

# Privacy Policy in E Government Websites: A Case Study of Saudi Arabia

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## Abstract

Information privacy has been one of the areas of extended discussion over a past decade. There has been a lot of discussion about the information privacy online. Presence of a privacy page in a website is one way of ensuring privacy in a website. This paper is concerned with the presence of privacy policy in e government websites of Saudi Arabia. During the course of this study we looked for the presence of privacy policy in E government websites of Saudi Arabia. This paper presents the result of the study, and the aim is to draw attention of the governing bodies and Administrators towards the privacy policy implementation in their websites.

**Keywords:** Websites, Privacy policy, Data privacy, Web privacy, Universities, Educational collages, Data privacy laws, Internet laws, Saudi Arabia

## 1. Introduction

The advancement in computer and communication technology has changed the way information is processed over the internet. There has been a lot of discussion about the privacy of the information online. Privacy over the internet is one of the most prominent issues concerning the online world today. A lot of attention is paid to online information over the internet and every website to implement some kind of privacy in their website. The first and most important step of ensuring privacy in the virtual environment is the presence of privacy policy in the website. A privacy policy is a legal document that defines how the website gathers information from the user and how it uses this information. It also provides information about the access to this information. Most websites provide a link to the privacy page of the website. There are no standards and requirements for writing a privacy policy and hence there is no standard definition of the privacy policy.

The contents of the privacy policy depend upon the requirements of the organisation. The contents of the privacy policy depend upon the law applicable in that region and may also need to address the laws of multiple countries and their jurisdiction.

Users over the internet are very concerned about the information that they disclose over the internet. Most users need some kind of assurance before they disclose information to a website. The presence of privacy policy is one approach, which boosts user confidence over the website and also reduces the chance of receiving false information from the user.

Keeping the importance of ensuring privacy in the mind, we conducted a study on the Presence of privacy policy in E government websites of Saudi Arabia. The e government websites represent the government of the particular place over the internet. So, ensuring privacy of the e government website is extremely important. The aim of the study was to check the presence of privacy policy in the e government websites of Saudi Arabia regarding the use of information and the implementation of the privacy policy.

The Paper is organized as follows. First, it will describe the background to the study. Next, it will discuss the approach undertaken in the research. Further, the results of the study have been discussed in detail. Finally, the last section will summarize the conclusion of the study.

## 2. Background of the Study

The presence of the privacy policy in any website has a broad impact on the use of the website by the user. The information practices employed by the website are defined by its privacy policy. Users all over the world are particularly concerned about the information they disclose over the internet. Users understand that they need to know the information they provide and how this information is used by the websites. The presence of privacy policy provides an assurance to the user to provide information to the website. The privacy policy of a website must also be understandable and easily accessible to the user (Annie I. Antón, Julia B. Earp & Angela Reese, 2002). From an organization's point of view, the presence of privacy policy defines the way the business is conducted by the organization (Wouters, Simoens, Lathouwers & Bart Preneel, 2008).

Over the past decade, data privacy laws have been introduced in a number of countries. The European Union in 1995 introduced "European privacy Directive" to ensure privacy over the internet. Privacy over the internet in United states are governed by laws like "The Children's Online Privacy Protection Act (COPPA)", "The Gramm-Leach-Bliley Act", "Health Insurance Portability and Accountability Act (HIPAA) Privacy Rules" (Elizabeth Perkins & Mike Markel, 2004). A lot of other countries like Australia, Argentina and Canada have also introduced their own privacy laws (Perkins & Markel, 2004; Larry Korba, 2002). Saudi Arabia in 2001 passed "The Internet Laws" to govern every aspect of information and data privacy over the internet (Saudi internet rules, 2001).

Everyday infinite amount of information is collected by the websites. Previous studies have proven that privacy concerns the users over the internet (Federal trade commission Report, 2000; Adkinson, Eisenach & Lenard, 2002). A survey conducted by Graphics, Visualization and Usability centre of the Georgia Institute of Technology found out that 69.95% of the users were concerned providing information to the websites (James E. Pitkow & Colleen M. Kehoe, 1997). Another study conducted by an internet privacy solution company "TRUSTe" Found that 78% of users will only disclose information if they are provided with some kind of privacy assurance. The results of these surveys established that websites that have a dedicated privacy policy page present in their websites are considered trustworthy and increase user confidence towards the disclosure of information to the website.

The regulation of the internet and the main privacy concerns are the areas that need to be thoroughly researched (James S. Wilson, 2000). As the previous studies have established that these privacy concerns can have serious consequences. Keeping the concerns of the privacy over the internet, we conducted a study on privacy policy implementation in e government websites of Saudi Arabia. The aim of this study is to measure the status of privacy policy in e government websites of Saudi Arabia.

