

# **The Impact of Social Networks on Behavioral Change: A Conceptual Framework**

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*Social networking significantly impacts political as well as social life on a global scale. While there exists considerable research on the use of social networks in marketing, conspicuously absent is research that addresses the impact of social networking on behavior and political change. After an extensive literature review of psychological theories and models, this paper presents a framework that proposes the prerequisites required for behavior and political change (World Bank 2006), and relates users' social networking perceptions to attitudes towards change, intention to change, and actual behavior. The article concludes with future research propositions to test the framework and political implications.*

**Keywords:** social network, behavior change, political change, framework

## **1. Introduction**

Social networks significantly impact political relationships as well as social life. Social networks facilitated elections in the United States (Baumgartner & Morris 2010), political change in Malaysia (Smeltzer & Keddy 2010), online political activism in China (Guobin 2009), and information seeking during political crisis in Pakistan (Shaheen 2008) and Iran (Morozov 2009). Social networks also increased political efficacy (Lee 2006) and political participation in Japan (Ikeda & Richey 2005), Canada (Cournoyer 2009), and Egypt (Attia et al. 2011).

A successful 'Twitter Revolution' took place in Moldova in 2009 after a fraudulent election. Protesters used text messaging, Twitter, Facebook, and LiveJournal to communicate with each other and share information. The Moldovan government censored the Internet after the demonstrations; however, government censorship does not typically suppress protests (Ho 2011; Hodge 2009; Marandi et al. 2010). Facebook and Twitter played a prominent role in the modern uprisings, unrest, and revolutions in Tunisia, Egypt, Libya, Yemen, Syria, and Bahrain. The impact of social networking tools such as Facebook, Twitter, and YouTube in social and political environments can be globally exemplified in the recent Egyptian revolution where former Egyptian

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President Hosni Mubarak stepped down and now with former government cabinets and police chiefs facing historic court trials for corruption and the murder of peaceful Egyptian protesters.

Research on social networking's impact on global behavioral and political change needs a conceptual framework that explains how social networking influence major political changes such as elections and revolutions. Political change can be defined as "the transformation of political institutions associated with shifts in the balance of social actors to change their potentials and positional alignment of political forces which are caused by economic, spiritual, cultural, international and non-social factors" (Degtyarev 1998). Recent examples of political changes include changes in political power, regimes, revolutions and ideologies such as what recently happened and is currently happening in Egypt, Libya, Tunisia, Syria, Yemen and other countries. There is a gap in the literature in addressing the impact of social networking on political changes. That is why empirical and conceptual research needs to be expanded in the area of impact of social networking on political change.

The objective of this article is to review the literature and propose a framework that explains the impact of social network tools on recent behavioral and political changes. Literature pertaining to social networking, attitudes, and behavioral change will be reviewed. Second, a framework that links perceived characteristics of social networking tools (trust, relationship, loyalty, value, and word of mouth) to attitude, behavioral intention, and actual behavior is presented. Third, research propositions are proposed to stimulate future research that improves our understanding of the relationships among the different framework variables, social networking, behavior change and political change. Lastly, political and policy implications are discussed.

## **2. Social Networking, Attitude, and Behavioral Change: A Literature Review**

Social network sites are:

“web-based services that allow individuals to (1) construct a public or semi-public profile within a bounded system, (2) articulate a list of other users with whom they share a connection, and (3) view and traverse their list of connections and those made by others within the system. The nature and nomenclature of these connections may vary from site to site”(Boyd & Ellison 2008 p. 211).

The aim of social networking is to facilitate social interaction among others of his or her choice (Hoy & Milne 2010). The body of social networking research has increased as social networks gained acceptance and use (Grabner-Krauter 2010; Lai & Turban 2008; McKnight & Chervony 2002; Pitta & Fowler 2005; Sledgianovski 2009). Both empirical and conceptual social networking research have shown that such variables as trust (Grabner-Krauter 2010; Lai & Turban 2008; McKnight & Chervony 2002; Pitta & Fowler 2005; Sledgianovski 2009), relationship (Benson et al. 2010; Bagozzi et al. 2007, Coyle & Vaughn 2008; Ellison et al. 2007), loyalty (Casalo et al. 2010; Lin 2008; Shen et al.

