# Self, Network, or Society: Exploring Their Relative Effects on Entrepreneurial Self-Efficacy, Attitude, and Intentions

*Research-in-Progress Paper*

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## Introduction

In the wake of a global economic recession, increased attention is being placed on societal transformations that lead to sustainable development, defined as "development that meets the needs of the present without compromising the ability of future generations to meet their needs" (Brundtland Commission, 1987). Sustainability addresses three overlapping and interdependent domains of development—economic, social, and environmental—and emphasizes the need to holistically address all three domains simultaneously.

Education had long been identified as an indispensable element for achieving sustainable development (Johannesburg Plan of Implementation, 2002). Beyond the provision of educational opportunities, which is a basic requirement for sustainability from a social perspective, educational performance is key in activating grassroots developments and achieving downstream benefits. While an extensive body of knowledge exists on education and pedagogy, more recently attention has been placed on the potential of social media acting as the levers for enhancing such educational performance (Junco, Heiberg and Loken 2011; Chen, Lambert and Guidry 2010; King and Robinson 2009; Heiberger and Harper 2008).

Similar to the way social media have reshaped our private social life, it is also reshaping the educational and organizational landscape. The power of individuals to interact with others in an online setting drives the success or failure of many organizations in the Internet space (Kumar et al. 2010), perhaps most importantly for small entrepreneurial start-ups. Hence, social media use is not only critical for students' immediate educational gains, but also for the longstanding—sustainable—professional success by young professionals and budding entrepreneurs. Consequently, this study sets out to explore how social media can link the self, the network, and society and hereby form a significant catalyst in fostering entrepreneurial activities as a major conduit for sustainable development in mid-

developing societies (Hall, Daneke, and Lenox, 2010; Schaper, 2002; Kyro, 2001; Adeoti, 2000; Larson, 2000; Anderson and Leal, 1997).

## Research Motivation

According to the Development Policy and Analysis Division (DPAD) of the Department of Economic and Social Affairs of the United Nations Secretariat (UN/ DESA), Saudi Arabia is a 'developing economy' that can benefit from its high Gross National Income (GNI)[1]. This potential becomes even greater when one considers the country's median age is a young 23.9 (CIA 2012[2]), and that a mere 21% of female Saudis are currently employed (CNN 2011[3]) hinting at the tremendous economic gains and social transformations to be generated assuming the requisite structural enablers are implemented starting with education opportunities particularly in entrepreneurship.

Social media, such as social network sites, blogs, wikis, and microblogging services are critical tools in these efforts. It is especially important that academic institutions embrace these new media tools, particularly in the delivery of entrepreneurship curricula, because their primary stakeholders—young people between the ages of 18 and 24—are often rampant consumers and producers of social media. Young people in Saudi Arabia are part of a global "Born Digital" culture and many use social media tools fluidly for multiple purposes. Although some social media tools are still in the process of gaining a foothold among young people in Saudi Arabia, the recent double-digit growth of various social platforms would suggest that social media will be closely integrated into the future of social and entrepreneurial participation in the area. For example, in the last two years alone, Facebook's user base has skyrocketed from 3.6% to 20.3% of the population (Lorica, 2009; SocialBakers[4]), making its user base of 5,333,360 the largest in the Middle East for this social network site, with the majority (68%) of the users being between the ages of 18 and 34[5].

Another dimension to consider is the relatively low Internet penetration of 49.7% compared to that for mobile phones, which at 187.86% (ITU Statistics Data Base, 2011[6]) ranks first in the world (ArabCrunch, 2012). Coupling this penetration rate with their "always on" nature, "mobile phones will increasingly become the glue that holds the social graph together, offering creative tools and immediacy, presence, location, and context when interacting with the real world," states a recent Forrester report (Husson et al., 2009). This is in line with current developments when one considers that the mobile platform for Facebook, *Facebook Mobile*, tripled its reach over the 2009 and continues to grow (Walsh, 2009), and when more than 50% of Twitter users in the Middle East and North Africa (MENA) tweet via their mobile

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[1] http://www.un.org/en/development/desa/policy/wesp/wesp_current/2011wesp.pdf

[2] https://www.cia.gov/library/publications/the-world-factbook/geos/sa.html

[3] http://globalpublicsquare.blogs.cnn.com/2011/10/27/zakaria-comparing-the-status-of-women-in-iran-and-saudi-arabia%E2%80%A8

[4] http://www.socialbakers.com/facebook-statistics/saudi-arabia

[5] Ibid.

