discuss areas of interest.
- This committee should have representative from each charity to express their views and share their experiences with others.

Awareness and Attitudes changes:

- More attention should be given to donors in order to increase revenue of the charities by presenting all facilities to them.
• Providing proper ICT training courses for both top and middle managers, in order to enable them to make confident and effective decisions.

• A plan to be developed for proper ICT training for all staff in the charitable organisations.

• Employing qualified and professional staff to develop the IESCKO prototype Model. These professionals take the responsibility to keep the model updated, trouble shooting, technical support, emailing newsletters to clients, defining new users, training for example.

8.4 Future Research

This research study has uncovered interesting issues. These issues can be summarised by the following key points:

• Extensive research on factors that may affect Kuwaiti donors and beneficiaries. These factors may include communication methods and techniques, social, religion, managing to control their data and transactions;

• Investigating needs of International charity organisations, other than Kuwaiti culture. It would be an interesting topic for further research on comparison between the two cultures;

• There is a need to explore the potential role of the Kuwaiti Philanthropy sector worldwide;

• There is a need to investigate the importance of establishing charity training courses provide by an academic institution in the Middle East countries; and,

• There is a need to examine problems concerning ICT in charitable organisations between developing and developed countries, in order to compare problems and solutions.


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Appendices
الفودي، الأول من نوعه في الكوبي ويتضمن مع التحور طالب دكتوراه كويتي أنجز مشروعًا للربط الإلكتروني بين المؤسسات الخيرية
كويتي ينجح مشروعًا لشبكة معلوماتيّة تربط بين المؤسسات الخيريّة في الكويت

علم/بريطانيا/حاسوب/كويتي (مع صور)

كويتي ينجح مشروعًا لشبكة معلوماتيّة تربط بين المؤسسات الخيريّة في الكويت

من عاصم العالم

لندن - 7 - 5 (كونا) -- في سابقة هي الأولى في الكويت وربما في منطقة الشرق الأوسط تمكن طالب كويتي في مرحلة الدراسات العليا في إحدى الجامعات البريطانيّة من إنجاز مشروع إلكتروني يركز بشكل أساسي في ربط مختبر المؤسسات الخيريّة في دولة الكويت

الكويتي، بشريكة مكثافة للمعلومات تتيح نقل وتبادل المعلومات والخبرات فيما بين تلك المؤسسات من جهة وبينها وبين المهتمين والمستفيدين من جهة أخرى. وقال مصمم المشروع طالب الدكتوراة عادل الفودري في لقاء مع وكالة الأنباء الكويتية (كونا) أن مشروع الشبكة المعلوماتيّة هو الأول من نوعه في دولة الكويت ويتصل بأتمتة التطورات التي يشهدها العصر في المجالات التكنولوجيا والربط الألتي وضمنا أن المشروع يمثل بشكل أساسي في ربط جميع المؤسسات والجهات الخيريّة

العملية بدولة الكويت بشبكة حاسوب وهي موجهة للأمر الذي من شأنه أن يسهل وتسهيل عمل تلك المؤسسات ويرفع من مستوى أداء العاملين في هذا القطاع في التعامل مع اهتمامات المستفيدين في مجال الاتصالات المعلوماتية ويسهل أيضاً عمل الجهات الحكومية في مراقبة النشاط تلك المؤسسات.

وأشار الفودري إلى أن المشروع - وهو موضوع اطروحة الدكتوراه التي ينجزها لدى جامعة لافربورت البريطانيّة - تبناه بعد دراسة تحليلية شاملة وتفعيلة لجميع البيانات والمعلومات التي جمعت على مدى أربع سنوات وشملت أدوات بحثية عدة منها استبيانات

للعملاء في عدد من المؤسسات الخيريّة في الكويت ومقابلات شبه الرسمية مع المسؤولين فيها.