2010), value (Dholakia et al. 2004; Grabner-Krauter 2010; McKenna & Barch 1999) and word of mouth (Bickart & Schindler 2001; Brown et al. 2007; Smith et al. 2007) form people's attitude, which affects their behavioral intentions that shape their individual and collective behavior (political change). Literature that addresses these variables and psychological theories and models that explain the relationships among these variables are offered in the following sections.

## **2.1 User Perceptions of Social Networks**

Research shows that a closer match between a person's interest and those shown in the web site results in a more powerful tie between the Web site and the user. Perceived credibility increases user involvement in that it activates site tie strength (Brown et al. 2007).

### ***Trust***

Trust plays an important role in forming and maintaining long-term relationships (Sanchez-Frenandez et al. 2010). Mayer et al. (1995p. 712) defined trust as 'the willingness of a party to be vulnerable to the actions of another party based on the expectation that the other will perform a particular action important to the trusted individual, irrespective of the ability to monitor or confront that other party. Grabner-Krauter (2002) identified trust as essential for online trading effectiveness because it reduces suspicions related to interactions and relationships. McKnight & Chervony (2002) proposed a model that identified three types of trust: dispositional, interpersonal, and institutional trust. Dispositional trust involves trust in people. Institutional trust consists of structural security of online Websites. Interpersonal trust includes perceptions of adequacy, benevolence, integrity and predictability. According to Lai & Turban (2008), social network tool users are willing to trust others whom they share expertise, identify with, share personal information and even lend money to. Social network users often express their thoughts, beliefs and choices and show trust in safety within their online community (Pitta & Fowler 2005; Shin 2010). People rely on trust in order to reduce social ambiguity (Gefen & Straub 2004).

### ***Perceived Relationship***

Research shows that people, especially youth, use social network tools such as Facebook to maintain existing relationships and establish new ties with like-minded others (Benson et.al. 2010; Coyle & Vaugh 2008; Ellison et.al. 2007). Furthermore, social network users influence one another as their identification and emotional attachment with the group increases (Bagozzi et al. 2007). Since users continuously converse about various issues and affairs, relationships can become stronger with time (Armstrong & Hagel 1995; Pitta & Fowler 2005). Zhang et al. (2010) found that increased interpersonal discussion fosters both civic participation and political activity. There are two types of relationships: personal and formal. Consumers that visit web sites to simply obtain information form formal relationships. Personal relationships may be 'casual buddies' or 'committed partnerships.' 'Casual buddies' are weak in intimacy but regularly reinforced, while 'committed partnerships' are long-term with high levels of involvement (Brown 2007).

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### ***Perceived Loyalty***

Loyalty is defined as 'a deeply held commitment to rebuy or re-patronize a preferred product/service consistently in the future, thereby causing repetitive same-brand or same brand-set purchasing, despite situational influences and marketing efforts having the potential to cause switching behavior' (Oliver, 1999, p.34). In the context of online social networks, user interaction can enhance satisfaction that leads to loyalty to a particular social network tool. East et al. (2000) and Harridge-March & Quinton (2009 p. 174) suggested that loyalty may be developed by social network users themselves and contains dimensions of attitudes and behaviors. Shen et al. (2010) highlighted the relationship between participants and their loyalty to online communities. For example, Facebook actively links members that have friends in common or share similar interests. Increased interactions among members could constitute loyalty. Casalo et al. (2010) concluded that users' satisfaction with a particular online community is related to loyalty. Satisfaction of needs leads to advanced customer retention, positive word of mouth and increased customer loyalty (Lin 2008).

### ***Perceived Value***

Perceived value is positively related to participation in social networks (Grabner-Krauter 2010). Sanchez-Fernandez et al. (2006p. 53) define consumer value as:

“cognitive-affective evaluation of an exchange relationship carried out by a person at any stage of the process of purchase decision, characterized by a string of tangible and/or intangible elements which determine, and are also capable of, a comparative, personal, and preferential judgment conditioned by the time, place, and circumstances of the evaluation.”