## 3. Research Methodology

### 3.1 Selecting E government Websites

In this step, all the websites concerning the Saudi Arabian government and services were selected, and a list was created. There were a total of 54 E government websites in Saudi Arabia. A list of all E government websites is given in Table 1.

### 3.2 Content Analysis

This step was concerned with the presence of privacy page in the website. The presence of the privacy page asked for the content analysis of the privacy statement to be done. Content analysis is a research tool to derive valid inferences and concepts from the text (Earp, Antón, Aiman-Smith & Stufflebeam, 2005). The privacy statement of each website was studied line by line to understand the level of privacy implemented by the websites. The evaluation of the privacy statement was done on the basis of the United States Federal Trade Commission's Fair Information Practice Principles (FIPs). The Fair Information Practice Principles (FIPs) are widely accepted guidelines for ensuring fair practices and is based on following core principles (Annie I. Antón *et al.* 2002; Richardson, Agrawal, & Domingos, 2003).

#### 3.2.1 Notice/Awareness

It should be clearly stated to the user what information is collected from him and how this information is used (Annie I. Antón *et al.*, 2002; Richardson *et al.*, 2003; Peter S. Gemmill, 1997).

### 3.2.2 Choice/Consent

Users should be clearly informed about the disclosure of the information by the website (Annie I. Antón *et al.*, 2002; Richardson *et al.*, 2003; Peter S. Gemmell, 1997).

### 3.2.3 Access/Participation

Users must be able to access the information provided to the website (Annie I. Antón *et al.*, 2002; Richardson *et al.*, 2003; Peter s. Gemmell, 1997).

### 3.2.4 Integrity/Security

Websites should prevent any unauthorised access to the user data. Websites must also ensure that data remains accurate all the time (Annie I. Antón *et al.*, 2002; Richardson *et al.*, 2003).

## 3.3 Classification

The last part of our research methodology was classifying the websites. Once the websites were checked for presence of privacy policy, each website was classified as:

### 3.3.1 Privacy policy Present

A link to a separate page stating the privacy policy of website is present i.e. privacy policy is present.

### 3.3.2 Privacy Policy Not Present

No page or link dedicated to privacy policy of website present i.e. privacy policy not Present.

The second part of the study was to check whether the privacy policy complies to the Fair information practice principles of Notice/Awareness, choice/Consent, Access/Participation and Integrity/Security. Figure 1 demonstrates the weight age given to each of the fair Information Practice principles.

The FIP principles were given an equal weight age and based on the presence of these principles, the website's privacy policy was rated as:

- 1) *Strong*: The privacy policy of website complying with any three FIP principles was classified as Strong.
- 2) *Weak*: The privacy policy of website complying with two or less than two of the four FIP principles was classified as Weak.

## 4. Results

Considering the amount of attention that data privacy over the internet is given these days, the results of our study were shocking. It was found that out of the total e government websites in Saudi Arabia; only 28% have some kind of privacy policy present. The rest of 72% websites didn't have privacy policy present on the website. Figure 2 shows the percentage of privacy policy in e government websites of Saudi Arabia.

The results were also surprising because some of the major e government websites didn't have any privacy policy implemented.

The second part of our study was to determine the status of privacy policy based on fair information practice's principles (FIPs) of Notices, choice/consent, access /participation and integrity/security. The results about the status of the privacy policy were quite encouraging. It was found that out of the total websites where privacy policy was present, 60% has a strong status of the privacy statement while as 40% had a weak privacy statement. The status of the privacy statement is shown in Figure 3.

## 5. Conclusion and Future Work

Data Privacy and security are the major concern of organisations and users over the internet today. The most common way of implementing privacy over the internet is to ensure the presence of privacy policy in the website. Privacy policy is one of the most important documents in any website. The presence of privacy policies is important not only for users but also for the organisations as the data privacy laws differ from one place to another. The motive behind this study was to measure the presence of privacy policy in e government websites of Saudi Arabia. The results of the study showed that there are very less number of e government websites that have the p of privacy policy. The less percentage of privacy policy presence in websites can be attributed to the fact that e governance is still in an emerging stage in Saudi Arabia. Another possible reason for this could be that there is not much importance given to privacy policy even in the traditional working environment of Saudi Arabia. The results showed that 72% of the e government websites don't have a privacy policy page in their websites. As far as the statuses of the privacy policy in the websites were privacy policy was present, the results were far better with 60% of strong privacy policy. The status of the privacy policy was calculated on the basis of FIP principles, which act as a benchmark for writing privacy policy for any website.

