

# **The contingent value of marketing and social networking capabilities in firm performance**

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## **Abstract**

Recent research shows a continued interest by scholars in understanding the extent that firms develop and deploy marketing capability in an effort to enhance their market- and financial-performance. In conjunction with the marketing literature, relational governance scholars suggest that social networks can provide access resources and knowledge required to perform business activities which assist in achieving performance objectives. Yet, the literature is almost silent about the extent that social networks assist market oriented firms in their efforts to develop superior marketing capability to enhance performance. The findings from a survey of 160 firms in an emerging Middle Eastern economy show that market oriented firms are better at developing and deploying marketing capability when the levels of business, political, and academic ties are high.

**Keywords:** social networking capabilities; relational governance; marketing capability; firm performance; emerging economy

## **Introduction**

The role of marketing capability as a driver of superior firm performance (often couched in terms of market- and financial-based performance) is of significant interest to marketing scholars (Krasnikov & Jayachandran, 2008; Murray, Gao, & Kotabe, 2011; Vorhies, Morgan, & Autry, 2009). Capability theory suggests that to achieve superior firm performance, firms need to effectively configure both outside-in processes (e.g. market orientation) and inside-out processes (e.g. marketing capabilities) (Day, 1994; Ngo & O’Cass, 2012). Marketing capability (MC) represents a bundle of interrelated routines that provide the capacity to engage in specific marketing activities and respond to market knowledge (Morgan, Zou, Vorhies, & Katsikeas, 2003; Murray et al., 2011; Ngo & O’Cass, 2012). In fact, MC focus on the integration of employees’ knowledge (e.g., line staff, managers) directed to perform marketing activities (Day, 1994; Vorhies, Orr, & Bush, 2011). Therefore, firms with greater capacity to generate market knowledge (e.g., market oriented firms) should develop superior MC to enhance their market and financial performance (Murray et al., 2011).

In conjunction with marketing scholars, relational governance scholars suggest that managerial actions are embedded in networks of social relationships (Acquaah, 2007; Peng & Luo, 2000). Social networks with partners (e.g., other firms, government officials, and academic institutions) help a firm access important market information about emerging regulatory policies, and other firms’ experiences that may not be available in the open market (Rindfleisch & Moorman, 2001; Sheng, Zhou, & Li, 2011). Despite an extensive body of work on the relationships between market knowledge, MC and firm performance, what remains underdeveloped is an understanding of the extent that the magnitude of these relationships varies in the presence of specific types of social networks. Our study seeks to extend the current literature in three ways.

First, we adopt the position that firms with a greater capacity to generate market knowledge should have superior MC to act on their market knowledge and enhance their performance (Murray et al., 2011; Vorhies et al., 2011). In relation to market knowledge, we identify market-oriented behaviors and social networking capabilities (SNC) as mechanisms that enable a firm to generate the requisite market knowledge to develop and utilize MC. While the pursuit of market-oriented behaviors results in the generation and dissemination of market knowledge (e.g., information about customer needs, competitor actions, and market trends) (Hulland, 1999), SNC enables a firm to build networks (or ties) with specific social partners to access external market information that are not available in the open market (Atuahene-Gima, Li, & De Luca, 2006; Peng & Luo, 2000). The focus here is on the extent that the interaction between market-oriented behaviors and SNC enhances the firm's ability to develop and deploy superior MC to enhance performance.

Second, much of the work investigating the role of social networking capabilities has focused on the capacity to build ties with other firms (or business ties) and ties with governmental officials (or political ties) (Atuahene-Gima et al., 2006; Sheng et al., 2011). Yet the role of ties with academic and professional institutions (or academic ties) has received much less attention. This study investigates the extent that business, political, and academic ties independently enable a firm to access different forms of market knowledge. Our focus on these specific ties is not to overlook the importance of relationships with customers, employees, and suppliers. Rather our focus responds to the call by Peng and Luo (2000) and Sheng et al. (2011) on the need to investigate different aspects of external relationships in emerging economies (see also Atuahene-Gima et al., 2006).

Third, we place our theoretical contentions in the context of an emerging economy in the Middle-East. Much of the work on market oriented firms and marketing capabilities has been conducted in developed Western and Asian economies (e.g., US, Japan, China). Given the

growing importance of Middle Eastern economies in the global economy (Ralston et al., 2011) because of the increasing level of investment and number of product launches by multinational companies in these countries (Bozer, 2011), understanding the role of marketing capabilities in the Middle-East region is important for both academics and practitioners. In addition, Middle Eastern emerging economies are an appropriate empirical setting to investigate the performance implication of SNC and marketing capabilities. Indeed, social ties are important in emerging economies where market-supporting systems are underdeveloped, and legal and regulatory institutions are limited (Acquaah, 2007; Sheng et al., 2011). In this context building strong business, political, and academic ties may be imperative for success and survival. Given much of the work on SNC has been conducted in Asian emerging economies (e.g., China), the role of SNC in other emerging economies with strong collectivist cultures (e.g., Middle-Eastern economies) is worthy of investigation (see also Acquaah, 2007).

We structure the remainder of this paper as follows: First, we develop specific hypotheses focusing on the relationships between MO, SNC, marketing capabilities, and firm performance as shown in Figure 1. Second, we discuss research methods for data collection and data analysis. We then present the results of hypothesis testing. Finally, we discuss the findings, implications of the study, and future research.

