

PRIVACY POLICY EVALUATION OF UNIVERSITIES IN SAUDI ARABIA: POLICY EASE OF ACCESS AND READABILITY

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ABSTRACT

With the growing awareness of the importance of protecting user information online, the need for websites to include comprehensive privacy policies is more important than ever. It is more important that the policy is accessible and fully understandable by the potential users. This paper assesses readability and ease of access of privacy policies of higher educational institutions in Saudi Arabia (SA). Privacy policies from thirty-three public and private universities and colleges in SA were collected and analyzed, and the results show the availability of the privacy policies are different for public and private institutions. In addition, policies vary in their readability. Future research direction is suggested.

INTRODUCTION

The widespread popularity of Internet technologies continues to dominate major socio-economic sectors world-wide. Educational sectors are no exception. Adoption of Internet technologies and social media applications in the realm of higher education is new phenomenon. Studies on information-era evolution span across various dimensions; however, privacy continues to be a major topic for both academia and industries due to direct relevance and significance to the users. Privacy policy becomes an inevitable obligation for public organizations, including higher educational institutions.

Privacy becomes a critical matter in modern society, especially in sectors which see businesses interacting with their customers via information technology. In other words, information technology is increasingly empowering societal operations, with websites serving as the platform in which organizations and businesses can reach their clients across the globe. Conventional business approach has evolved over the years to incorporate e-commerce - an approach which offers consumers and products/service providers the convenience to carry out transactions via internet websites without physical contact. This convenience, comes with its challenges, some of which include insecurity of consumers' data and sensitive information stored on various websites. Besides legal requirements promulgated in almost all countries in the world, SA and USA included, organizations need to secure their consumers' trust in website security.

Naturally, all organizations must have a well-developed, easily accessible, comprehensive and understandable privacy policy. With presence of an explicitly released privacy policy, consumers are, at the very least, provided with a form of perceived guarantee that the security of their collected information is also a concern to the organization. In turn, such a guarantee may boost consumers' loyalty with an organization and its web services (Flavián & Guinalú, 2006). A privacy policy outlines the level and nature of information a website withholds, and delineates how, and to what extent, the information will be used by the organization.

This study aims to supplement existing literature on privacy policy in terms of its accessibility in the context of higher educational institutions in SA. Currently, few studies emphasize educational sectors in SA with close examination of privacy policy. This study serves as an exploratory effort into the status of privacy policies in SA by focusing on the accessibility and readability of the policies published.

This paper is organized as follows: it begins with a literature review: followed by the presentation of the research design; the next section presents data analysis and major findings; the last section provides recommendations for future research.

LITERATURE REVIEW

Higher education presents services through website its target "customers". These customers are the thousands of perspective and current students, alumni, faculty members, and staff, prompting the need for well-defined privacy guidelines. The vast scope of procedure in higher education determines the criticality of proper rule evaluations, maintaining effectiveness based on valid and robust methodologies. Conversely, higher educational institutions employ their official websites as a preferred medium to broadcast strategies to the target audience. Availability of procedures is normally exhibited via webpages with contents of relevant information. It is critical to achieve user-friendly interfaces so that this information can be properly access website visitors. Additionally, the accessibility of websites is another important aspect of presenting this important information.

With the development of new Internet technologies, concerns on how to protect user's information has been increasing. Privacy policy has become one of the essential policies that users are required to accept before signing up with different services. However, not all users fully understand them (Meiselwitz, 2013). With regard to information security, privacy policy has become much more critical.

Nevertheless, privacy policy necessitates higher education institutions to formulate consistent and effective privacy rules. Therefore, merely providing a privacy policy is not enough, the policy needs to be easily accessible and comprehensible by its intended audiences.