This study was concerned only with the e government websites of Saudi Arabia. The study can be extended to other sectors as well as to other countries. Furthermore, the comparative study between sectors is highly encouraged. We recommend the study to be extended to other areas.

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- Yesser. [Online] Available: <http://www.yesser.gov.sa/en/Pages/default.aspx>

Table 1. List of E government websites in Saudi Arabia

Government Department	Website
Ministry of Communications and Information Technology	<a href="http://www.mcit.gov.sa">http://www.mcit.gov.sa</a>
Communications and Information Technology Commission	<a href="http://www.citc.gov.sa/">http://www.citc.gov.sa/</a>
National Center for Digital Certification (NCDC):	<a href="http://www.pki.gov.sa/">http://www.pki.gov.sa/</a>
Saudi Computer Society	<a href="http://www.computer.org.sa">http://www.computer.org.sa</a>
Saudi Industrial Property Authority	<a href="http://www.modon.gov.sa/">http://www.modon.gov.sa/</a>
Saudi Post	<a href="http://www.sp.com.sa/">http://www.sp.com.sa/</a>
King Abdulaziz City for Science and Technology	<a href="http://www.kacst.edu.sa">http://www.kacst.edu.sa</a>
Computer Emergency Response Team-Saudi Arabia (CERT-SA)	<a href="http://www.cert.gov.sa/">http://www.cert.gov.sa/</a>
Saudi National Anti-SPAM Program	<a href="http://www.spam.gov.sa">http://www.spam.gov.sa</a>
Ministry of foreign affairs	<a href="http://www.mofa.gov.sa">http://www.mofa.gov.sa</a>
Ministry of Civil services	<a href="http://www.mcs.gov.sa">http://www.mcs.gov.sa</a>
Saudi Arabia Government	<a href="http://www.the-saudi.net/">http://www.the-saudi.net/</a>
The Saudi Arabian Market Information Resource.	<a href="http://www.saudinf.com/">http://www.saudinf.com/</a>
Arab Gulf Program	<a href="http://www.agfund.org">http://www.agfund.org</a>
Arab fund	<a href="http://www.arabfund.org/">http://www.arabfund.org/</a>
The Ministry of Commerce and Industry (MOCI),	<a href="http://www.commerce.gov.sa">http://www.commerce.gov.sa</a>
The Council of Saudi Chambers	<a href="http://www.saudichambers.org.sa">http://www.saudichambers.org.sa</a>
Eastern Province Chamber of Commerce	<a href="http://www.chamber.org.sa">http://www.chamber.org.sa</a>
Ministry of Economy and Planning	<a href="http://www.mep.gov.sa">http://www.mep.gov.sa</a>
Ministry of education	<a href="http://www.moe.gov.sa">http://www.moe.gov.sa</a>
Ministry of finance	<a href="http://www.mof.gov.sa">http://www.mof.gov.sa</a>
General Organization for Social Insurance	<a href="http://www.gosi.gov.sa">http://www.gosi.gov.sa</a>
Ministry Of hajj	<a href="http://www.hajjinformation.com">http://www.hajjinformation.com</a>
Ministry of Health	<a href="http://www.moh.gov.sa">http://www.moh.gov.sa</a>
Ministry of Higher Education	<a href="http://www.mohe.gov.sa">http://www.mohe.gov.sa</a>
King Fahd Complex for the Printing of the Holy Qur'an	<a href="http://www.qurancomplex.org">http://www.qurancomplex.org</a>
Ministry of Islamic Affairs, Endowments, Da'wah and Guidance	<a href="http://quran.al-islam.com">http://quran.al-islam.com</a>
Islamic Development Bank	<a href="http://www.isdb.org">http://www.isdb.org</a>
Jeddah Chamber of Commerce & Industry	<a href="http://www.jcci.org.sa">http://www.jcci.org.sa</a>
Ministry of Justice	<a href="http://www.moj.gov.sa">http://www.moj.gov.sa</a>
King Abdul Aziz (Ibn Saud) Information Resource	<a href="http://www.ibnsaud.info/">http://www.ibnsaud.info/</a>
King Fahd Bin Abdul Aziz	<a href="http://www.kingfahdbinabdulaziz.com">http://www.kingfahdbinabdulaziz.com</a>
King Faisal Foundation	<a href="http://www.kff.com/">http://www.kff.com/</a>
King Faisal Specialist Hospital and Research Centre	<a href="http://bportal.kfshrc.edu.sa">http://bportal.kfshrc.edu.sa</a>
Ministry Of labor	<a href="http://www.mol.gov.sa">http://www.mol.gov.sa</a>
Majlis Al-Shura	<a href="http://www.shura.gov.sa">http://www.shura.gov.sa</a>
Ministry of Municipal and Rural Affairs	<a href="http://www.momra.gov.sa/">http://www.momra.gov.sa/</a>
Organization of Arab Petroleum Exporting Countries (OAPEC)	<a href="http://www.oapecorg.org/">http://www.oapecorg.org/</a>
OPEC	<a href="http://www.opec.org">http://www.opec.org</a>
Ministry of Petroleum and Mineral Resources	<a href="http://www.mopm.gov.sa">http://www.mopm.gov.sa</a>
Saudi Arabian Airlines	<a href="http://www.saudiairlines.com">http://www.saudiairlines.com</a>
SAUDI ARABIA investment authority	<a href="http://www.sagia.gov.sa">http://www.sagia.gov.sa</a>
Saudi Arabian Monetary Agency	<a href="http://www.sama.gov.sa">http://www.sama.gov.sa</a>
Saudi Aramco	<a href="http://www.saudiaramco.com">http://www.saudiaramco.com</a>
Saudi Basic Industries Corporation	<a href="http://www.sabic.com/">http://www.sabic.com/</a>
Saudi Arabian Standards Organization	<a href="http://www.saso.org.sa">http://www.saso.org.sa</a>
Saudi Fund for Development	<a href="http://www.sfd.gov.sa/">http://www.sfd.gov.sa/</a>
Saudi Commission for Tourism and Antiquities	<a href="http://www.scta.gov.sa">http://www.scta.gov.sa</a>
Saudi Geological Survey	<a href="http://www.sgs.org.sa">http://www.sgs.org.sa</a>
Saudi Ports Authority	<a href="http://www.ports.gov.sa">http://www.ports.gov.sa</a>
Saudi Telecommunications Company	<a href="http://www.stc.com.sa">http://www.stc.com.sa</a>
Saudi Press Agency	<a href="http://www.spa.gov.sa">http://www.spa.gov.sa</a>
Ministry of Interior	<a href="http://www.moi.gov.sa">http://www.moi.gov.sa</a>