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Insert Figure 1 here  
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## **Theory and hypotheses**

### ***The role of marketing capabilities***

Some marketing scholars posit that firms may not achieve superior performance because of being market-oriented (Foley & Fahy, 2009; Ketchen, Hult, & Slater, 2007). Instead, acting on market knowledge about customer needs to serve them better become an essential task for

marketing practitioners (Hult, Ketchen, & Slater, 2005; Ngo & O'Cass, 2012). Marketing capabilities help transform the firms' market knowledge into success in the market and improve financial performance (Murray et al., 2011; Ngo & O'Cass, 2012). Marketing capabilities are formed where a group of employees in a business unit or department integrate and apply their knowledge and expertise to undertake a specific marketing related task (Felin, Foss, Heimeriks, & Madsen, 2012; Grant, 1996; Miller, Pentland, & Choi, 2012). The integration and crystallization of market knowledge among employees is what provides the foundation for creating marketing capabilities (Morgan et al., 2003; Murray et al., 2011; Vorhies et al., 2011). Consequently, firms with more capacity to generate market knowledge and disseminate it among their employees are more likely to develop marketing capabilities that are superior (Vorhies et al., 2011). In this sense, market orientation has the potential to contribute to performance, when the firm's MC acts as an intervening mechanism in the relationship between market orientation and performance. Thus,

H1: MC mediates the effect of market orientation on firm performance.

### ***The role of social networking capability***

The marketing literature shows that the nature and outcomes of specific marketing activities (e.g., pricing, advertising, distribution) vary across different economic (e.g., centrally planned vs. market-based economies) and cultural (e.g., collectivist vs. individualist culture) contexts (e.g., Ellis, 2005; Fletcher & Fang, 2006; Ozer, 2006). Beyond the connections between market orientation, MC, and firm performance, we contend that the magnitude of these connections varies in the presence of social networking capability. SNC represents a bundle of interrelated organizational routines that provide the capacity to build networks with specific social partners to access (or generate) knowledge that is not available in the open market (Atuahene-Gima et al., 2006; Peng & Luo, 2000). Relational governance theorists contend that social networks are an important success factor for firms operating in emerging economies with collectivist

cultures. According to Acquah (2007), firms operating in emerging economies with collectivist cultures are more likely to rely on social networks when facing uncertain and turbulent business environments. SNC coordinates exchanges through informal and interpersonal social mechanisms that allow firms to overcome the limits of weak institutional infrastructures in emerging economies, access external resources and information, and deal with uncertain environment (Acquaah, 2007; Adler & Kwon, 2002; Sheng et al., 2011). Literature shows that SNC significantly facilitates the performance of organizational strategies and activities (e.g., Atuahene-Gima et al., 2006; Atuahene-Gima & Murray, 2007). The central argument in this study is that market-oriented firms who have strong social networks are better positioned to generate knowledge that is not available in the open market (i.e., confidential information regarding emerging governmental policies) and knowledge that goes beyond that generated from market orientation. In this sense, the outcomes of market orientation can vary across different forms and levels of social networks.

In this study, SNC represents the firm's capacity to build and maintain business, political, and academic ties (Atuahene-Gima et al., 2006; Peng & Luo, 2000). Business ties represent the relationships with other firms outside and inside the industry (Atuahene-Gima et al., 2006). Business ties enable firm to access important knowledge that may not be available in the open market regarding competing products, market changes, competitors' strategies, and information about trustworthiness of other firms (Adler & Kwon, 2002; Rindfleisch & Moorman, 2001; Sheng et al., 2011). Business ties also promote learning and mutual adjustment between business partners and facilitate knowledge transfer and technology acquisition (Adler & Kwon, 2002; Rindfleisch & Moorman, 2001). According to Atuahene-Gima et al. (2006), business ties with firms outside and inside an industry allow a firm to capture different types of knowledge. In particular, the relationships with firms outside the industry capture broad information and experiences about the implications of different strategies and capabilities.

They help a firm to reduce the high cost and potential errors associated with the collections and use of new information (Atuahene-Gima et al., 2006). On the other hand, the relationships with firms inside the industry capture deeper knowledge and understanding of competitors' strategies and market changes (Atuahene-Gima et al., 2006). To this end, business ties enhance a market-oriented firm's ability to generate requisite market knowledge to develop superior MC to enhance firm performance. Thus,

H2: When the level of business ties is high, the effect of market orientation on firm performance through MC is greater.

Political ties encompass the relationships with governmental officials and financial institutions. In this study, relationships with financial institutions are considered as political ties, because governments in many emerging economies still control a significant portion of financial resources such as bank loans, subsidies, and tax breaks (see Sheng et al., 2011). Political ties help firms to access important knowledge about industry development plans, emerging regulatory policies, and industrial statistics (Sheng et al., 2011). In addition, political ties provide the best means of obtaining financial resources, approvals, licenses, and other resources required to perform business activities in emerging economies (Atuahene-Gima et al., 2006). Therefore, political ties enhance a market-oriented firm's ability to generate requisite market knowledge to develop superior MC to enhance firm performance. Thus,

H3: When the level of political ties is high, the effect of market orientation on firm performance through MC is greater.