Individuals typically have many values that vary by importance. A certain value can be important in one situation or decision, but not important in another (Steenhaut & Kenhove 2006).

Stephen & Toubia (2010) found that social commerce provides economic value for market-owning companies and sellers in these marketplaces. Social shopping provides another value by offering 'virtual' shops and making shopping convenient for customers. Social networks add informational and instrumental value as product and service information is communicated, consumer problems are resolved, and ideas are exchanged and implemented. Utilitarian value is derived from accomplishing some specific purpose, and entertainment value is defined as an individual's enjoyment of interaction with another one through online social networks. Social value reflects maintaining interpersonal connectivity, increasing social enhancement, developing contacts, and maintaining friendships (Dholakia et al. 2004).

Research demonstrates the obvious importance of social value (McKenna & Bargh 1999; Grabner-Krauter 2010). Grabner-Krauter (2010) conducted focus group discussions with StudiVZ, Facebook and Xing users that reported 'keeping in touch' with others worldwide to be the most social networking benefit.

***Perceived Word of Mouth***

Word-of-mouth is defined 'as any positive or negative statement made by potential, actual, or former customers about a product or company, which is made available to a multitude of people and institutions via the Internet' (Henning-Thurau et al. 2004 p. 39). Whether companies like it or not, people talk online about various products and services. Companies often are not successful in trying to prevent public online discussions of their products by curbing the use of their company names and brands in discussion groups (Hagel & Armstrong 1997).

Amazon.com offered an opportunity to its customers to write book reviews of their book titles. Such an offer stimulates generating word-of-mouth about Amazon's inventory. Reviews can be negative or positive. Consumer comments about the quality and perceived value of individual titles provide an important source about consumer preferences, which work in the company benefits (Pitta & Fowler 2005). People tend to believe peers and take their recommendations into consideration when making buying decisions. Information provided by peers in social networks is often viewed as credible and trustworthy (Smith et al. 2007; and Gil-Or 2010).

Bickart & Schindler (2001) suggested that online forum users are likely to believe the personal opinions and experiences of other consumers like them (Chevalier & Mayzlin 2006). Word-of-mouth becomes more powerful when consumers lose trust in their company's official statements. Online word-of-mouth became more popular with increased use of online social network tools such as Facebook, MySpace, and Twitter. These tools are also replacing communication vehicles such as face-to-face interactions, phones, mobile devices, and even e-mails (Gil-Or 2010). Henninh-Thurau et al. (2004) identified four motives people have for using social networking sites: 1) self-interested helpers, who are seeking economic incentives; 2) multiple-motive customers; 3) consumer advocates, who are concerned for other consumers; and 4) altruists, who are strongly motivated by helping other consumers and companies.

Empirical research investigated the impact of word-of-mouth on consumers' decision making and attitude formation in social networks. Researchers stressed three influencers, including tie strength, homophily and source credibility. Tie strength is 'the intensity of an interactive and personalized relationship between an individual and a Web site.' Homophily is the 'congruence between a user's psychological attributes such as group interests or shared mindset and web site content.' Source credibility is the 'perceived competence of the web site and its membership' (Brown et al. 2007 p.10).

The Third-Person Effect (TPE) was developed by Davison (1983). TPE proposes that individuals tend to expect mass media to have a greater effect on others than on themselves. Zhang & Daugherty (2009) found that social networks have a larger impact on others than themselves, and that TPE negatively affects individuals' behavioral intention related to word of mouth communication. That is, online word of mouth no longer occurs just among few people, but a message is sent by people on discussion boards where lots of other users see it instantly.

## **2.2 Attitude, Behavioral Intention, and Behavior**

Psychological theories of attitudes and attitude change help understand the impact of social networks on users' political attitude and behavior. Three theories help explore and investigate the social networking effect on individual and collective behavior: Theory of Reasoned Action (TORA), the Theory of Planned Behavior (TPB), and the Technology Acceptance Model (TAM) (Cha, 2009; Pelling et al. 2009; Sledgianovski & Kulvivat 2009; and Zhang & Daugherty 2009).