[6] http://www.itu.int/ITU-D/ict/statistics/   (Dec. 11)

phones (Malin & McNabb, 2009). Mobile phones can truly evolve into becoming social hubs.

More important than the significant connectivity and use of social media is the motivation behind their use. According to a study by Al-Saggaf, Weckert and Williamson (2002) relationships, family atmosphere, and enhanced learning opportunities were reported as the most important benefits of social media use by Arab students. Social media can create an online space that is conducive to learning by providing a trustworthy environment for both strong and weak ties (Granovetter 1992) in which knowledge sharing processes can emerge, evolve, and serve as the catalyst for transformative entrepreneurship education.

Hence, through a case study of a pioneering entrepreneurship certificate program offered through a university in Saudi Arabia, we will explore the role of social media in the development of social capital as an indispensable antecedent of entrepreneurial self-efficacy, attitudes, and intent against the backdrop of an analysis of participants' national culture and individual personality traits.

## Theoretical Underpinnings

In order to understand the role of social media in entrepreneurial initiatives of Saudi Arabian youth, we draw on three fields of literature that are important for predicting entrepreneurial intention, namely cultural context, social capital, and personality traits. Before discussing each of these dimensions in detail, we will first focus on a set of entrepreneurial concepts that represent the outcome variables in our research model.

### *Entrepreneurship, Entrepreneurial Attitude, Entrepreneurial Self-Efficacy, and Entrepreneurial Intention*

Entrepreneurship refers to the act of new entry, that is, the launching of a new venture, either by a start-up firm, through an existing firm, or via "internal corporate venturing" (Lumpkin and Dess, 1996). Hence, it involves the exploration of new and the exploitation of existing opportunities.

In line with the prominent literature in psychology on attitudes, self-efficacy, and intention as substantial predictors of actual behavior (Ajzen and Madden, 1986; Ajzen and Fishbein, 1980), we argue that the likelihood of entrepreneurial initiatives is strongly predicted by a person's entrepreneurial attitude, self-efficacy, and intention (Robinson et al., 1991). In this context, attitudes towards entrepreneurship involve people's predispositions toward being self-employed. Self-efficacy involves the judgment of and confidence in one's own abilities, skills, experience, and physiological states to be an entrepreneur. Finally entrepreneurial intention involves the extent to which someone plans to be self-employed in the foreseeable future.

*H1: Positive attitudes towards entrepreneurship are positively associated with increased entrepreneurial intent*

*H2: Higher levels of entrepreneurial self-efficacy are positively associated with increased entrepreneurial intent*

In order to explore the antecedents of entrepreneurial intention, we will investigate the role of attitudes and self-efficacy in mediating the effects of a set of technological, cultural, social, and psychological factors. Hence, we assume that these factors only indirectly affect a person's intention to become an entrepreneur namely through their effect on entrepreneurial attitudes and self-efficacy.

### Entrepreneurship and Culture

An important antecedent of a positive attitude toward entrepreneurship and subsequent entrepreneurial intention is one's cultural context. Two dimensions of national culture have previously been linked to entrepreneurship, namely *individualism* and *uncertainty avoidance* (Hofstede 1991).

*Individualism* refers to a society characterized by loose social ties and commitments and which values individual freedom of action and independence (Hofstede 1991). In contrast, collectivism refers to a society characterized by tightly knit networks of (kinship) relationships and which values group decisions and loyalty. Hence, individualistic societies are more conducive to entrepreneurship than collectivistic societies as self-confidence and self-reliance are celebrated (Mueller and Thomas 2000).