Academic ties comprise the relationships with professional industrial association (e.g., consultative institutes, managerial forum) and academic institutes (e.g., universities, private research organizations, and public research institutes). Academic ties have been advocated as

important drivers of innovation and organizational learning. The interactions with academic institutes support the firm's efforts to learn new skills, use new technologies, and implement new processes (Segarra-Blasco & Arauzo-Carod, 2008; Tethera & Tajar, 2008). In addition, interactions with industrial association and managerial forums help firms to communicate with other firms inside or outside their industry to exchange their knowledge and experiences. Industrial associations also enhance the likelihood of partnership and joint venture between firms. Further, the interaction with consultative agencies may enable firms to access the knowledge and experiences required to enhance the performance of existing activities (Tethera & Tajar, 2008). To this end, academic ties enhance a market-oriented firm's ability to generate requisite market knowledge to develop superior MC to enhance firm performance. Thus,

H4: When the level of academic ties is high, the effect of market orientation on firm performance through MC is greater.

Beyond the effect that business, political and academic ties has on the connections between market knowledge, MC, firm performance, we contend that these effects do vary in strength. In business ties, firms have common interest in maximizing their economic return and strive to build the long-term cooperation premised on mutual trust and commitment (Sheng et al., 2011). Moreover, business ties across two firms may provide broad range of information such as market needs, competitors' activities, technological changes and implication of different strategies and capabilities. In political ties, the government officials primary intend to develop their political careers and obtain personal benefits rather than accommodate the firm's needs and maximize their economic return. Therefore, the goal divergence among firms and government officials may lead to the short-term cooperation rather than a long term commitment (Sheng et al., 2011). Moreover, government officials who want to maximize their short-term interests (e.g., get a promotion) may oblige firms to undertake projects with high

social but low economical returns (Shleifer & Vishny, 1994). Similar to political ties, there is potential goal divergence among firms and academic institutes that may lead to the short-term cooperation. However, political ties provide broader range of information (e.g., industry development plans, industrial statistics) than academic ties. In academic ties, firms and academic institutes exchange specific types of information such as the application of a new technology. Given that all business, political, and academic ties are important, but they are different. In particular, the long term nature and broad range of information provided by business ties may make it more beneficial than political and academic ties. Further, the nature of information provided by political ties may make it more beneficial than academic ties. Therefore, the integration of market orientation and business ties provides a stronger foundation to generate requisite market knowledge to develop superior MC than political and academic ties. Such integration represents the extent that market orientation and business ties mutually enhance their effect on the development of MC. In the same vein, the integration of market orientation and political ties provides a stronger foundation to generate requisite market knowledge to develop superior MC than academic ties. Thus,

H5a: The integration of market orientation and business ties has stronger effect on MC than that of political ties and academic ties.

H5b: The integration of market orientation and political ties has a stronger effect on MC than that of academic ties.

## **Method**

### ***Data collection***

To gather the data to test the hypotheses we used questionnaire protocol as the primary means for data collection. We used a sample of senior managers from large firms (over 200

employees) across a variety of industries in the context of a Middle-Eastern emerging economy. Given the growing importance of the Middle-East in the global economy (Ralston et al., 2012; Soltani & Wilkinson, 2012) and the increasing level of investment and product launches by multinational companies in the Middle-East countries (Mellahi, Demirbag, & Riddle, 2011), understanding the role of MC in the Middle-East region is worthy of investigation. Among emerging economies in the Middle-East, Iran has been considered as one of the strongest and most industrialized economies in the Middle-East. Iran's economy is predicted to become the 12th largest in the world by purchasing power parity by 2015 (IMF, 2010; WorldBank, 2010). Iran has over 40 major industry sectors (e.g., automotive, chemical, consumer durable), which makes it unique in the Middle-East (FinancialTimes, 2010). In addition, Iran as a Middle-Eastern country contains strong collectivist culture (Soltani & Wilkinson, 2012). This makes Iran a suitable context for examining the nature and implications SNC (see Acquaaah, 2007; Peng & Luo, 2000).

The questionnaire was prepared in English and then translated into Persian. It was checked for accuracy following the conventional back-translation process (Ellis, 2005). We pre-tested the instrument using individual interviews with 20 managers who had at least three years of business experience in Iran to examine understanding of the survey questions and face validity of the constructs. Drawing on De Luca and Atuahene-Gima (2007), we employed a drop-and-collect data collection technique. Using drop-and-collect technique is encouraged in developing countries where interpersonal interactions are preferred as modes of information exchange and the postal system is unreliable (Ellis, 2005; Ngo & O'Cass, 2009). We distributed questionnaires to 538 large-sized manufacturing firms and we received 160 usable questionnaires. The average number of full-time employees in firms was 645 and the average age of firms was 24 years. Of the firms in the sample, 31% traded with other firms (B2B), 69% with both other firm and end consumers. They ranged across following industry sectors: 20%

industrial machinery and process equipment, 15% automotive , 12% food, 11% consumer durable, 9% chemical, 5% electronic equipment, 5% IT and telecommunication, 3% pharmaceutical and 20% others. The mean scores for the informant's knowledge about the issue being studied on a seven-point Likert-type scale ranging from "not at all" to "very much so" were 6.30.