### ***Psychological Theories and Models***

The Theory of Reasoned Action (TORA) states that behavioral intention is an antecedent to behavior. Behavioral intentions are determined by two factors: a person's negative or positive attitude toward performing the behavior, and subjective norms influence, which is the person perception of whether significant others think the behavior is important (Ajzen & Fishbein 1980; Glasford 2008; and Hansen 2008).

The Technology Acceptance Model (TAM) proposes two variables that lead to the acceptance or rejection of information technology: perceived usefulness and perceived ease of use. Perceived usefulness is 'the degree to which a person believes that using a particular system would enhance his or her job performance.' The word 'useful' means 'capable of being used advantageously.' Perceived ease of use is 'the degree to which a person believes that using a particular system would be free of effort.' The word 'ease' means 'freedom from difficulty or great effort' (Davis 1989p. 320).

Cha (2009) integrated the technology acceptance model with perceptions of social networks and characteristics of individual users, such as perceived enjoyment, perceived fit, and perceived security. Cha studied the factors that affect attitude toward shopping on social networking sites and how they differ and are determined by product types (real or virtual). Perceived enjoyment is 'the extent to which the activity of using computer is to be perceived enjoyable in its own right, apart from any performance consequences that may be anticipated.' Perceived fit is 'the degree of similarity between an extension of the product category and the existing products affiliated with the brand.' Perceived security is 'the extent to which one believes that the World Wide Web is secure for transmitting sensitive information.' While perceived usefulness, ease of use, security of shopping services, and perceived fit between social networking sites and real items have positive impacts on attitudes toward shopping, perceived enjoyment and age show negative associations with attitude toward shopping for real items on social networks. Also, in virtual items, while perceived ease of use, perceived fit and female gender predict favorable attitudes, experience with social networks has a negative association.

The consumers' perception affects their attitudes toward shopping of virtual items. It can be observed that perception of consumers affect their attitudes toward shopping regarding virtual items. In the Egyptian revolution, perceived trust, perceived loyalty, perceived relationship, perceived word-of-mouth and perceived value affected people attitudes toward political change.

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Sledgianovski & Kulvivat (2009) used the technology acceptance model to determine the factors, which mostly affect adoption of social network sites, and to propose the Social Network Site Adoption model. This model examines adoption of social network sites from a hedonic perspective by including perceived playfulness, perceived critical mass, and perceived trust.

The Theory of Planned Behavior (TPB), developed by Ajzen (1991), is an extension of the theory of reasoned action (TORA) and can be described as 'a behavior determined by one's intentions to perform the behavior, where intention is influenced by attitude, subjective norms and perceived behavioral control' (Pelling 2009p. 755). 'The central premise of the theory is that behavioral decision is not spontaneous but is the result of a reasoned process in which behavior is influenced, albeit indirectly, by attitudes, norms, and perceptions of control over the behavior' (Smith et al. 2008 p. 312). The individual positive or negative evaluation of performing behavior is an attitude. Perceived social pressure about performing the behavior or not is subjective norm. The perceived ease or hardness that the individual attaches to performing behavior is perceived behavioral control.

Hsiu-Fen (2006) found that attitude and perceived behavioral control influence behavioral intention. They applied TPB and investigated the determinants of members' intention to join virtual communities. Study findings revealed that community members' attitude toward the virtual community is prominent in anticipating behavioral intention. Perceived trust among members, perceived usefulness and perceived ease of use of social networks are important determinants of positive members' attitude and online communication behavior. However, subjective norms did not significantly affect the behavioral intention, which suggest that people tend to make their own decisions rather than being affected by others' opinions and advices. Perceived behavioral control's impact on intention was found to be small but significant so it is considered as an important determinant of individuals' intention to join virtual communities.