وتحتريه بدوره في إجراء محاضرات وورشات حول حالات عدد من المستفيدين من تلك المؤسسات وذلك بهدف

التحريف على الاحتياجات والمطلبان، وتناول العقبات التي قد تكون دون عمل تلك المؤسسات بشكل متزامن، وقال أن مشروع الشبكة الإلكترونية هو نتاج تلك الدراسات الأثرية في الشبكة من شأنها أن تمكن المؤسسات الخيريّة من توفير المعلومات الدقيقة والمحدثة بشكل مبكر عن طريق اجهزة الحاسوب الآلي على شكل شبكة معلوماتيّة مكثفة والتي

يمكن أن تكون لها كبر الأثر من تحسين الخدمات التي تقدمها المؤسسات الخيريّة لكل من أولاً الفن التعبيريّ للمشروعات الخيريّة والمستفيدين على حد سواء، وأضاف أن الشبكة أيضاً من شأنها أن تحلل دون الارتداد في تقديم المساعدات والترعيبات، والذي بدوره يضفي على عمليات التحالف التي قد يمارسها بعض المستفيدين.
في الشبكة، وتحت الاستيعاب والرغبة في الاتزان، أدى التقدم في تطوير الخدمات المتعلقة بالأنترنت إلى تحسينات كبيرة. حيث يمكن الآن للمستخدمين الوصول إلى المعلومات والبيانات على الإنترنت بسهولة.

ومع ذلك، فإن استخدام الإنترنت بشكل غير منطقي قد يسهم في تقليل الرضا عن خدمات الإنترنت، حيث تؤدي تUIImageView (0x26060000)ة استخدام المتغيرة بسرعة. فإن استخدام الإنترنت بشكل غير منطقي يمكن أن يؤدي إلى فقدان الأفكار والمهارات الفنية، مما يؤثر على القدرة على تحقيق أهداف المستخدمين.

وفي هذا السياق، تأتي أهمية تنظيم استخدام الإنترنت وتحقيق استخدام فعال للإنترنت. فضلاً عن ذلك، يمكن أن يؤدي استخدام الإنترنت بشكل غير منطقي إلى تقليل الرضا عن الخدمات الرقمية، مما يؤدي إلى فقدان الأفكار والمهارات الفنية، مما يؤثر على القدرة على تحقيق أهداف المستخدمين.

ومع ذلك، فإن استخدام الإنترنت بشكل غير منطقي قد يسهم في تقليل الرضا عن خدمات الإنترنت، حيث تؤدي تبسيط الاستخدام بشكل غير منطقي إلى تقليل الرضا عن الخدمات الرقمية، مما يؤدي إلى فقدان الأفكار والمهارات الفنية، مما يؤثر على القدرة على تحقيق أهداف المستخدمين.
لشبكة وهو (الشبكة الخيرية الكويتية) كما تم حجز عنوان خاص لها على الإنترنت تحت اسم (دليو دليو دليو. كويت ايد. نيت) حتى يتمكن المهتمون من استعراض المشاريع الخيرية للمؤسسات الخيرية وتتبع انشطااتها. (النهاية)

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جمع: أخبار الكويت

2003
Appendix B IESKCO Model in the Press (English News)
EDU-KUWAIT-CHARITIES-SPORT
Kuwaiti PhD student builds network to link Kuwaiti charities

By: Essam Al-Ghanem
LONDON, May 7 (KUNA) -- A Kuwaiti PhD student managed to create a network that links all Kuwait-based charities together and facilitates information sharing amongst them and other interested parties.

In an interview with the Kuwait News Agency (KUNA), Adel Al-Foudari, PhD student at the British Loughborough University, said this project was the first in Kuwait and the Middle East.

"The project links all charities to one mainframe, which makes information sharing easier and lowers costs and gives access to governmental bodies concerned with monitoring the activities of such charities," Al-Foudari said.

Al-Foudari has gathered data and information about his doctorate thesis over about four years.

This project can eliminate duplication of efforts, and double donations to the same beneficiary, thus saves efforts, time and money, he added.

It can also provide interested parties with reliable instructions useful in handling crises and emergencies, and can also supply updated information on disaster areas; types and quantities of aids already sent there, and could follow up reports on these crises.

- The project's data base is very safe and is not accessible for unwanted parties. It also eases donors' decision-making process through providing them with a list of potential charitable projects. Decision makers and Donors can also receive short messages to their mobile.
phones, through the net, to allow them move quickly to provide assistance. Employees at these charities can receive distance training courses through the network, and that can help boosting their professionalism.

