
Co-Designing with the Iman in a Haram Digital World: Drawing on the Quran and Sunnah to Support People's Privacy and Information Practices

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Abstract

It is with subtle irony that when the prophet Muhammad (Salla Allah Alihi Aasallam, SAW) received the Quran between 609-632 it contained revelations about privacy and information practices that, if the West had used to guide software design and policy, 2020 may not be contending such global crises from disinformation and hacking. Western social media milieu is at odds for followers of Islam, particularly for women and people from countries of conflict and regarding privacy and identity. Following a brief overview of social media use in the Arab world, we discuss 1) information and privacy concepts from the Quran and Sunnah, and 2) research problems for empirical work that we have identified through our fieldwork with vulnerable populations in the Middle East and in the Nordic countries.

Author Keywords

Co-design; Privacy; Identity; Gender; Haram; Islam; Arab; Quran; Disinformation.

Introduction

For the CHI community, the 21-country MENA region (Middle East & North Africa) and Arab diaspora as perhaps the greatest challenge in privacy design. Indicators show MENA among the fastest growing technology markets: Facebook with 164M monthly users (up from 56M in 2014) and youths' first source for news, Jordan and Lebanon leading in adult users, Saudi Arabia with highest social media growth, YouTube with 160% channel increase in 3 years, and Instagram beauty influencers with 30M+ followers and \$550M incomes [1]. Driving these gains are increased connectivity, financial and social mobility, high youth unemployment (almost 40% in Jordan) and civic unrest. Yet they are countered by state monitoring and licensing of websites and social media accounts; < 30% of Twitter users posting original content and retweets of top 2% driving 75% of Arab Twitter; World Press Freedom Index of 180 countries ranking Yemen at 167th, Saudi Arabia 169th, and Syria 177th [1]; along privacy with leakage in Arabic apps [2]; and high frequency of bots, influencers and other actors engaging in disinformation practices in regional conflicts and protests. During the November 2019 Iran protests the government banned Internet access, allowing only Halal Net while the UAE often bans Skype. Added complexity is the uneven wealth of MENA countries and their burden in supporting refugees, and the appropriation of communication technologies by actors in conflict zones against civilians and aid agencies. In short, "the walls have ears" is known by most every person of age in the Arab World; every family has experienced the human cost of when PII (personally identifiable information) is compromised. These costs range from social embarrassment or ostracism, to harassment, job loss, divorce, fines,

banishment, detainment, conscription, imprisonment, or death. Research is vitally needed on how privacy is defined, enacted and compromised in the Arab World, and how privacy can be best integrated through technology that guarantee people's safety in myriad situations. Communication tools give people agency, but it is imperative that they do not come at a human cost—today or in future.

Arab Concepts of Information and Privacy

Research [3-7] shows that communication and privacy (hurma) in the Arab World are governed by 3 sources of law and knowledge: 1) secular or government law; 2) Islamic law (Sharia) as contained in the Quran and Sunnah (and Hadith) that guide Muslims on all aspects of everyday life, including privacy, relations, information sharing, speech and dress; and 3) tribal law and cultural/social norms that emphasize the collective and family honor (a'ardth) over the individual, and are passed through generations, preserved through blood lines and across territorial borders. All three sources are at play at any time and subject to change and differing interpretation regionally and locally. With whom, for example, can a female teen be friends with, chat privately, or follow on social media? What can she post about or use in her profile and photos? According to Islamic concepts of halal (permissible) and hijab (curtain or veil) she can only be friends with her immediate family and cannot share photos of herself. If she is in a conservative country, she would need her male guardian's permission to have an account and he would have her password. For some families, it is unacceptable for women to have an account and instead they use an account in their son's name and photo. Thus, confusion reigns when she contacts unknowing recipients using her son's profile or