### ***Measures***

Building on Vorhies and Morgan (2005), we measured MC using twelve items. The respondents indicated the extent that their firm performed marketing activities relative to their industry standard. We measured market orientation using eight items from Zhou et al. (2008). The respondents indicated the extent to which they agreed or disagreed with statements about the firm's market-oriented behaviors. The items related to MO, MC, and firm performance were answered on a seven-point scale ranging from 1= "strongly disagree" and 7= "strongly agree".

We adopt the measures for business and political ties based on the works of Atuahene-Gima et al. (2006), Peng and Luo (2000), and Sheng et al. (2011). We develop new measures for academic ties, because no measures were available in the extant literature gauging the firm's capacity to build ties with academic social partners. Finally, we used 12 items to measure SNC. The instruction in the questionnaire asked respondents to rate their firm's relationships with other firms (outside and inside of the industry), governmental officials, financial institutes, industrial associations, and academic institutes, with 1= "not at all" and 7= "very much so". Following Ngo and O'Cass (2009) we assessed the face validity of measures for SNC. In particular, we sent the items to academic experts who judged their precision and representativeness. In doing so, we used expertise of highly reputed scholars in management and marketing to examine the parsimony of the item pool. The expert judges were asked to rate

each item as either “not representative”, “somewhat representative”, or “very representative” to the construct definition. Further, as noted before a group of 20 managers reviewed the new items during pre-test to enhance the measures’ clarity. As shown in Table 1, we used factor analysis to separate the items related to business, political, and academic ties with acceptable Cronbach alphas (.77, .87 and .86 respectively).

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Insert Table 1 here  
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We gauged firm performance using five subjective measurement scales adopted from Langerak et al. (2004), because objective measures were almost impossible to obtain because of confidentiality and historically subjective measures have been shown to be correlated to objective measures of performance (Langerak et al., 2004). The instruction in the questionnaire asked respondents to rate the firm performance in relation to the goals set by the firm over the past year in terms of revenue, sales growth, market share, return on investment and profitability.

We considered market turbulence, governmental turbulence, firm age, firm size, and CEO experience as the control variables. In particular, market turbulence represents the speed of change and instability of customer preferences and competitors’ actions in a specific market (De Luca & Atuahene-Gima, 2007). Market turbulence was measured using three items adopted from De Luca and Atuahene-Gima (2007). Governmental regulation turbulence represents instability of the governmental regulations within a market (e.g., country, region). Governmental regulation turbulence was measured using four items developed for the study. The items related to market turbulence and governmental turbulence were answered on a seven-point scale ranging from 1= “strongly disagree” and 7= “strongly agree”. Firm size was

measured as the logarithm of the number of full-time employees. Firm age was measured as the logarithm of the number of years since the firm was founded.

## **Analysis and results**

### *Analysis of measurement model*

As shown in appendix 1, all measurement items have acceptable bootstrap critical ratios ( $>1.96$ ) with loadings greater than the cut-off value of 0.50 proposed by Hulland (1999), thus demonstrating adequate individual item reliabilities. Further, all constructs have acceptable levels of reliability, with the composite reliability coefficients ranging from 0.85 and 0.94 for each construct, greater than the recommended 0.70 (Nunnally, 1978). As shown in Table 2, convergent validity is evident as AVE values for all constructs are uniformly acceptable, ranging from 0.54 to 0.80 greater than the recommended 0.50 (Fornell & Larcker, 1981). Discriminant validity is evident as the square root of the AVE (the off-diagonal elements in Table 2, ranging from .74 to .90) consistently greater than all corresponding correlations (-.23 to .51) (Fornell & Larcker, 1981). Due to single sources of information can increase the probability of common method variance, we examined common method bias using the marker variable technique suggested by Lindell and Whitney (2001). We used industry sector as a marker variable to control for common method variance ( $r_M = -.01$ ,  $p = .41$ ). The mean change in the correlations of the key constructs ( $r_U - r_A$ ) when partialling out the effect of  $r_M$  was .04, providing no evidence for common method bias (see also Malhotra, Kim, & Patil, 2006).

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### *Test of hypotheses*

We tested the mediational effects of MC in the relationship between market orientation (MO) and firm performance (FP) following the approach suggested by James and Brett (1984). Following this approach, the mediation model was tested with a path from the independent variable (MO) to the mediator(s) and from the mediator(s) to the dependent variable (FP). The mediation effect occurs when the relationship between independent variable-mediator and mediator-dependent variable is significant. In addition, we followed Preacher and Hayes's (2004) approach to check the significance of mediational effect of MC. As shown in Table 3, MO significantly influences MC ( $\beta = .39, p < .01$ ) and MC significantly affects FP ( $\beta = .62, p < .01$ ). Further, bootstrapping results indicate that the confidence interval for the mediation effect through exploratory marketing does not include zero value (.14 to .37) and the normal theory test (or Sobel's test) show that the mediation effect is significant ( $p < .01$ ). Therefore, the results reveal that MC fully mediates the relationship between MO and FP, supporting H1. Regarding control variables, none of the control variables (governmental turbulence, market turbulence, firm size, and firm age) significantly affects FP.