The network, called "Kuwait Charitable Network" has a domain on the world web: www.kuwaitaid.net, and also has a data bank that includes all "Fatawa", or religious opinions, and related studies of value to concerned parties and individuals. (end)

eg.ad

KUNA 071625 May 04NNNN
Appendix C  A permission letter to General Directors of Kuwaiti Charities

Dear General Manager,

At present I am a PhD student in the Department of Information Science at Loughborough University, in the United Kingdom. My study attempts to conduct an investigation and analysing the current state of ICT use in charitable organisations in the State of Kuwait, and to provide guidelines to improve ICT.

I would be very grateful if you would allow me to interview you for around 30 minutes. I will contact your secretary to arrange an interview time which will be convenient for you. Your opinions and views from a charity’s perspective will be crucial for the findings of this research.

I would also appreciate your consent to interview directors of ICT, internal activities, and external activities departments, and also to distribute a questionnaire to some of your staff (a sample copy is attached). Data collected from individual respondents will be kept confidential. If you are interested in the survey findings, I will be pleased to send you a copy of the study as soon as this project has been completed.

I sincerely appreciate your co-operation and your willingness to give up your time to participate in achieving the aim of this interview.

Thank you and kind regards.

Yours faithfully,

Adel AL-Foudary
PhD Student - Loughborough University
United Kingdom
A.K.ALFOULDARY@LBORO.AC.UK
Appendix D Main Questionnaire Survey

Personal Background

Please read questions carefully and tick ☒ to the appropriate answer:

(1) Your gender: Male ☐ 1 Female ☒ 2
(2) Your age group: Below 21 ☐ 1 21-30 ☒ 2 31-40 ☐ 3 41-50 ☒ 4 51 or over ☒ 5
(3) Name of your charity organisation:
   Zakat House ☐ 1 Khairia ☒ 2 Islah ☐ 3 Turath ☒ 4
(4) Name of your department:
   Administration & Financial ☐ 1 Social affair & Training ☐ 2 Internal & External project ☐ 3
   ICT & Public Relation ☐ 4 Top management & Resources ☐ 5
   Other ☐ 6 (Please specify) ..................................
(5) Your position:
   Manager or Manager's Assistant ☐ 1 Section Head or Sub-section Head ☒ 2 Others ☒ 3
(6) Work experience:
   Less than 5 years ☐ 1 5-10 ☒ 2 11-20 ☐ 3 More than 20 years ☒ 4
(7) Your highest education degree:
   High School or less ☐ 1 Diploma or Bachelor ☒ 2 Master or PhD ☒ 3

PART 1. Information Communication Technology

(8) What is your main concern on your current information system?

<table>
<thead>
<tr>
<th>Concerns</th>
<th>Very Important</th>
<th>Important</th>
<th>Moderately Important</th>
<th>Of Little Importance</th>
<th>Unimportant</th>
</tr>
</thead>
<tbody>
<tr>
<td>1- Speed of process</td>
<td>☐ 1</td>
<td>☒ 2</td>
<td>☒ 3</td>
<td>☒ 4</td>
<td>☒ 5</td>
</tr>
<tr>
<td>2- Security of data</td>
<td>☐ 1</td>
<td>☒ 2</td>
<td>☒ 3</td>
<td>☒ 4</td>
<td>☒ 5</td>
</tr>
<tr>
<td>3- Capacity of storage</td>
<td>☐ 1</td>
<td>☒ 2</td>
<td>☒ 3</td>
<td>☒ 4</td>
<td>☒ 5</td>
</tr>
<tr>
<td>4- state-of-the-art technology</td>
<td>☐ 1</td>
<td>☒ 2</td>
<td>☒ 3</td>
<td>☒ 4</td>
<td>☒ 5</td>
</tr>
<tr>
<td>5- Others ..................</td>
<td>☐ 1</td>
<td>☒ 2</td>
<td>☒ 3</td>
<td>☒ 4</td>
<td>☒ 5</td>
</tr>
</tbody>
</table>
(9) Current Database System meets the charity needs.

<table>
<thead>
<tr>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Undecided</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

(10) Current Database System is effective in identifying beneficiary’s fraud.