An important aspect of implementation of privacy policies by organizations is the purpose of enactment of such formal prescriptions in terms of protecting user's private information. One group of studies argue that privacy policies are implemented to keep organizations out of trouble by keeping them away from legal sanctions pertaining to data privacy (e.g., Alhomod & Shafi, 2013). For instance, the USA may impose legal restrictions and fines of up to one million U.S. dollars on organizations violating privacy policies by disclosing private information to unauthorized audiences (Alhomod & Shafi, 2013). On the other hand, studies abound in contending that privacy policies should ensure that users be entitled to fair treatment in the way that personal information is collected, stored, and used (e.g., Schwaig, Kane, & Storey, 2006). In particular, Schwaig et al. (2006) illustrate that privacy policies in private sector are a derivative of the protection of citizens' information from intrusion by the government. Thus, this study takes perspectives from both users and institutions and recognize the purpose of privacy policies as protection for both organizations and their customers.

RESEARCH METHODOLOGY

This study is the first attempt on the evaluation of privacy policies in higher education institutions in SA. This project focuses on the *ease of access* and the *readability* of the privacy policies by SA universities.

Saudi Arabia Ministry of Education (2017) and UniRank (2017) presented top ranked public and private universities and colleges in SA. Based on the ranking, the top 33 universities were adopted for this study. Among them, seven were private universities, while 26 are public institutions. Privacy policies published on the universities websites are collected for analysis.

In this study, the ease of access and readability are used to help determine the level of accessibility of privacy policies. Ease of access is defined as the easiness for the users to reach the policy. The users must be able to find the policy on the site with as little effort as possible. The user should be able to access the policy within three clicks (3-click rule), whether it is through search or direct access from the links provided on the site. In addition, access of the policy page should not require extra software installation. Therefore, ease of access is measured by examining the existence of policies, counting the number of clicks required for accessing it, checking the policy availability through search function, and verifying the file format used for presenting the policy (Meiselwitz, & Wang, 2016).

The policy should be easily understood by its intended readers. The readability was measured by the length of the policy such as total numbers of words, sentences, and pages, and Flesch-Kincaid Grade Level (FGL) scores. Due to the lack of tools available for evaluating Arabic expressions, the readability evaluation has been limited to English version of the policies collected. The Juicy Studio website (2016) has been used for this purpose.

RESULT

This section presents results on the ease of access and readability of the privacy policies collected.

Ease of Access

Metrics such as policy availability, number of clicks required to access the policy, availability through search function, and file format are used to assess policy ease of access for the privacy policies of selected SA schools.

Table 1 below present's data gathered from the schools' websites in terms of ease of access for their respective privacy policies. In particular, among 33 schools, 25 schools have published the privacy policy in Arabic, while eighteen of them have published the English version of the privacy policies on the websites. Nine universities only provide privacy policies in Arabic, while two universities provide English version only. Sixteen universities provided the policy in both Arabic and English. It should be noted that the Islamic University of Madinah is the only university in the country that accepts international students, but it provides the privacy policy in Arabic version only. Princess Nora University is the only public university accepting female students, and it provides the privacy policy in both languages. In total, 45.4% of the selected universities (i.e., a total of 15 out of 33) do not present English version of the privacy policies on their official websites, and none of these 15 schools accept foreign students. This may explain why there is a lack of English translations of privacy policy published on their websites. Unfortunately, nearly a quarter of the universities analyzed (eight, 24.24%) did not provide privacy policy in any language on their website. Failing to provide an accessible policy can make it even more difficult for the potential users (perspective and current students, faculty members, and staff members) to obtain such important information.

Most of the policies are accessible within three clicks from the institution's homepage. Out of the eighteen institutions that provide English version of the privacy policy, sixteen institutions have a link directly to the privacy policy on their homepages. One policy was accessible by two clicks. Only one institution required four clicks to access the privacy policy. In addition, users can also access the policy by conducting a search on the institution's site. Moreover, all the privacy policies collected are presented as web-based documents on websites of the SA schools. This makes it easy for the readers to access the policy. For instance, the Arab Open University has its English version privacy policy reachable within two clicks. While the King Abdul-Aziz University requires users to make four clicks on its official website to reach its privacy policy, a design not advisable when considering established metrics of ease of access.