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Insert Table 3 here  
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Drawing on Preacher et al. (2007), we operationalized the effect of SNC on the relationships between MO-MC-FP as the moderated mediation effect. Moderated mediation effect refers to the magnitude of an indirect effect at a particular value of a moderator (or at particular values of more than one moderator) (Preacher, Rucker, & Hayes, 2007). The moderated mediation test following Hayes (2012, Model 9) involves three steps. In the first step, a multiple regression is conducted to examine the effects of the independent variable (IV), the moderator, and the interaction between IV and moderator on the mediator. In this step, IV and the interaction between IV and moderator should significantly affect mediator. In the

second step, a multiple regression is conducted to predict the dependent variable (DV) from the IV and mediator. The mediator in this step should significantly influence DV. The first two steps examine the assumptions for moderated mediation effect, when the moderator is assumed to affect the link between IV-mediator. The third step tests the conditional indirect effect of the IV on the DV by probing specific indirect effects of the IV on the DV at certain values ( $\pm 1$  standard deviation) of the moderator variable. As suggested by Preacher et al. (2007), all variables were mean-centered (e.g., composite mean) to avoid multicollinearity problem (see also Aiken & West, 1991).

As shown in Table 4 (Panel A), the results from steps 1 and 2 reveal that the required assumptions for moderated-mediation effect for business ties are satisfactory. The third step indicates that the indirect effect of the MO to FP through MC increases with the increasing level of BT (from .19 to .29). Further, the bootstrap confidence interval for the conditional indirect effect is entirely above zero among all levels of BT. Therefore, the effect of MO on FP through MC is greater when the level of BT is high, supporting H2. Table 4, Panel B (Steps 1 and 2) reveals that the required assumptions for moderated-mediation effect for political ties are satisfactory. The third step indicates that the indirect effect of the MO to FP through MC increases with the increasing level of PT (from .18 to .32). Further, the bootstrap confidence interval for the conditional indirect effect is entirely above zero among all levels of BT. Therefore, the effect of MO on FP through MC is greater when the level of PT is high, supporting H3. Table 4, Panel C (Steps 1 and 2) reveals that the results do not support the required moderated-mediation assumptions for academic ties. However, the third step indicates that the indirect effect of the MO to FP through MC increases with the increasing level of AT (from .23 to .25). Further, the bootstrap confidence interval for the conditional indirect effect is entirely above zero among all levels of AT. Given the effect of MO on FP through MC slightly increases at higher levels of AT (from .23 to .25) and the results from steps 1 and 2 do

not support the required assumptions for moderated-mediation effect, we reason that AT has a slight effect on the connection between MO-MC-FP. Therefore, the results provide partial support for H4.

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Insert Table 4 here  
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To test hypotheses 5a and 5b and gain further insight about the differences between BT, PT, and AT, we examined the effect of integration of MO×BT, MO×PT, and MO×AT on the levels of MC. As shown in Table 5, the integration of MO×BT has stronger effect on MC than that of PT and AT. Further, the integration of MO×PT has a stronger effect on MC than that of AT. Further, we conducted the difference test between two non-independent correlations (Steiger, 1980) for the effects of MO×BT and MO×PT on MC, the effects of MO×BT and MO×AT on MC, and the effects of MO×PT and MO×AT on MC. The results reveal that the relationship of MO×BT on MC is significantly different to that of MO×PT and MO×AT on MC ( $p < .05$ ). Further, the relationship of MO×PT on MC is significantly different to that of MO×AT on MC ( $p < .05$ ). Therefore, the results support hypotheses 5a and 5b.

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Insert Table 5 here  
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### **Discussion and implications**

The current marketing literature shows that the nature and outcomes of specific marketing activities (e.g., pricing, advertising, distribution) vary in different economical (e.g., centrally planned vs. market-based economies) and cultural (e.g., collectivist vs. individualist culture) contexts (e.g., Ellis, 2005; Fletcher & Fang, 2006; Ozer, 2006). In conjunction with the marketing literature, relational governance theorists highlight social networks as an important success factor for firms operating in emerging economies with collectivist cultures.

Specifically, the relational governance literature suggests that managerial action and organizational activities (e.g., marketing activities) are embedded in networks of social relationships. Given the increasing attention to the role of social networks in the marketing literature, no study at present has investigated the extent that social networking capabilities affects the firm's effort to market its products, particularly in the context of emerging economies in the Middle-East.

The central focus of this paper is on the extent that specific social networking capabilities enhance the firm's ability to act on the market knowledge it gains from being market oriented to enhance its performance. Specifically, our study offers three contributions. First, our findings show that MC mediates the relationship between MO and firm performance. This shows that being market-oriented is not enough to achieve superior firm performance, and it is the firm's ability to act on market knowledge that transforms market knowledge into superior performance. Therefore, the results of this study, in line with previous research conducted in Asian emerging economies (Murray et al., 2011) and Western economies (Vorhies et al., 2011), validate the mediational role of MC in the MO-firm performance linkage in the context of a Middle-Eastern emerging economy, Iran.

Second, our study advances marketing and relational governance literature by examining the moderated-mediation effect of specific social networking capabilities (business, political, and academic ties) on the MO-MC-firm performance linkage. Previous research in this field has focused primarily on the direct link between social networking capabilities, with an emphasis on business ties and political ties, and firm performance. However, the role of relationships with academic and professional institutions (or academic ties) has received much less attention. In this sense, the results of this study offer an important insight into the extent that academic ties help firms in their efforts to perform marketing activities and achieve superior performance. In addition, our study shows that the effects of business, political, and

academic ties in conjunction with market orientation on MC are different. In particular, the results reveal that the integration of market orientation and business ties has a stronger effect on the level of MC than that of political and academic ties. Further, the results reveal that the integration of market orientation and political ties has a stronger effect on the level of MC than that of academic ties.