Pelling et al. (2009) used the extended model of the theory of planned behavior and enclosed the additional variables of self-identity and belongingness to predict high-level social networking use intentions and behavior in a sample of young people with ages 17-24. The study results reveal that personal attitudes and subjective norms significantly predict intentions to engage in high-level social networking websites use, and subsequently, behavioral intentions significantly predict behavior. Self-identity and past behavior significantly predict intention and behavior. Also, self-identity and belongingness significantly predict addictive tendencies toward social network websites.

Pelling et al. (2009) found that people who were supporting each other and communicating through their social network led to performing behavior. Enforced censorship in a country does not prevent communication and involvement in political change, but research shows that perceived behavioral control is maintained prominently and influences behavioral intention toward political change. According to Pavlou & Fygenson (2006), both trust and technology adoption variables play important roles as distinctive beliefs for predicting e-commerce adoption, which justifies the integration of both variables within the TPB framework.

***Attitude***

Attitude is defined as ‘the amount of like or dislike a person has for the behavior in question and is determined by behavioral beliefs (i.e., beliefs about the consequences of the behavior) and beliefs evaluation (i.e., how good or bad each consequence would be if it happened’ (Trafimow et al. 2010p. 288). A Person’s attitude reflects his/her positive or negative evaluation of performing control (Pelling et al. 2009).

Attitudes affect behaviors towards a particular product, brand, service or information. Characteristics of attitudes are favorability, accessibility, confidence, persistence, resistance, and ambivalent. Attitude favorability refers to how much we like or dislike something. Attitude accessibility is how easily an attitude is recalled (Hoyer & MacInnis 2008p. 122). Attitude confidence is a person’s belief that his or her judgment of an alternative is correct, which may vary based on the quantity and/or quality of available information (Berger 1992). Ambivalent attitudes exist when an individual’s evaluation of a particular brand is both positive and negative. Attitude persistence refers to how long our attitude lasts, while attitude resistance refers to how difficult it is to change an attitude (Hoyer & MacInnis 2008p. 122). In the eighteen day Egyptian revolution, both individuals’ attitude confidence and persistence toward the revolution were strong. Even after President Mubarak was forced to step down on February 11, 2011, Egyptians kept and are still strongly pressuring the Egyptian Military Supreme council (temporarily in charge until June 2012) to track police criminal actions and corruption practices among former Egyptian government officials, and to put them in public trials.

***Behavioral Intention***

Behavioral intention refers to an individual motivation and conscious plan to expend effort and perform a behavior (Sommer 2011). Behavioral intentions are ‘indicators that signal whether customers will remain with or defect from the company’(Zeithaml et al. 1996 p. 33). Research studies reveal that service quality and consumer satisfaction affect behavioral intention (Brady & Robertson 2001; Zeng et al. 2009). Zeithaml et al. (1996) indicate that behavioral intentions can be favorable and unfavorable as well. Positive attitude towards behavioral change can lead to favorable behavioral intention to perform the behavior.

***Behavior***

Individuals mostly have control over their behavior; that is, the behavior is voluntary and performed under the individual free will. Of course, an individual can intend to perform a particular activity but may not realize it because of some outside conditions (Davies et al. 2002). However, if there is a strong attitude and intention toward performing a particular action, actual behavior will occur. A favorable behavioral intention is more likely to result in a repurchase than in the case of an unfavorable intention. For example, research results document that overall satisfaction has a significant positive impact on purchase intention, and purchase intention has a significant positive impact on actual repurchase (Akhter 2010). Smith et al. (2005) suggest that participants’ recommendations and advices in online communities may affect their members’ behavior.



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There is limited research in the area of social networking and its impact on political change. Most research is conducted in the USA (Ellison et al. 2007, Bagozzi et al. 2007, Coyle & Vaughn 2008, Cha 2009, Zhang & Daugherty, 2009, Sledgianowski & Kulviwat, 2009, Pelling, 2009, Kelly et al. 2010, and Peluchette & Karl, 2010), Canada (Foster et al. 2010), the UK (Wills & Reeves, 2009, and Benson et al. 2010), Europe, and the Middle East (Cardon et al. 2009, and Shen & Khalifa, 2010). Strengths of these empirical studies reflect in their attempts to understand what motivates people to participate in social networking. The findings suggest that self-identity, word-of mouth, third person effect, and community membership impact people's attitudes and behavioral intentions. The major issue of these studies is that they are conducted mostly in developed countries such as the USA, Canada and the UK. More research needs to be conducted on developing countries. In addition, cross-cultural studies need to be conducted to understand whether there are differences in terms of using social networking tools among diverse societies. Research needs to be performed not only to understand the motives of people, but also to explore the impact of social networking tools on companies' marketing strategies. This research fills in a gap in the literature by proposing a framework to understand the impact of social networking tools on political change.