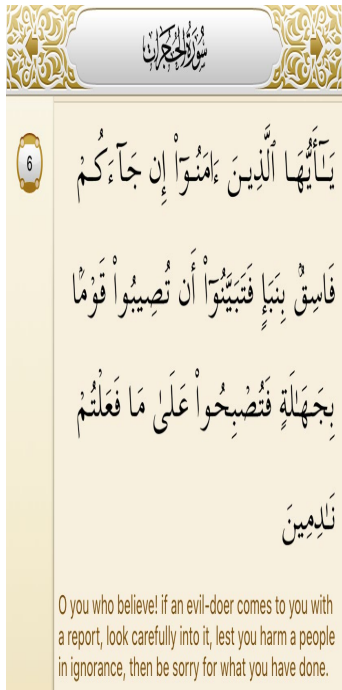


Figure 1 Al-Hujurat 49:6 setting rules for morals and validation of information

his WhatsApp. Haram is the Islamic term for forbidden behavior and anything non-CIS, i.e., LGBTQ is considered haram as well as possibly illegal by secular and tribal law and therefore greatly warranting technology privacy protections. Other vulnerable situations involve domestic violence, human trafficking, early marriage and muta'a (temporary pleasure) marriage, divorce, and women seen as violating social norms such as publicly operating in enterprise. Everyday life and war, of which MENA experiences much, bring these situations, heightened privacy needs where people use accounts in multiple identities, have strict rules on friendships and dialog, strategies for vetting information and sources, and strong needs for trusted encrypted communications. Aid groups such as, the White Helmets need to protect their PII/agency data at risk of being targeted online and with munitions. This framework of secular, Islamic, and tribal laws together with social and cultural values, suggests broad areas for researching privacy and identity in the Arab world. In the remainder of our paper, we discuss specific research problems for the CHI community identified through our fieldwork and how these problems are best understood and approached through an Arab lens.

Research Problems

1) Programs for media and information literacy (MIL) or Internet safety have been developed by western agencies and then adapted in other countries. We argue an Oriental context-specific MIL is requisite, one based on both the Holy Quran and Arab culture and that also considers the sensitivities of war—as so many Arab countries have experienced (are engaged in) conflict. These factors have tremendous impact on design of current and future

Internet-based programs and mobile applications and raise questions for the design process, types of tools needed, and impact on users' lives. In our fieldwork we use codesign with stakeholders and Imams to create such MIL programming. The Quran 49:6 Surah Hujurat (Fig1) provides Rules of Akhlaq governing the validation of information and spreading of news. The Syria context, for example, includes the need for verifying the accuracy of information, which is weaponized by the regime and other factions. Safe techniques are needed to assess rumors of amnesty, the condition and return of property, release of conscription from the army, news and release of detainees, status of towns, checkpoints and fighting—to name a few topics.

- 2) While women and girls are increasingly becoming more active on social media, the high unemployment rates and influx of refugees, e.g., Jordan and Lebanon, have stressed the need for women to operate microbusinesses. Examples include running beauty salons out of their homes, selling homemade foods such as makkdous, or embroidery and soaps at markets. The beauty salon example is particularly challenging for women as it is haram in conservative cultures for women to have social media profiles in their own names, to post their mobile and address. Furthermore, salon owners cannot post photos of their clients' hair or makeup, nor can their clients easily post salon recommendations without also risking harassment. Thus, research questions focus on "how can women safely advertise their businesses and brands without risk of harassment?" and "how can female customers safely engage in peer recommendation without risk of harassment?"
- 3) A Syrian woman who migrated to Sweden in 2015 tries to support herself through her own business of herbal products and stitching. She faces many challenges in integration with advertising her business and networking in her town. She and her family are highly concerned for her privacy guide and include marketing her business, e.g., only