Third, the results of this study indicate that all forms of social networking capabilities (business, political, and academic ties) enhance the firm's capacity to generate market knowledge and transform marketing knowledge via MC into superior performance. Therefore, the results of this study suggest that the synchronous pursuit of business, political, and academic ties is a critical success factor for firms that operate or market their products in the Middle-East region. This synchronous pursuit helps the firm to generate different forms of market knowledge, develop superior market capability, and achieve outstanding firm performance. This contribution is in line with ambidexterity literature (e.g., Katila & Ahuja, 2002; Nickerson & Zenger, 2004) arguing that synchronization on search for different types of knowledge (e.g., distal and proximal search) is essential for success and survival of the firms.

### ***Limitations and future research***

While our study contains a number of limitations, they offer avenues for future research. First, we examined our hypotheses within the context of a one-year lag in firm performance data. Thus, our ability to empirically assess the sustainability of the effects of marketing capability and social networking capability on firm performance over time is limited. Future research using a longitudinal design may help in evaluating the sustainability of the effects of marketing capability and social networking capability on performance. Second, our study focuses on different forms of external relationships such as business, political, and academic ties. Future research can extend this study by examining the role other types of social ties with customers,

employees, and suppliers. Third, drawing on contingency theory the magnitude of relationships between market orientation, marketing capability, social networking capability, and firm performance could be contingent on the on specific organizational (e.g., organizational slack) and environmental (e.g., competitive intensity) conditions. In particular, picking up on this point, future research could extend this study by investigating what organizational and/or environmental characteristics reinforce or impede the effect of these capabilities on firm performance. Further research should compensate for the above mentioned issue and address such limitations.

Figure 1. Theoretical framework

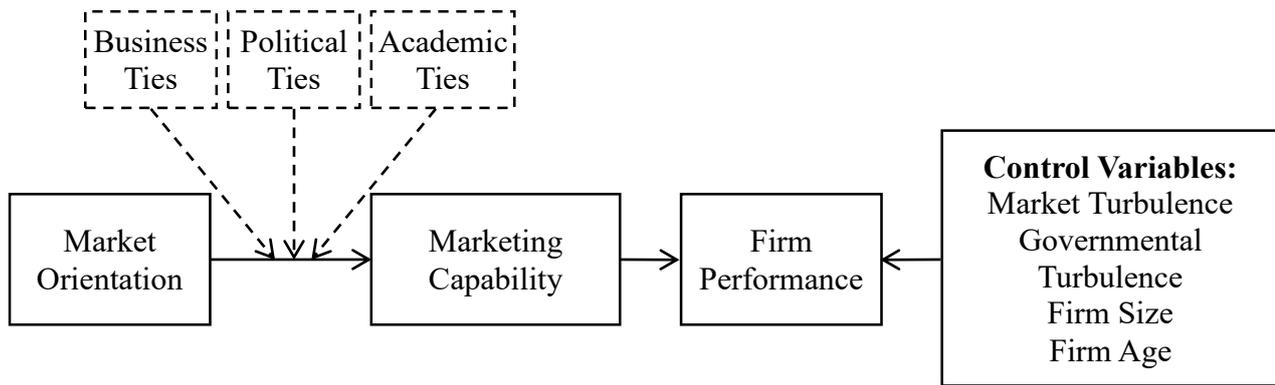


Table 1. Factor analysis for business, political, and academic ties

<i>Our firm has: (1 = "Not at all" to 7 = "Very much so")</i>	<i>Business Ties</i>	<i>Political Ties</i>	<i>Academic Ties</i>
Cronbach alpha	.77	.87	.86
...extensively utilized relationship (e.g. personal ties, networks, and connections) with managers of firms outside our industry.	.04	.42	<b>.62</b>
...acquired information beyond our current product-market experiences from our interactions with managers of firms outside our industry.	.25	.26	<b>.72</b>
...extensively utilized relationships with managers of firms in our industry.	-.08	.22	<b>.70</b>
...acquired deeper information for our current product-market experiences from our interactions with managers of firms in our industry.	.26	.05	<b>.81</b>
...extensively utilized relationships with government officials (e.g. officials in industrial bureaus, officials in regulatory organizations).	.08	<b>.79</b>	.24
...acquired information related to our product-market strategies (e.g. governmental regulations, tariffs) from our interactions with government officials.	.10	<b>.78</b>	.24
...extensively utilized relationships with officials of financial institutions (e.g. tax bureaus, state banks).	-.08	<b>.85</b>	.17
...acquired financial related information related to our product-market strategies (e.g. taxation, state funds) from our interactions with officials of financial institutions.	-.00	<b>.84</b>	.13
...extensively utilized relationships with officials of academic institutes (e.g. universities, research institutes).	<b>.91</b>	-.09	.11
...acquired technological and market related information for our product-market strategies from our interactions with officials of academic institutes.	<b>.90</b>	-.10	.11
...extensively utilized relationships with officials of professional associations (e.g. industrial associations, management associations).	<b>.72</b>	.22	.01
...acquired information for our product-market strategies from our interactions with officials of professional associations.	<b>.85</b>	.05	.18

*Note: Extraction Method: Principal Component Analysis. Rotation Method: Varimax.*