Table 1: Privacy policy ease of access for 33 universities in Saudi Arabia (Ordered by University Names Alphabetically)

Institution	Private /Public	Arabic /English	Available Through Search Function English / Arabic	Number of Clicks English /Arabic	File Formats in English	File Formats in Arabic
Al Baha University	Public	none found		-/-		
Al Jouf University	Public	Arabic	- / yes	-/1		html
Al Yamamah University	Private	none found		-/-		
Alfaisal University	Private	none found		-/-		
Al-Imam Muhammad Ibn Saud Islamic University	Public	both	yes / yes	1/1	html	html
Arab Open University	Private	english	yes / -	2/-	html	
Dar Al Uloom University	Private	both	yes / yes	1/1	html	html
Effat University	Private	none found		-/-		
Islamic University of Madinah	Public	arabic	- / no	-/1		html/pdf
Jazan University	Public	both	yes / yes	1/1	html	html
King Abdulaziz University	Public	both	yes / yes	4/1	html	html
King Abdullah University	Public	both	yes / yes	1/1	html	html
King Fahd University	Public	both	yes / yes	1/1	html	html
King Faisal University	Public	both	yes / yes	1/1	html	html
King Khalid University	Public	both	yes / yes	1/1	html	html
King Saud bin Abdulaziz University for Health	Public	both	yes / yes	1/1	html	html
King Saud University	Public	both	yes / yes	1/1	html	html
Majmaah University	Public	both	yes / Yes	1/1	html	html
Najran University	Public	arabic	- / yes	-/1		html
Northern Borders University	Public	arabic	- / no	-/1		html
Prince Mohammad Bin Fahd University	Private	english	yes / -	1/-	html	
Prince Sultan University	Private	none found		-/-		
Princess Nora University	Public	both	yes / yes	1/1	html	html
Qassim University	Public	arabic	- / yes	-/1		html
Shaqra University	Public	arabic	- / yes	-/1		html
Taibah University	Public	both	yes / yes	1/1	html	html
Taif University	Public	both	yes / yes	1/1	html	html
Umm Al-Qura University	Public	both	yes / yes	1/1	html	html
University of Bisha	Public	none found		-/-		
University of Dammam	Public	both	yes / yes	1/1	html	html
University of Ha'il	Public	both	no / yes	-/1		html
University of Jeddah	Public	arabic	no / yes	-/1		html
University of Tabuk	Public	arabic	no / yes	-/1		html

Source: data collected by the author on English version privacy policies only.

Policy Readability

Naturally, Human Computer Interaction design concepts are relevant in terms of assessing whether these web-based documents, via web pages, are user friendly in both content and presentations. For instance, one area of HCI research focuses on uses friendliness of website design to people with dyslexia (Santana et al., 2012). The author extends this concept of cognitive friendliness by examining content friendliness of the selected privacy policies in terms of their readability. Specifically, total number of sentences, total number of words, average words per sentence, number of pages, and FGL scores are measured for each policy collected. However, due to the lack of tools in the readability evaluation of Arabic documents, this study focused the readability of the English version of the policies only. *Table 2* below represents the readability measures for all the privacy policies that are presented in English.

Table 2: Privacy policy readability of 33 universities in Saudi Arabia

Institution	Total Sentences	Word	Avg Words Per Sentence	Pages	FGL
Al-Imam Muhammad Ibn Saud Islamic University	518	2537	4.9	5.07	7.39
Arab Open University	169	1223	7.24	2.45	7.84
Dar Al Uloom University	183	936	5.11	1.87	9.61
Jazan University	162	798	4.93	1.60	8.63
King Abdulaziz University	730	2864	3.92	5.73	10.56
King Abdullah University	246	1470	5.98	2.94	9.20
King Fahd University	344	1193	3.47	2.39	7.75
King Faisal University	422	2146	5.09	4.29	7.62
King Khalid University	219	2463	11.25	4.93	11.51
King Saud bin Abdulaziz University for Health	298	935	3.14	1.87	7.97
King Saud University	255	718	2.8	1.44	7.19
Majmaah University	255	2061	8.08	4.12	8.84
Prince Mohammad Bin Fahd University	358	1026	2.87	2.05	8.76
Princess Nora University	478	2396	5.01	4.79	8.32
Taibah University	305	949	3.11	1.90	6.35
Taif University	18	710	39.44	1.42	9.60
Umm Al-Qura University	288	1567	5.44	3.13	9.46
University of Dammam	237	1750	7.38	3.50	11.93
Average	304.72	1541.22	7.18	3.08	8.81

Source: data collected by the author on English version privacy policies only.