<table>
<thead>
<tr>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Undecided</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

(11) Current Charity Communication System is convenient for Beneficiaries.

<table>
<thead>
<tr>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Undecided</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

(12) Current Charity Communication System is convenient for Donors.

<table>
<thead>
<tr>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Undecided</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

(13) Do you use a computer at work?  Yes 1  No 2 (If No, please go to question 18)

(14) Does your organisation have a local computer network (LAN)?

Yes 1  No 2 (If No, please go to question 16)  Not sure 3

(15) How frequently do you use the local computer network (LAN) for the following?

<table>
<thead>
<tr>
<th></th>
<th>Always</th>
<th>Usually</th>
<th>About Half the Time</th>
<th>Seldom</th>
<th>Never</th>
</tr>
</thead>
<tbody>
<tr>
<td>1- Local E-Mail</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>2- Appointments’ Scheduler</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>3- Tasks’ Assignments</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>4- Sharing files and devices</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>
(16) Do you use the Internet at work?
Yes [ ]  No [ ]  (If No, please go to question 18)

(17) How frequently do you use the Internet for the following?

<table>
<thead>
<tr>
<th></th>
<th>Always</th>
<th>Usually</th>
<th>About Half the Time</th>
<th>Seldom</th>
<th>Never</th>
</tr>
</thead>
<tbody>
<tr>
<td>1- E-Mail</td>
<td>[ ] 1</td>
<td>[ ] 2</td>
<td>[ ] 3</td>
<td>[ ] 4</td>
<td>[ ] 5</td>
</tr>
<tr>
<td>2- Downloading apps</td>
<td>[ ] 1</td>
<td>[ ] 2</td>
<td>[ ] 3</td>
<td>[ ] 4</td>
<td>[ ] 5</td>
</tr>
<tr>
<td>3- Web page design</td>
<td>[ ] 1</td>
<td>[ ] 2</td>
<td>[ ] 3</td>
<td>[ ] 4</td>
<td>[ ] 5</td>
</tr>
<tr>
<td>4- Internet banking</td>
<td>[ ] 1</td>
<td>[ ] 2</td>
<td>[ ] 3</td>
<td>[ ] 4</td>
<td>[ ] 5</td>
</tr>
<tr>
<td>5- Video conferencing</td>
<td>[ ] 1</td>
<td>[ ] 2</td>
<td>[ ] 3</td>
<td>[ ] 4</td>
<td>[ ] 5</td>
</tr>
<tr>
<td>6- Technical support</td>
<td>[ ] 1</td>
<td>[ ] 2</td>
<td>[ ] 3</td>
<td>[ ] 4</td>
<td>[ ] 5</td>
</tr>
<tr>
<td>7- Purchasing products</td>
<td>[ ] 1</td>
<td>[ ] 2</td>
<td>[ ] 3</td>
<td>[ ] 4</td>
<td>[ ] 5</td>
</tr>
</tbody>
</table>

Part 2. Co-operation with charities and clients

(18) Do you think there is any co-operation between your organisation and any other charity organisations in Kuwait?
Yes [ ]  No [ ]  Not sure [ ]

(19) How important the following activities are for the co-operation among all charity organisations in Kuwait?

<table>
<thead>
<tr>
<th>Information Concerning Existing ...</th>
<th>Very Important</th>
<th>Important</th>
<th>Moderately Important</th>
<th>Of Little Importance</th>
<th>Unimportant</th>
</tr>
</thead>
<tbody>
<tr>
<td>1- Donor data</td>
<td>[ ] 1</td>
<td>[ ] 2</td>
<td>[ ] 3</td>
<td>[ ] 4</td>
<td>[ ] 5</td>
</tr>
<tr>
<td>2- Beneficiary data</td>
<td>[ ] 1</td>
<td>[ ] 2</td>
<td>[ ] 3</td>
<td>[ ] 4</td>
<td>[ ] 5</td>
</tr>
<tr>
<td>3- Local projects data (Inside Kuwait)</td>
<td>[ ] 1</td>
<td>[ ] 2</td>
<td>[ ] 3</td>
<td>[ ] 4</td>
<td>[ ] 5</td>
</tr>
<tr>
<td>4- External project data (Outside Kuwait)</td>
<td>[ ] 1</td>
<td>[ ] 2</td>
<td>[ ] 3</td>
<td>[ ] 4</td>
<td>[ ] 5</td>
</tr>
<tr>
<td>5- Data on Catastrophes</td>
<td>[ ] 1</td>
<td>[ ] 2</td>
<td>[ ] 3</td>
<td>[ ] 4</td>
<td>[ ] 5</td>
</tr>
</tbody>
</table>
(20) How important are the following methods to facilitate co-operation of meetings amongst all charity organisations in Kuwait?