*Uncertainty avoidance* refers to the extent to which the members of a culture feel threatened by unknown and unfamiliar situations as well as unorthodox behaviors and ideas (Hofstede 1991, 2005). Low uncertainty avoidance societies expect their members to cope with uncertainty, whereas in high uncertainty avoidance societies, people minimize and avoid uncertainty. Since low uncertainty avoidance societies are more accepting of innovative behaviors, it can be anticipated that entrepreneurs are more likely to emerge and flourish in these societies rather than in societies characterized by high uncertainty avoidance (Mueller and Thomas 2000).

Although Hofstede's dimensions of national culture are helpful in broadly making sense of a country's cultural context, it is important to keep in mind that these dimensions assume cultural homogeneity among the members of a society, hence, largely overlook individual differences due to one's network ties and personality traits. Hence, in order to overcome these limitations, this study will enrich cultural explanations of entrepreneurial intent with insights and constructs from the social capital and psychology literature.

### Entrepreneurship, Social Capital, and Social Media Use

Building a new company is a highly competitive and risky endeavor (Stuart et al. 1999), hence, managers of start-ups need to continuously seek opportunities and mobilize resources (Stinchcombe 1965; Aldrich and Auster 1986; Freeman 1997). Accessing financial, social and other types of resources is inherently a social process, i.e., resources are acquired primarily through relationships with parties outside the boundaries of these start-ups (Stuart et al. 1999). Previous research on offline social

networks has shown that entrepreneurs who are well connected are more successful (Allen et al. 2009; Raz and Gloor 2007; Uzzi and Spiro 2005; Schilling and Phelps 2005; Baum et al. 2000; Uzzi 1997).

Despite empirical evidence for the importance of offline social networks for entrepreneurial performance, we aim to investigate if the same holds true in the online realm, by analyzing three dimensions of social capital, namely a structural, relational, and cognitive dimension as these pertain to the use of social media (Nahapiet and Goshal 1998).

The *structural dimension* of social capital refers to the network structure's overall pattern of connections between actors (Nahapiet and Goshal 1998) and for instance focuses on the presence of structural holes (Burt 1992)—sparsely connected clusters that are bridged by knowledge brokers, hence, provide potential access to novel information and resources.

The *relational dimension* refers to the nature of the personal ties that exist between different people in the network and therefore is related to tie strength (Granovetter 1985). Whereas strong ties are usually associated with trust, hence, allow for the transfer of tacit knowledge and fine-grained information (Uzzi 1997; Gulati 1998; Rowley, Behrens and Krackhardt 2000), weak ties provide potential access to novel information.

The *cognitive dimension* of social capital refers to the shared understanding that exist between the different individuals who make up a social network. Such shared understandings and meanings facilitate the exchange of information, learning, sensemaking, and knowledge creation (Grant 1996; Nonaka 1994).

In the context of our project with Saudi students, the role of social capital and its three constituent dimensions can be contextualized by analyzing the network of students and professors that provides a source of resources, trust, and shared meanings. Hence, given the program's focus on fostering entrepreneurial initiative, we can anticipate positive benefits for all three dimensions of social capital.

*H3: Social capital—in the form of structural, relational, and cognitive capital—will have a positive effect on entrepreneurial self-efficacy*

In addition to direct effects, we believe that the intensity of social media use can have a positive moderating effect on the relation between social capital and entrepreneurial self-efficacy. Since social media provide efficient and effective tools for maintaining, visualizing, enacting, and possibly expanding one's social network, its use intensity is likely to reinforce and strengthen the already positive effect of social capital on entrepreneurial self-efficacy. While there is a lack of research into the realm of social media and entrepreneurship, given the extensive literature on the link between offline social networks and entrepreneurial success (Allen et al. 2009; Raz and Gloor 2007; Uzzi and Spiro 2005; Schilling and Phelps 2005; Baum et al. 2000; Uzzi 1997), we can anticipate similar positive effects for online social networks.

