Between a Rock and a Cell Phone: Communication and Information Technology Use during the 2011 Uprisings in Tunisia and Egypt

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ABSTRACT

Many observers heralded the use of social media during recent political uprisings in the Middle East, even dubbing Iran’s post-election protests a “Twitter Revolution”. The authors seek to put into perspective the use of social media in Egypt during the mass political demonstrations in 2011. We draw on innovation diffusion theory to argue that these media could have had an impact beyond their low adoption rates due to other factors related to the essential role played by social networks in diffusion and the demographics of Internet and social media adoption in Egypt, Tunisia and (to a lesser extent) Iran. To illustrate the argument the authors draw on technology adoption, information use, discussion networks and demographics. They supplement the social media data analysis with survey data collected in June 2011 from an opportunity sample of Egyptian youth. The authors conclude that in addition to the contextual factors noted above, the individuals within Egypt who used Twitter during the uprising have the characteristics of opinion leaders, that is, a group of early adopters with influence throughout their social circles and beyond. These findings contribute to knowledge regarding the use and impact of social media during violent political demonstrations and their aftermath.

Keywords: Innovation Diffusion, Middle East, Mobile Phones, Social Media, Social Networks

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THE ROLE OF SOCIAL MEDIA IN POLITICAL CRISIS

Protesters took to the streets with “a rock in one hand, a cell phone in the other,” according to Rochdi Horchani – a relative of Mohamed Bouazizi, the 26-year-old Tunisian street vendor who set himself on fire in December 2010 to protest police harassment and corruption (Ryan, 2011). Bouazizi’s death in early January 2011 as a result of his burns triggered riots leading to the downfall in mid-January of the 23-year reign of Tunisia’s President Ben Ali. A wave of protests against Middle East authoritarian governments followed in Egypt, Libya, Bahrain, Algeria, and Syria, and came to be dubbed the ‘Arab Spring’. Starting in July 2010, prior to the uprising, WikiLeaks began to release confidential State Department cables indicating that the US did not much admire the authoritarian leaders in many of these countries—a development played out via a set of online documents that certainly may have contributed to Arabs’ confidence in protesting. In addition, much credit has been given to the role played by social media used by citizens to share with each other and with international media the news of what was happening in the streets.

On June 13, 2009, the day the Iranian government announced controversial results in Iran’s June 12th Presidential elections, hundreds of thousands of protesters came to Azadi (Freedom) Square in Tehran. In the protests that continued despite a number of deaths and injuries, the Western media declared this a ‘Twitter Revolution’ (Grossman, 2009; Schleifer, 2009). The role of Twitter, YouTube and Facebook, among other social media, in mass political protests has been heralded in the Arab Spring, as well. In Tunisia, Facebook became the medium of choice among social media, because Twitter adoption was very low and the (now former) Ben Ali government blocked Flickr and YouTube (Lotan et al., 2011; Saletan, 2011). In Egypt Facebook was also more widely adopted than Twitter, but Twitter is more resilient to Internet blockage by government. That is, Twitter can still be used over cell phones, which have a very high adoption rate throughout Egypt, Tunisia and Iran as well as the rest of the Middle East (described below).

Massive protests of corruption and unemployment over 18 days between January 25 and February 11, 2011 (primarily in the two largest cities, Cairo and Alexandria) led to the end of the 30-year reign of President Hosni Mubarak. To constrain the flow of cell phone communications from areas of Tehran where post-election protests were taking place, e.g., Azadi and Ferdowsi Squares and along Vali Asr Street, the Iranian government appeared to have restricted bandwidth on cell phone towers (Sohrabi-Haghigat & Mansouri, 2010). The authors also heard (through hearsay not verified) that to communicate without depending on the cell towers during demonstrations, people would sometimes pass messages to nearby fellow demonstrators using Bluetooth technology between cell phones. The Egyptian government also restricted cell phone traffic in areas of Cairo (Tahrir Square) and Alexandria during demonstrations, and cut off Internet access completely (Singel, 2011) for several days in January 2011. This type of government restriction of traffic on cell towers also was reported in the mass street protests over disputed elections in Belarus (Zuckerman, 2009; Morozov, 2011). In this paper we put the use of social media, especially the micro-blogging service Twitter, into the larger perspective of diverse information sources during the political uprising in Egypt that led to the resignation and departure of President Mubarak on February 11th, 2011. We compare social media use in Egypt with that of Tunisia (leading to the ouster of the 23-year reign of President Ben Ali) and of Iran (a non-Arab Middle Eastern country) during contested presidential elections in June 2009. We see similar technology adoption, demographic and social patterns in Egypt, Iran, and Tunisia where the Internet, cell phones, and most recently social media have been used to contribute to political uprisings (Kavanaugh, 1994; Kavanaugh, 1998; Kavanaugh, 1999; Kavanaugh, 2004).
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