<table>
<thead>
<tr>
<th>Method of Meetings</th>
<th>Very Important</th>
<th>Important</th>
<th>Moderately Important</th>
<th>Of Little Importance</th>
<th>Unimportant</th>
</tr>
</thead>
<tbody>
<tr>
<td>1- Internet (chatting, video conferencing)</td>
<td>Q 1</td>
<td>Q 2</td>
<td>Q 3</td>
<td>Q 4</td>
<td>Q 5</td>
</tr>
<tr>
<td>2- Electronic mail</td>
<td>Q 1</td>
<td>Q 2</td>
<td>Q 3</td>
<td>Q 4</td>
<td>Q 5</td>
</tr>
<tr>
<td>3- Post mail</td>
<td>Q 1</td>
<td>Q 2</td>
<td>Q 3</td>
<td>Q 4</td>
<td>Q 5</td>
</tr>
<tr>
<td>4- Telephone</td>
<td>Q 1</td>
<td>Q 2</td>
<td>Q 3</td>
<td>Q 4</td>
<td>Q 5</td>
</tr>
<tr>
<td>5- Fax</td>
<td>Q 1</td>
<td>Q 2</td>
<td>Q 3</td>
<td>Q 4</td>
<td>Q 5</td>
</tr>
<tr>
<td>6- Sharing floppy disks</td>
<td>Q 1</td>
<td>Q 2</td>
<td>Q 3</td>
<td>Q 4</td>
<td>Q 5</td>
</tr>
<tr>
<td>7- Formal meetings (face to face)</td>
<td>Q 1</td>
<td>Q 2</td>
<td>Q 3</td>
<td>Q 4</td>
<td>Q 5</td>
</tr>
<tr>
<td>8- Informal meetings (training session, conference, etc)</td>
<td>Q 1</td>
<td>Q 2</td>
<td>Q 3</td>
<td>Q 4</td>
<td>Q 5</td>
</tr>
</tbody>
</table>

(21) What are the Donor main concerns?

<table>
<thead>
<tr>
<th>Donors Concerns</th>
<th>Very Important</th>
<th>Important</th>
<th>Moderately Important</th>
<th>Of Little Importance</th>
<th>Unimportant</th>
</tr>
</thead>
<tbody>
<tr>
<td>1- Speed of process</td>
<td>Q 1</td>
<td>Q 2</td>
<td>Q 3</td>
<td>Q 4</td>
<td>Q 5</td>
</tr>
<tr>
<td>2- Confidentiality of their records</td>
<td>Q 1</td>
<td>Q 2</td>
<td>Q 3</td>
<td>Q 4</td>
<td>Q 5</td>
</tr>
<tr>
<td>3- Charity location</td>
<td>Q 1</td>
<td>Q 2</td>
<td>Q 3</td>
<td>Q 4</td>
<td>Q 5</td>
</tr>
<tr>
<td>4- Humanitarian projects</td>
<td>Q 1</td>
<td>Q 2</td>
<td>Q 3</td>
<td>Q 4</td>
<td>Q 5</td>
</tr>
<tr>
<td>5- others ............................................</td>
<td>Q 1</td>
<td>Q 2</td>
<td>Q 3</td>
<td>Q 4</td>
<td>Q 5</td>
</tr>
</tbody>
</table>

(22) What are the Beneficiaries main concerns?