*H4: Higher intensity of social media use will positively moderate the effect of social capital on self-efficacy*

### Entrepreneurship and Personality Traits

In describing entrepreneurs, Schumpeter (1934) emphasized their aptitude for challenging and transforming the status quo, hence, recognized that entrepreneurs display certain distinct personality traits. The notion of entrepreneurial personality characteristics has resulted in a vast range of studies exploring different traits that are positively linked to entrepreneurial intent (Gartner 1990), two of which have received strong support, namely locus of control and innovativeness (Borland 1974; Brockhaus 1975; Jennigs and Zeithaml 1983; Mueller and Thomas 2000).

*Internal locus of control*—one's belief of influence over outcomes through ability, effort, or skills (Rotter 1966; Strickland 1989)—has been one of the most popular psychological traits studies in entrepreneurship research (Perry 1990) and has been repeatedly shown to positively affect entrepreneurial intent (Jennings and Zeithalm 1983; Borland 1974; Brockhaus 1975).

*Innovativeness* involves the turning of an invention into a marketable product or service through exploitation and exploration, hence, is in line with Schumpeter's (1934) and Drucker's (1985) description of entrepreneurs as catalysts and exploiters of change. Hence, assessing an individual's innovativeness—i.e., the tendency to be creative and take initiative—is important for predicting one's entrepreneurial attitude and intent (McClelland 1987; Fernald and Solomon 1987; Hornaday and Aboud 1971; Timmons 1978).

Based on these insights, we propose the following hypotheses:

*H5a: Internal locus of control will have a positive effect on entrepreneurial attitude*

*H5b: Innovativeness will have a positive effect on entrepreneurial attitude*

Although the abovementioned personality traits represent significant direct predictors of entrepreneurial attitude, these traits are likely moderated by cultural context. Entrepreneurial activities require initiative through an internal locus of control, which is more likely reinforced in an individualistic society that supports independent behavior. Hence, we can anticipate that the individualism dimension of national culture moderates the relation between internal locus of control, on the one hand, and entrepreneurial attitude, on the other hand (Levenson 1974; Mueller and Thomas 2000). Since Saudi Arabia displays high levels of collectivism, i.e., low levels of individualism (25 out of 100, Hofstede 2005); we can anticipate a negative moderating effect as follows:

*H6a: Saudi Arabia's high level of collectivism will negatively moderate the relation between internal locus of control and entrepreneurial attitude*

Furthermore, since entrepreneurial activities often involve innovative, i.e., non-traditional, behaviors and



**Figure 1. Research Model**

approaches, societies characterized by low uncertainty avoidance are more likely to display preferences for innovation (Tuunanen et al.

1997; Shane 1992). Hence, we can anticipate that the uncertainty avoidance dimension of national culture moderates the relation between innovativeness, on the one hand, and entrepreneurial attitude, on the other hand (Mueller and Thomas, 2000). Since Saudi Arabia displays high levels of uncertainty avoidance (80 out of 100, Hofstede 2005), we can anticipate a negative moderating effect as follows:

*H6b: Saudi Arabia's high level of uncertainty avoidance will negatively moderate the relation between innovativeness and entrepreneurial attitude*

The multiple constructs and hypothesized relationships are depicted in Figure 1.