### **3. Impact of Social Network on Behavioral Change: A Proposed Framework and Research Propositions**

This paper builds on a framework proposed by Hsiu-Fen (2006). The proposed framework integrates the three psychological theories reviewed above with social networking literature to explain the effect of social networking on behavior. The proposed social network framework appears in Figure 1.

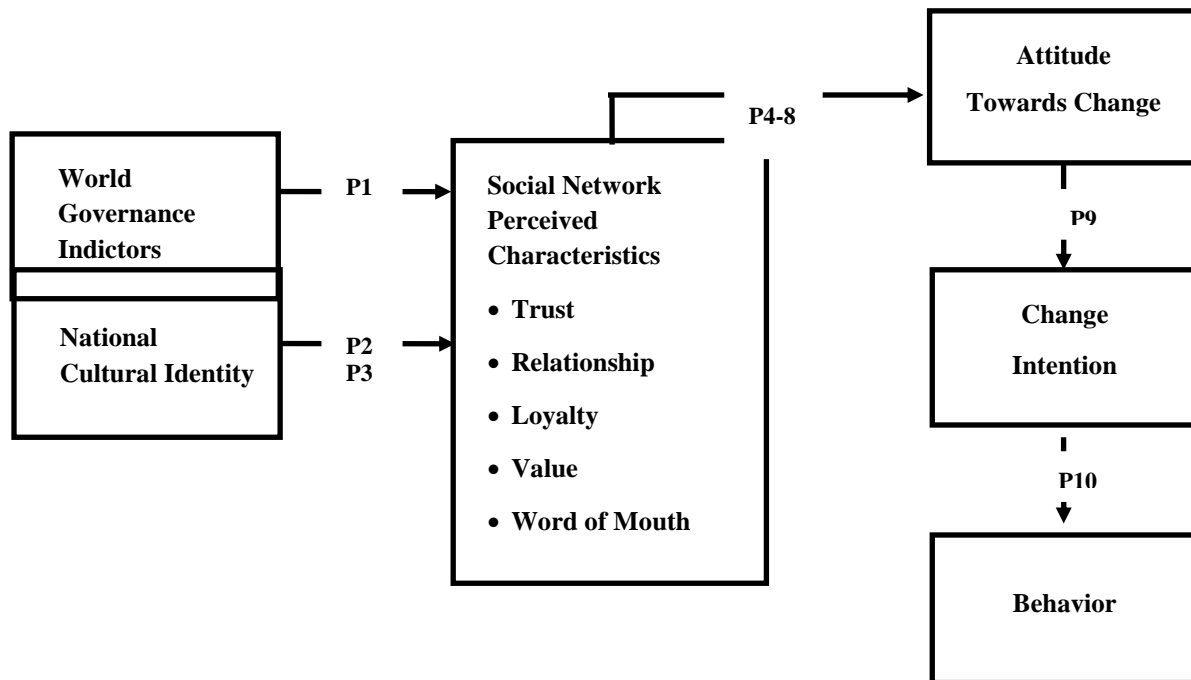
World Governance Indicators (World Bank 2006) and National Cultural Identity (Hofstede 2001, 1980) are depicted as prerequisites for social networking use in the political domain. World governance indicators are defined as citizens' beliefs that they have voice in their countries' affairs, that their government is effective, that the rule of law is present, that political stability exists, that regulatory quality is maintained, and that corruption is controlled (World Bank 2006). Social networks may serve as an alternative venue for discourse, attitude change and action when confidence and trust in the political system and leadership diminishes. Smeltzer & Keddy (2010) argue that citizens turn to alternative media forms to express dissent and mobilize like-minded individuals for action. As previously mentioned, social networking may increase as consumers lose faith in the validity of company statements (Bickart & Schindler 2001). Similarly, citizens may increase their use of social networking as their faith in government decreases. Another pre-requisite for social networking in the political domain is national cultural identity.