Table 2. Latent variable correlations

	Mean	SD	AVE	CR	1	2	3	4	5	6	7	8
<b>1</b> Marketing Capability	4.73	.83	<b>.54</b>	<b>.93</b>	<b>.74</b>							
<b>2</b> Business Ties	4.78	.98	<b>.59</b>	<b>.85</b>	.15	<b>.77</b>						
<b>3</b> Political Ties	4.84	1.44	<b>.69</b>	<b>.90</b>	.07	.50	<b>.84</b>					
<b>4</b> Academic Ties	2.76	1.56	<b>.72</b>	<b>.91</b>	.28	.25	.01	<b>.85</b>				
<b>5</b> Market Orientation	4.22	1.26	<b>.65</b>	<b>.94</b>	.51	.11	.05	.25	<b>.81</b>			
<b>6</b> Firm Performance	4.54	.92	<b>.70</b>	<b>.92</b>	.46	.28	.25	.09	.15	<b>.84</b>		
<b>7</b> Market Turbulence	4.08	1.72	<b>.80</b>	<b>.92</b>	.43	.06	.05	.11	.44	.11	<b>.90</b>	
<b>8</b> Governmental Turbulence	3.73	1.64	<b>.80</b>	<b>.94</b>	-.11	-.12	-.22	-.02	-.10	-.19	-.01	<b>.90</b>

*Note: Diagonal entries show the square roots of average variance extracted, others represent correlation coefficients.*

Table 3. Mediation test for hypotheses 1

<b>H1: MO→MC→FP</b>		$\beta$	SE	t-value	$p$		
Outcome variable: MC							
MO		.39	.04	9.20	.00		
Outcome variable: FP							
MC		.62	.10	6.19	.00		
MO		-.12	.07	-1.77	.07		
GT		-.04	.04	-1.07	.28		
MT		-.04	.04	-.96	.33		
Firm Size		.00	.00	.19	.84		
Firm Age		.01	.01	1.81	.07		
<b>Mediation effect</b>	Effect	Normal theory test			Bootstrapping		
		SE	t-value	$p$	SE	LL	UL
MO→MC→FP	.24	.05	5.12	.00	.06	.14	.37

*Notes: MO= Market orientation, MC= Marketing capability, GT= Governmental turbulence, MT= Market turbulence, LL= Lower-level interval, UL=Upper-level interval.*

Table 4. Moderated-mediation test for hypotheses 2 to 4

<b>Panel A: MO→MC→FP at values of BT</b>				
	<i>B</i>	<i>SE</i>	<i>t-value</i>	<i>p</i>
<i>Step 1 - Outcome variable: MC</i>				
MO	.39	.04	9.22	.00
BT	.02	.05	.42	.67
MO × BT	.08	.04	1.98	.05
<i>Step 2 - Outcome variable: FP</i>				
MC	.62	.09	6.24	.00
MO	-.12	.06	-1.81	.07
GT	-.04	.04	-1.03	.30
MT	-.05	.04	-1.11	.26
Firm Size	.00	.01	.25	.80
Firm Age	.01	.01	2.01	.04
<i>Step 3 - Conditional indirect effect at values of BT</i>				
	<i>Effect</i>	<i>SE</i>	<i>LL</i>	<i>UL</i>
-1 SD (3.79)	.19	.05	.11	.34
Mean (4.78)	.24	.05	.15	.38
+1 SD (5.77)	.29	.07	.17	.44
<b>Panel B: MO→MC→FP at values of PT</b>				
	<i>B</i>	<i>SE</i>	<i>t-value</i>	<i>p</i>
<i>Step 1 - Outcome variable: MC</i>				
MO	.38	.04	9.01	.00
PT	-.04	.03	-1.08	.27
MO × PT	.07	.03	2.35	.02
<i>Step 2 - Outcome variable: FP</i>				
MC	.65	.10	6.45	.00
MO	-.13	.06	-1.91	.06
GT	-.03	.04	-.83	.40
MT	-.02	.04	-.64	.52
Firm Size	.022	.00	.11	.91
Firm Age	.01	.01	1.65	.10
<i>Step 3 - Conditional indirect effect at values of PT</i>				
	<i>Effect</i>	<i>SE</i>	<i>LL</i>	<i>UL</i>
-1 SD (3.40)	.18	.06	.07	.33
Mean (4.84)	.25	.06	.14	.38
+1 SD (6.28)	.32	.07	.18	.47
<b>Panel C: MO→MC→FP at values of AT</b>				
	<i>B</i>	<i>SE</i>	<i>t-value</i>	<i>p</i>
<i>Step 1 - Outcome variable: MC</i>				
MO	.38	.04	8.64	.00
AT	.05	.03	1.56	.12
MO × AT	.01	.02	.35	.72
<i>Step 2 - Outcome variable: FP</i>				
MC	.62	.10	6.15	.00
MO	-.12	.06	-1.73	.08
GT	-.04	.04	-1.08	.27
MT	-.04	.04	-.87	.38
Firm Size	.00	.00	.19	.84
Firm Age	.01	.01	.165	.10
<i>Step 3 - Conditional indirect effect at values of AT</i>				
	<i>Effect</i>	<i>SE</i>	<i>LL</i>	<i>UL</i>
-1 SD (1.20)	.23	.07	.11	.41
Mean (2.76)	.24	.06	.14	.38
+1 SD (4.32)	.25	.06	.15	.40