## Research Design

The proposed longitudinal study is based on a recently funded project that began with a pilot during the Fall Semester of the 2011-2012 academic year in Saudi Arabia. Based on the pilot's success, a 3-course online certificate entrepreneurship program will be offered as of next year at a large southwestern Saudi university. In tandem with the delivery of the curriculum, we will be undertaking the research described below.
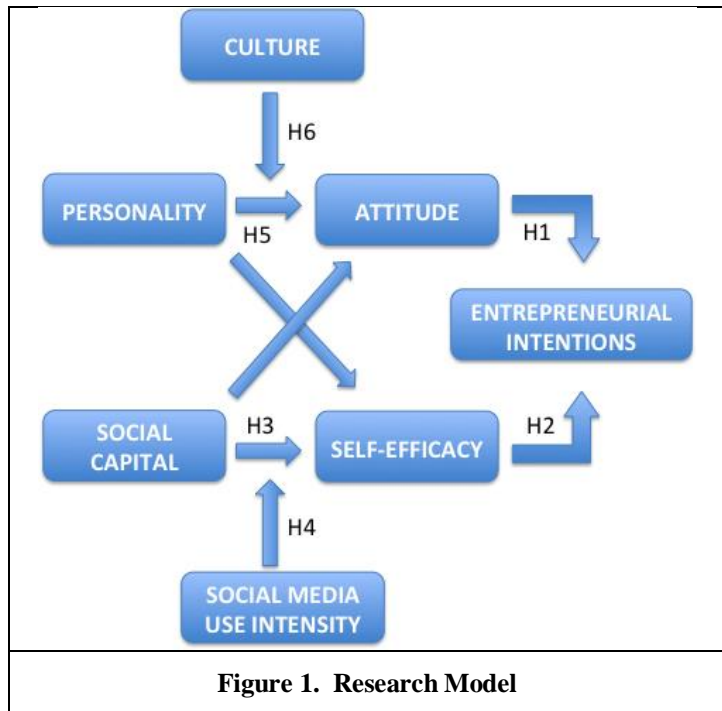
The sample will consist of 100 students enrolled in the entrepreneurship certificate program. While we will strive for gender balance, it is anticipated that a greater proportion of male students will be present in both groups.

Data analysis will combine the use of Partial Least Squares (PLS) for the test of both structural and measurement models, and SPSS for ANOVA and post-hoc tests to explore for gender differences. Furthermore, our analysis will highlight the impact of personality, social capital, and culture on entrepreneurial motivations—self-efficacy and attitude—and in turn entrepreneurial intentions, as a predictor of future entrepreneurial behavior. With respect to culture, Saudi Arabia is particularly interesting as it represents the country with the lowest level of individualism and the highest level of uncertainty avoidance in the Arab world and is polar opposite to the levels found in the US, which is generally considered a hotbed for entrepreneurial activities (Kuratko 2003).

Self-reported (pre and post) data will be collected at the start and upon conclusion of each of three entrepreneurship certificate courses for all constructs included in our research model.

Given the limited length of a research-in-progress submission, the measurement instrument could not be included in this manuscript, but all constructs and sources for their corresponding variables are shown in Table 1.

| Table 1: Summary of Constructs and Scales | | |
|---|---|---|
| **Construct** | **Number of Items** | **Source** |
| Social Media Use Intensity | 3 | Adapted from Bagchi et al. (2003) |
| Locus of Control | 10 | Adapted form Rotter (1966) |
| Innovativeness | 8 | Adapted from Jackson Personality Inventory (1994) |
| Social Capital (incl. structural, relational and cognitive) | 10 | Adapted from Liao and Welsch (2005) |
| Culture: Individualism and Uncertainty Avoidance | N/A | Hofstede (2005) |
| Entrepreneurial Attitude | 3 | Luthje and Franke (2003) |
| Entrepreneurial Self-Efficacy | 4 | Zhao, Seibert, and Hills (2005) |
| Entrepreneurial Intention | 4 | Zhao, Seibert, and Hills (2005) |

## Discussion

This groundbreaking study will offer a holistic view of key technological, social, cultural and psychological antecedents influencing one's self-efficacy, attitude toward, and intention to embark on entrepreneurial activities in the context of social media use and education.

We anticipate the following two main contributions. First, by exploring the effects of social media use for entrepreneurship training through a rigorous empirical and longitudinal approach, this study will provide strong parsimonious and generalizable results, which in turn can inform the successful integration of these tools in and the formulation of policies for future entrepreneurship education. Second, by bridging multiple antecedents of the self, the network, and society, this study offers a more holistic, multi-level understanding of entrepreneurial intent.

Given the length limitations of a research-in-progress submission, implications for theory and practice, as well as the measurement instrument to be used in this study will be provided during the presentation.

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