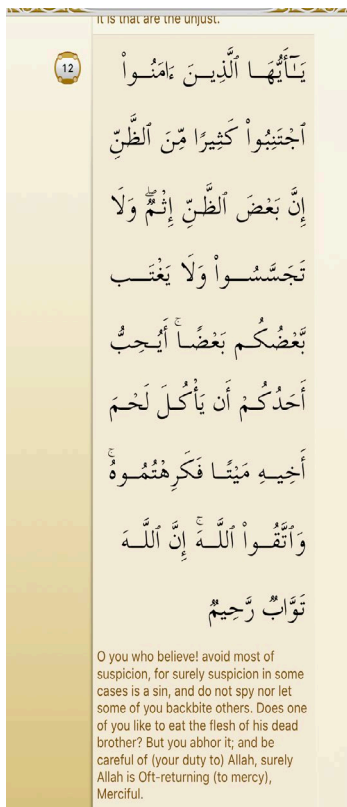


Figure 2 Al-Hujurat 49:12 about suspicion and backbiting others.

approaching male clients with a male family member. Her very limited social community comprises the small world of Arabs, thus her business opportunities are limited, and she is at-risk of information poverty (small information world). Research is needed to understand her challenges and support her business.

- 4) A Palestinian woman in Finland plans to open a small halal food delivery business with the help of her community. Finland is rich in using technology (apps for food advertising, approaching customer strategies etc.). However, the woman lacks literacy in how to use these apps in Finnish and how to approach the right customer target—a significant challenge for Arab refugee women to learn new technology cultures and skills in older age. She uses WhatsApp to connect with Muslim families, students and others in the city, who are looking for halal homemade food. She wears a niqab (face veil), which is rare in Finland and will hire only Muslim workers for her food preparations, food storage, delivery services and marketing—all will create challenges to interacting with business partners. Research is needed on “how can women achieve MIL/ICT skills and business success in western countries while adhering to Islamic practices?”

Conclusions

What core insights from the Prophet (SAW) and can guide CHI to identify and carry out research for the Arab world? Privacy, as we continue to relate from the 7th to 21st centuries is contained in Surah An-Nur 27-28 that forbids a person from entering another’s property if he/she does not have verbal permission from the owners, e.g., salam, assalamu’alaikum or having knocked three times for authentication. Surah Al-Baqarah 188, An-Nisa’ 58 and Al-Anfal 27 emphasize the building of trust and maintaining friendships and relationships and how one cannot put trust

automatically without realizing or considering factors such as perceived benefits, privacy, risk management, virtues and value, etc [8]. Moreover, Surah Al-Hujurat 49:12 (Fig 2) urges all to avoid negative assumption and never spy nor backbite others as such acts contribute to spreading faked and incorrect information. Integrating these Quranic views along with Arab culture and laws to societal needs suggest novel avenues for technology design that may yield broad impact.

References

- [1] Radcliffe, D., & Bruni, P. State of Social Media, Middle East: 2018. <http://hdl.handle.net/1794/24301>
- [2] Youssef, A. & Shosha, A. Quantitative dynamic taint analysis of privacy leakage in Android Arabic apps. ACM ARES '17. <https://doi.org/10.1145/3098954.3105827>
- [3] Faisal, M., & Alsumait, A. Social network privacy & trust concerns. ACM iiWAS '11.
- [4] Abokhodair, N., & Vieweg, S. Privacy & social media in Arab Gulf. ACM DIS '16.
- [5] Abokhodair, N., et al. Photo sharing in the Arab Gulf: ACM CSCW '17.
- [6] Rouibah, K., & Abbas, H. Effect of personal innovativeness, attachment motivation and social norms on acceptance of camera mobile phones: Int. J. Handheld Comput.
- [7] Saleh, M., et al. Privacy invasion experiences and perceptions. CHI EA '18.
- [8] Lubis, M. & Kartiwi, M. (2013). Privacy and trust in the Islamic perspective: Implication of the digital age. 2013 5th International Conference on Information and Communication Technology for the Muslim World, ICT4M 2013. 1-6. 10.1109/ICT4M.2013.6518898.