The number of sentences on the policies ranges from 18 to 730, while the total number of words spans from 710 words to 2,864. The total words for the 18 universities are 27,742 words, or about

1541.22 words on average. King Abdul-Aziz University has the longest privacy policy with 2,864 words. In contrast, Taif University has the most concise privacy policy with only 710 words. The drastic variations of total number of sentences and words among the 18 privacy policies indicate that the coverage of privacy policies can vary greatly.

Additionally, three universities had policies with FGL score above 10, indicating the higher level of reading capability is required to understand the policies. University of Dammam scored the highest level of FGL at 11.93, whereas the lowest FGL score is associated with Taibah University at 6.35. The average FGL score is about 8.81. Thus, it is clear that most of the 18 schools have privacy policies requiring a reading grade level between 6th grade and 12th grade, which is reasonable because the readers of these policies are students and staff members who should meet this reading grade level to understand the contents of the privacy policies.

DISCUSSION

With the data being gathered and compiled, it is important to analyze such data to obtain some insights about privacy policies among the selected 33 higher educational institutions in SA. Some major findings are presented in Table 3 and discussed subsequently.

Table 3: Summary of availability of the privacy policy for 33 SA institutions

	Arabic Version Availability		English Version Availability		Total number of Institutions
	Number	Percentage	Number	Percentage	
Public	24	92.31%	15	57.69%	26
Private	1	14.29%	3	42.86%	7
Total	25	75.76%	18	54.55%	33

It is worth noting that the availability of privacy policy is not the same for public and private institutions. Among the 25 universities that do provide privacy policies in Arabic, majority of them are public universities (24, 92.31%) while only one private institution (14.29%) does the same. Interestingly, among 18 universities that provide privacy policies in English, three of them are private institutions (42.86%) while fifteen public institutions (57.69%) did so. One plausible explanation might be that public universities receive funding from the SA government, and only admit students from SA. Private schools do not need to follow the same regulation, and more likely target international students. Therefore, they naturally present school related materials in English to attract international students.

Importantly, two universities are located in the countryside and eight developing universities did not have internet connection until two years ago. In addition, out of the fifteen universities that did not provide privacy policies in English, eleven were public universities. Apart from the Islamic university, the other universities were just founded recently (less than 10 years old). This may be the result that the publication of a privacy policy may not be a high priority to these universities.

Even though the average FGL score shows that an 8th grade reading level is required for readers to understand the policy, the majority of the policies do require a higher level of reading ability. The difference in total number of words and length of the policy also indicate that the coverage of the privacy policies varies greatly. The shortest policy was less than one and half page, and the longest policy covers more than five pages. Overall, 32% of the reviewed policies require a reading level equivalent to that of a high school graduate in the US. This assumes that the potential readers of the policies can read according to their grade level. Unfortunately, this applies only to some, as many people have reading abilities well below their grade level especially when English is not their first language.

CONCLUSION

This paper presents a preliminary attempt to understand privacy policy in terms of its accessibility for higher educational institutions in SA. In this analysis, 33 private and public universities were selected, and the privacy policies of these schools were searched for, analyzed, and summarized.

Provision of governmental funding by the SA government might be an important factor in determining whether a school tends to present its privacy policy in Arabic. Private schools, without obligations to comply with governmental regulations or requirements, tend to focus on attracting international students and provide English version privacy policies only. Additional analysis finds that schools lacking access to Internet are less likely to have privacy policy.

This study is only the first step in evaluating the privacy policies in SA higher educational institutions. By ensuring the accessibility of the policies, it is more important to verify the coverage of the policy, such as comprehensiveness and the level of protection. Therefore, more in-depth analysis on the level of protection is needed.

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