<table>
<thead>
<tr>
<th>Beneficiaries Concerns</th>
<th>Very Important</th>
<th>Important</th>
<th>Moderately Important</th>
<th>Of Little Importance</th>
<th>Unimportant</th>
</tr>
</thead>
<tbody>
<tr>
<td>1- Speed of process</td>
<td>Q 1</td>
<td>Q 2</td>
<td>Q 3</td>
<td>Q 4</td>
<td>Q 5</td>
</tr>
<tr>
<td>2- Confidentiality of their records</td>
<td>Q 1</td>
<td>Q 2</td>
<td>Q 3</td>
<td>Q 4</td>
<td>Q 5</td>
</tr>
<tr>
<td>3- Easy communication with charities</td>
<td>Q 1</td>
<td>Q 2</td>
<td>Q 3</td>
<td>Q 4</td>
<td>Q 5</td>
</tr>
<tr>
<td>4- Technology utilisation</td>
<td>Q 1</td>
<td>Q 2</td>
<td>Q 3</td>
<td>Q 4</td>
<td>Q 5</td>
</tr>
<tr>
<td>5- Others ............................................</td>
<td>Q 1</td>
<td>Q 2</td>
<td>Q 3</td>
<td>Q 4</td>
<td>Q 5</td>
</tr>
</tbody>
</table>
Part 3. PERSONAL DEVELOPMENTS

(23) How often do you receive training in using information and communication technology (ICT)?
Always 1, Usually 2, About half the time 3, Seldom 4, Never 5

(24) How important is it to have training in computer networking?
Very Important 1, Important 2, Moderately Important 3, Of Little Importance 4, Unimportant 5

(25) How important are the following methods are to facilitate training?

<table>
<thead>
<tr>
<th>Method of Training</th>
<th>Very Important</th>
<th>Important</th>
<th>Moderately Important</th>
<th>Of Little Importance</th>
<th>Unimportant</th>
</tr>
</thead>
<tbody>
<tr>
<td>1- Lecture and seminar</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>2- Workshop</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>3- Electronic mail</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>4- Internet on-line session</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>5- Self-teaching (Book, CD-Rom)</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

(26) Please add any comments or suggestions:

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Thank you for your time in filling this questionnaire
Appendix E Interviews with Directors of ICT Department

Name:
Age:
Qualification:
Responsibility:

1. Do you have a database system in your organisation? and is it being accessed by other charities, donors and beneficiaries? How about your database security?

2. Who decide on the ICT policy in your department?

3. What is the ICT infrastructure is now available on your organisation?

4. What type of ICT services do you provide for your users?

5. How many staff in your department? What are their positions?

6. Are all units and departments on your organisations connected to the Local Network (LAN)?

7. What problems are associated with expanding Local Network connections on your organisation?

8. Do you have an Internet connection? Who is the major Internet Service Provider?

9. Are all units and departments on your organisations connected to the Internet?

10. What problems are associated with expanding Internet connection?

11. Do you provide any ICT training or technical support for literate or/and illiterate users?

12. Does your department connect with other charity organisations in Kuwait?

13. Would you please list the current types of connection with them?

14. Are you satisfied with these types of connection? Do these types of connections fulfil your department's need?
Appendix F  Interviews with Directors of External Activities Department

Name:
Age:
Qualification:
Responsibility:

1. What kind of methods usually used by your department to contact other departments within your organisation?
2. What kind of methods usually used by your department to contact other outside charity organisations in Kuwait?
3. Do you have any contacts with international charity organisations?
4. What deficiencies associated with these current methods?
5. What kind of resources is available to achieve your work tasks?
6. What are your current communication system do you use in order to perform your international charitable programmes with your other charities?
Appendix G Interviews with Directors of Internal Activities Department

Name:
Age:
Qualification:
Responsibility:

1. What kind of methods usually used to contact other departments within your organisation?
2. What kind of methods usually used to contact other outside charity organisations in Kuwait?
3. What kind of methods usually used to contact your donors and beneficiaries?
4. What deficiencies associated with these current methods?
5. What kind of resources is available to achieve your work tasks?
Appendix H Interviews with General Manager

Name:
Age:
Position:
Responsibility:

- What kind of policy for ICT resources do you have in your organisation? How will it be funded?
- What is the major challenging that you are facing today concerning extending ICT services locally and internationally?
- What method and procedures are often used to communicate with your branches around Kuwait, nationally and internationally?
- Is there any collaboration between your organisation and other charity organisations in Kuwait?
- What method and procedures are often used to communicate with other organisation, nationally and internationally?
- Does your current system comply with national and international statutes?
Appendix I Interviews with Donors