*Notes: MO= Market orientation, MC= Marketing capability, BT= Business ties, PT= Political ties, AT= Academic ties, GT= Governmental turbulence, MT= Market turbulence, LL= Lower-level interval, UL=Upper-level interval.*

Table 5. Hierarchical-regression test for hypotheses 5a and 5b

Outcome Variable: MC	Basic Model		Interaction Model	
	$\beta$	t-value	$\beta$	t-value
MO	.47	5.77	.01	.02
BT	.09	1.28	-.13	.81
PT	.12	1.65	-.50	1.68
AT	.11	1.50	-.08	.31
MO×BT			.68	2.05
MO×PT			.58	1.98
MO×AT			.26	1.22
R <sup>2</sup>	.37		.40	

*Notes: MO= Market orientation, MC= Marketing capability, BT= Business ties, PT= Political ties, AT= Academic ties.*

## Appendix 1. Constructs and manifest variables

Constructs and Manifest Variables	Loading	T-value
<b>Marketing Capability</b> ( <i>AVE=0.54 CR= 0.93</i> ) - <i>Our firm performs the following activities effectively relative to its industry's standards:</i>		
...advertising and/or promotion	.75	.93
...public relations	.65	12.52
...sales	.74	17.81
...brand image management	.74	17.90
...pricing	.73	13.80
... market testing	.65	10.57
...new product launch management	.72	12.86
...distribution	.64	11.47
...market research (e.g. market trends, competitors, and customer needs analysis)	.74	15.24
...market planning	.80	20.88
...marketing strategy implementation	.79	19.63
...marketing skill development	.82	23.64
<b>Business Ties</b> ( <i>AVE=0.59 CR= 0.85</i> ) - <i>Our firm has:</i>		
...extensively utilized relationship (e.g. personal ties, networks, and connections) with managers of firms outside our industry.	.76	6.00
...acquired information beyond our current product-market experiences from our interactions with managers of firms outside our industry.	.86	13.25
...extensively utilized relationships with managers of firms in our industry.	.68	5.17
...acquired deeper information for our current product-market experiences from our interactions with managers of firms in our industry.	.77	6.62
<b>Political Ties</b> ( <i>AVE=0.69 CR= 0.90</i> ) - <i>Our firm has:</i>		
...extensively utilized relationships with government officials (e.g. officials in industrial bureaus, officials in regulatory organizations).	.74	3.96
...acquired information related to our product-market strategies (e.g. governmental regulations, tariffs) from our interactions with government officials.	.72	3.72
...extensively utilized relationships with officials of financial institutions (e.g. tax bureaus, state banks).	.92	5.28
...acquired financial related information related to our product-market strategies (e.g. taxation, state funds) from our interactions with officials of financial institutions.	.91	5.11
<b>Academic Ties</b> ( <i>AVE=0.72 CR= 0.91</i> ) - <i>Our firm has:</i>		
...extensively utilized relationships with officials of academic institutes (e.g. universities, research institutes).	.92	32.15
...acquired technological and market related information for our product-market strategies from our interactions with officials of academic institutes.	.92	27.78
...extensively utilized relationships with officials of professional associations (e.g. industrial associations, management associations).	.67	3.96
...acquired information for our product-market strategies from our interactions with officials of professional associations.	.87	17.55
<b>Market Orientation</b> ( <i>AVE=0.65 CR= 0.94</i> ) - <i>In our firm:</i>		
...we detect changes in our customers' product preference quickly.	.94	22.78
...we detect fundamental shifts in our industry (e.g., competition, technology, regulation) promptly.	.77	17.06
...we periodically review the likely effect of changes in our business environment (e.g., regulation) on customers.	.82	23.43
...when something important happens to a major customer or market, the whole organization knows about it in a short period.	.80	21.16
...customer suggestions and comments are disseminated at all levels in the organization on a regular basis.	.81	17.19
...we pay close attention to the changes in our customers' needs.	.73	15.68
...if a major competitor launched a campaign to our customers, we implement a response immediately.	.83	21.36
...we can effectively implement a marketing plan in a timely fashion.	.85	27.67
<b>Firm Performance</b> ( <i>AVE=0.70 CR= 0.92</i> ) - <i>Our firm In relation to goals set, this product has:</i>		
...met revenue goals.	.88	38.04
...met sales growth goals.	.76	14.31
...met market share goals.	.75	13.24
...met return on investment goals.	.89	43.12
...met profitability goals.	.90	35.23
<b>Market Turbulence</b> ( <i>AVE=0.80 CR= 0.92</i> ) - <i>In our firm's business environment:</i>		
...customer needs and product preferences changed rapidly.	.96	4.10
...customer product demands and preferences were uncertain.	.94	4.03
...it was difficult to predict changes in customer needs and preferences.	.77	3.01
<b>Governmental Turbulence</b> ( <i>AVE=0.80 CR= 0.94</i> ) - <i>In our firm's business environment:</i>		
...government regulations related to product standards changed constantly.	.91	8.05
...restrictions on pricing enforced by the government fluctuated considerably.	.84	7.91
...governmental regulation of advertising has been unpredictable.	.90	6.58
...governmental regulation on distribution and handling of products changed constantly.	.92	9.01

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