Hofstede (2001, 1980) identified various dimensions of national cultural identity, including power distance and individualism/collectivism. Power distance is the extent to which a society allows inequalities among people with respect to power and wealth. Countries that tolerate large inequalities may not be good candidates to use social networking for social equality or political change because citizens perceive inequality as

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legitimate. On the other hand, the citizens of countries that are low in power distance may use social networks to reduce inequality that exist and is perceived as illegitimate. Individualism/collectivism refers to the extent that a society prizes personal achievement or conversely looks after the interests of their citizens collectively. Compared to individualistic societies, collectivistic societies may be more likely to utilize social networks to maintain relationships. For example, Cardon et al. (2009) found that members of collectivist societies have significantly more online social ties than relationships established in person.

Based on the literature, the proposed framework asserts that both WGI and National Cultural Identity serve as antecedents for social network use. Social network input variables of perceived trust, relationship, loyalty, value, and word of mouth then help to form attitudes toward political change. These attitudes then lead to create behavioral intentions that, in turn, influence actual behavior.



**Figure 1: The Social Network Impact on Behavior Change Framework**

Five variables determine users' perceptions of social networking: trust, relationship, loyalty, value and word of mouth. When people communicate through social networking tools, they are likely to perceive the suggestions of people whom they know as credible and trustworthy (Howard2007). Social network users also develop relationships with those who have similar interests (Bickart & Schindler 2001), and show loyalty to the network they choose (Harridge-March2009) and identify themselves with.

Cultural characteristics of people impact their perception and behavior in a similar way. Cardon et al. (2009) investigated online and offline social ties of social network website users and found out that social network users from collectivistic countries, such as

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Egypt, have significantly more social ties with people whom they have never met in person. People can have relationships even though they did not physically meet each other. This feature is related to cultural characteristics.

### Research Propositions

WGI and National Cultural Identity variables frame the political and cultural context in which social networks are used. The following propositions are offered with respect to these contextual variables.

*Proposition 1:* Citizens in countries that are low in voice and accountability, political stability, and government effectiveness will show an increased use of social networking for political means more than the citizens in countries that are high in the same variables.

As previously mentioned, citizens, who do not perceive officially sanctioned channels of communication and governance as trustworthy or legitimate, may seek social networks as alternative means for political change.

*Proposition 2:* Citizens in countries characterized as low in power distance will use social networks to a greater extent compared to citizens in countries that are high in power distance.

Citizens in countries high in power distance tolerate the unequal distribution of wealth and power as legitimate and may not be motivated to improve their political positions.

*Proposition 3:* Citizens in countries that are more collectivistic will utilize social networks more than citizens in countries that are more individualistic.

Citizens in collectivist societies may be more likely to use social networks to mobilize political actions. Citizens in individualistic countries may be less concerned with the common good than with their personal situations.

Recent social networking studies conclude that perceived trust, relationship, loyalty and word of mouth are significant elements that result in the intention to act, and subsequent behavior. Propositions 4 through 8 reflect the positive relationship between perceived social network characteristics and attitude towards political change.

*Proposition 4:* Perceived trust in social networking is positively related to individuals' attitudes towards social networks as a vehicle for change.

*Proposition 5:* The number of perceived relationships developed in social networks is positively related to individuals' attitudes towards social networks as a vehicle for change.

*Proposition 6:* Perceived loyalty in social networking is positively related to individuals' attitudes towards social networks as a vehicle for change.

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*Proposition 7:* Perceived value in social networking is positively related to individuals' attitudes towards social networks as a vehicle for change.

*Proposition 8:* Perceived word of mouth in social networking is positively related to individuals' attitudes towards social networks as a vehicle for change.