1. What type of donations do you perform?
2. How frequently do you donate?
3. What do you think about services and facilities provided by charities?
4. What problems are associated with facilities?
5. Are you satisfied with these types of facilities? Do these types of facilities fulfil your needs?
Appendix J  Questionnaire to evaluate IESKCO Model

Prototype Evaluation Form

Dear valued evaluator,

It's my pleasure to announce the launch of the first web based prototype information system in the State of Kuwait. This prototype system is part of a PhD research course in the department of Information Science in Loughborough University in UK.

I am approaching you to act as an evaluator for this prototype, which has been designed to meet the needs of charity organisations, donors, and beneficiaries in Kuwait.

I would be grateful if you please fill out the attached short questionnaire and email it back to me at below email address: a.k.alfoudary@lboro.ac.uk. The prototype can be accessed at http://www.kuwaitaid.net

Thank you for taking part in this evaluation

Yours Sincerely,

Adel AL-Foudary
PhD researcher
Information Science Department
Loughborough University
Do you agree that the following functions meet your needs? Please tick (✓) for your answers and add any comments in the blanks

<table>
<thead>
<tr>
<th>Part 1: Prototype Contents</th>
<th>Description</th>
<th>Objective of a Function</th>
<th>Agree</th>
<th>Undecided</th>
<th>Don’t Agree</th>
</tr>
</thead>
</table>
| 1. Shared Database System  | Include data about beneficiaries, local & international projects, and catastrophes | • To improve ICT facilities  
• To improve the confidentiality of both beneficiaries and donors records  
• To curb fraud on receiving help and aids |      |           |             |
| 2. Discussion Forum       | A communication channel to enable charities’ staff to share information and experiences | • To set up national and international forums to address key concerns |      |           |             |
| 3. Online Training Courses| Training course offered via a network for staff at their convenient time | • To improve ICT facilities  
• To improve awareness and attitudes towards ICT |      |           |             |
| 4. Event Calendar         | All-day online appointment and event schedule                                 | • To improve and strengthen communications among Kuwaiti charities |      |           |             |
| 5. News Letter             | To join Email list for interesting and relevant information to staff and clients |                                            |      |           |             |
| 6. What’s New              | A screen displays all updated relevant news                                   |                                            |      |           |             |
| 7. Questions and Answers  | Answers to most commonly asked questions about giving or alms…                | • To keep non-profit professional with updated relevant information  
• For quick decision making |      |           |             |
<p>| 8. SMS sign up             | Sending a short message to a mobile phone for any urgent relevant alerts      |                                            |      |           |             |
| 9. Research and Study Centre | Electronic research centre to explore wide selection of charitable issues   |                                            |      |           |             |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>10. Volunteer Directory</td>
<td>A database system to post and exchange volunteer skills</td>
<td>• To provide volunteer recruitment opportunities for nonprofits</td>
<td></td>
</tr>
<tr>
<td>11. Web Links</td>
<td>Relevant non-profit web sites</td>
<td>• To provide a variety of links to relevant charitable resources and services</td>
<td></td>
</tr>
<tr>
<td>12. Online Donations</td>
<td>The choice to pick a charity organisation and any projects to donate online</td>
<td>• To increase and encourage the donors</td>
<td></td>
</tr>
<tr>
<td>13. Browsing in English &amp; Arabic</td>
<td>Enabling English and Arabic text</td>
<td>• To address international key concerns</td>
<td></td>
</tr>
</tbody>
</table>

**Part 2: General User Satisfaction**

<table>
<thead>
<tr>
<th>Are you satisfied with this prototype?</th>
<th>Yes</th>
<th>Undecided</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Do you think that this prototype meets your charity and clients needs?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Do you recommend others to visit this web site?</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Part 3: Comments or Suggestions**

If you have any comments or suggestion you need to add up to improve this prototype system, please use this space:

.................................................................................................................................

.................................................................................................................................

Thank you very much for your co-operation

To email this questionnaire back, please send it to the following address (a.k.al-foudary@lboro.ac.uk)