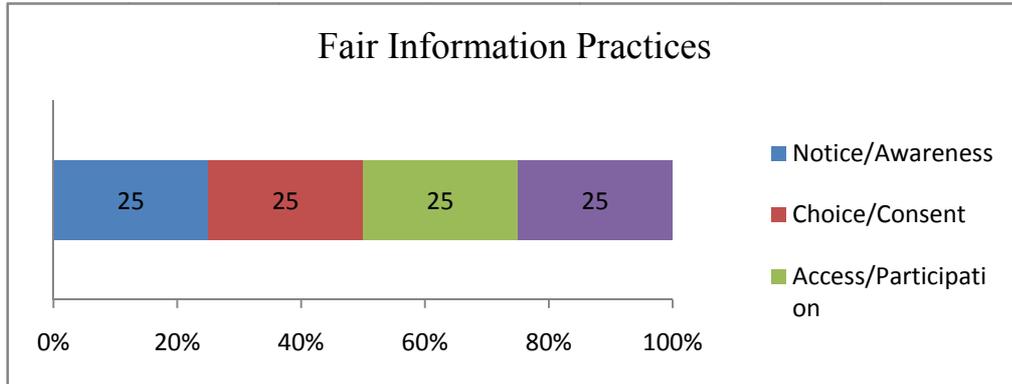


Figure 1. Fair Information Practices

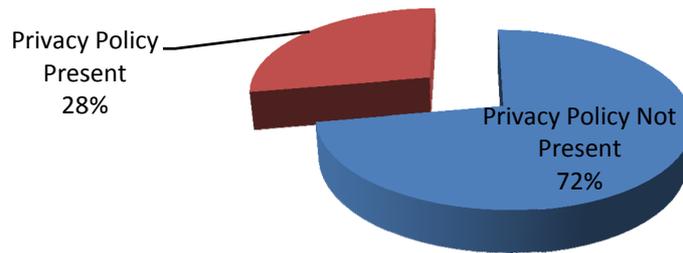


Figure 2. Privacy policy in E Government websites of Saudi Arabia

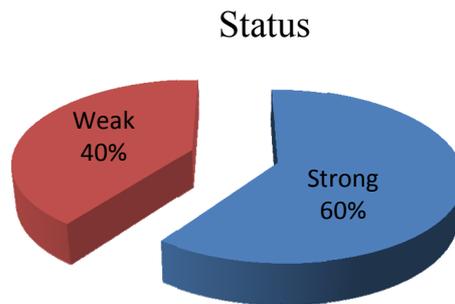


Figure 3. Status of the privacy statement