Attitude is the extent to which an individual perceives certain behaviors to be favorable or not. The more favorable one's attitude towards a particular behavior, the more likely it is that he/she will desire to enact the behavior. Korkut et al. (2009) found a positive relationship between attitudes and behavioral intention regarding mobile advertisements. As a result, propositions 9 and 10 are stated for future research:

*Proposition 9:* There is a positive relationship between attitude toward political change and behavioral intention.

*Proposition 10:* There is a positive relationship between behavioral intention to change and actual behavior.

### **4. Political and Policy Implications**

Policymakers must first focus on the context within which social networks are employed. How citizens perceive their government's effectiveness, their own voice in determining policy, political stability, and perceived rule of law will impact how and why social networks are used. In the absence of the world governance indicators (e.g., with low government effectiveness, low political stability), citizens may use social networks for political change in opposition of the existing government. When citizens perceive that their needs are being met, social networks may still be used, but for more peaceful change (e.g., elections, passage of new laws or rules). Policymakers should also be mindful of the country's national cultural identity when anticipating its citizens' use of social networks. Citizens of collectivistic countries where power distance is low are likely to use social networks for social and political change. Of course, if WGI dimensions, such as government effectiveness, are also low, social networks are even more likely to be employed for change.

For example, the World Bank (2009) scores for Tunisia and Egypt are in the 11<sup>th</sup> and 15<sup>th</sup> percentile for voice and accountability. Relative to citizens in other countries, Tunisians and Egyptians believe that their governments permit them little say in how they are governed or treated. In both the Tunisian and Egyptian Revolutions, young citizens formed positive attitudes toward political change on the basis of the information obtained from social networking tools, such as Facebook and Twitter. Communication via social networks increased mutual support and strengthened the intent to act (e.g., protest in pre-arranged locations). Enforced censorship of social networking tools and Internet blackouts in Egypt and Tunisia reinforced citizens' belief that their behavior was controlled and their governments intended to suppress their behavior. Government censorship did not prevent communication involvement. On the contrary, citizens were energized to find other ways to communicate and strengthen their relationships and solidarity to achieve their objectives in overthrowing their governments and dictatorship

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regimes. In result, the former Egyptian's president Hosni Mubarak forcefully stepped down on February 11, 2011, and, according to Kirkpatrick (2011), on January 14, 2011, the former Tunisia's president, Zine el-Abidine Ben Ali, fled the country following a month of protest and unrest.

Government officials and policymakers can use social network tools in order to access, build and strengthen relationships with their actual constituents. Government officials and representatives should practice empathy because social networking tools, including Facebook, Twitter, and YouTube, are powerful tools in understanding others. They should behave according to their constituents and citizens' needs in order to build trust and loyalty, and develop sustainable relationships and positive word of mouth. Perceived trust, loyalty, relationship, value, and word of mouth lead to positive or negative attitude, which effects behavioral intention that results in actual behavior expressed by constituents and citizens.

Government officials, politicians, and policymakers currently have diminished ability to suppress information about their actions from their constituents and citizens. The Internet and technological advances made it easy to obtain information. Social networking tools are certainly strong vehicles that might affect perceptions and beliefs about a particular politician, policy maker, government official, service, or political party.

A large implication of social networks employed for political change is that, unlike nations, social networks are borderless. The World Wide Web knows no borders, and citizens in one country can communicate and influence citizens of another country. Very limited number of thinkers, including Nixon (2011), believed that the unrest in the Arab countries, including Egypt and Yemen, can be in part attributed to individuals in other countries, including the United States. However, the overwhelming majority agree that the Arab political movements are homegrown and training in networking and organizing skills may have played a part and facilitated political change.

Therefore, government officials, politicians, and policymakers need to use social networks more strategically and take a global rather than a regional perspective. Perceived trust, relationship, loyalty, value and word of mouth are variables that can help policymakers to solicit constructive feedback from their constituents regarding how to improve governance. As individuals typically attribute greater credibility to their peers as opposed to authority figures (e.g. government officials), opinion leaders can be used to establish trust, develop relationships, acquire loyalty, generate value and spread positive word-of-mouth through various social networking tools.

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