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THE MODERATING ROLE OF ORGANIZATIONAL CULTURE IN THE RELATIONSHIP BETWEEN POWER, TRUST, AND eSCMS ADOPTION INTENTION

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ABSTRACT

Building on multiple theoretical perspectives, we examined how organizational culture moderates the relationship between power, trust, and a firm's eSCMS adoption intention. We tested the hypotheses using survey data collected from senior executives in China. Our findings reveal that a target firm's perceived mediated power would negatively impact its trust toward a dominant firm, while its perceived non-mediated power would positively affect its trust. Meanwhile, trust can positively influence the target firm's eSCMS adoption intention. Further, an internally focused culture weakens the negative effects of mediated power on trust. Meanwhile, an externally focused culture weakens the positive relationships between non-mediated power and trust, and between trust and eSCMS adoption intention. The externally focused culture could weaken the negative relationship between mediated power and trust either. The theoretical contributions and managerial implications of the study are discussed.

Keywords: Power, Trust, Organizational culture, eSCMS adoption intention.

1. INTRODUCTION

With the development of digitalized, interconnected, and globalized markets, more and more organizations start to foster inter-organizational systems (IOS) across a supply chain (Ke et al. 2009; Liu et al. 2010; Sawhney 2013; Wiengarten et al. 2012; Zhang & Dhaliwal 2009). The Internet-enabled supply chain management systems (eSCMS), which reflects “the technical enabler of the orchestration of value chain operations across firm boundaries” (Liu et al. 2010 p.373), thus is becoming necessary and critical for overcoming spatial and temporal boundaries. These systems enable firms to store, process, and deliver information relevant to their partners through the low cost, rich-content, real-time, and broach deployment platform (Ke et al. 2009; Liu et al. 2010). However, although many studies have confirmed the benefits of eSCMS, the adoption of eSCMS is still a great challenge for many firms (Ke et al. 2009; Liu et al. 2010; Yao et al. 2007).

The rationale behind IOS is the integration of a firm’s value propositions with its partners’ resources and perspectives (Yeung et al. 2009). However, because of the uneven distribution of the benefits of IOS, the results of IOS adoption are highly unpredictable (Liu et al. 2010; Subramani 2004). It is suggested that powerful players will likely benefit at the expense of dependent firms, and the adoption of IOS thus would require these firms to trust each other (Cai et al. 2010; Raymond & Bergeron 2008; Yeung et al. 2009). In this view, a wide array of literature has explored the role of power and trust in IOS adoption from the socio-political perspective (Hart & Saunders 1997; Ke et al. 2009; Liu et al. 2010; Premkumar & Ramamurthy 1995). However, the findings on the relationships between power, trust, and IOS adoption are mixed and even controversial (Hart & Saunders 1997; Ke et al. 2009). For example, although many studies have found that the use of power can promote IOS adoption, others report weak and even negative relationships between power and IOS adoption (Ke et al. 2009; Son et al. 2005).

Exploring the moderating effect of organizational culture may help resolve the inconsistency in previous studies (Hewett et al., 2002). Organizational culture refers to a collection of assumptions, values, and beliefs that organizational members have in common (Liu et al. 2010). The literature has indicated that “within the network of social relationship by radicalism, culture assumes an important role” (Jaspersen et al. 2002 p.425). McDermott and Stock (1999), for example, proposed that organizational culture may affect how employees embrace an innovation and thus influence the innovation implementation process. Therefore, we argue that the relationship between power, trust, and eSCMS adoption may be conditioned by the focal firm’s organizational culture, and the social-political view can be extended to incorporate a contingency perspective.

The objective of the current study is to evaluate how organizational culture moderates the relationship between power, trust, and eSCMS adoption intention. Specifically, drawing upon the social-political perspective, we investigate the influence of the focal firm’s perceived dominant firm power on its perceived inter-organizational trust, which would affect its eSCMS adoption intention. Building on the existing power literature, the current study defines power as the mediated power and non-mediated power. Mediated power is defined as the power which is external to the focal firm and is based on the condition that the focal firm does what the dominant firm wishes. Non-mediated power refers to power sources whose enforcements guiding the focal firm’s decision-making and behaviors are not mediated by the dominant firm (Ke et al. 2009; Zhao et al. 2008). In this study, we define that if firm

A's dependence on firm B is higher than B's dependence on A, then B is the dominant firm having power over the target firm A. We propose that these two types of power may impact inter-organizational trust, and then influence the focal firm's eSCMS adoption intention in differential ways.

In addition, based on the contingency perspective, we propose that the focal firm's organizational culture would moderate the relationship between power, trust, and eSCMS adoption. In this study, we categorized organization cultures into externally and internally focused culture (Deshpande et al. 1993; Hewett et al. 2002; McDermott & Stock 1999). An internally focused culture emphasizes the development of people and systems within the firm, which an externally focused culture regards external environment as a significant factor that affects firm's survival (Deshpande et al. 1993; Hewett et al. 2002). We propose that these two types of culture would leverage the relationship between power, trust, and eSCMS adoption variously.

2. THEORETICAL BACKGROUND AND HYPOTHESES

DEVELOPMENT

2.1 Internet-enabled supply chain management systems

Internet-enabled supply chain management systems (eSCMS) is a subset of IOS (Ke et al. 2009; Liu et al. 2010; Wiengarten et al. 2012; Yao et al. 2007). They reflect the physical implementation of the management of supply chain process with the support of Internet technologies (Ke et al. 2009; Sawhney 2013; Soto-Acosta & Meroño-Cerdan 2008). By contrast traditional IOS, such as traditional electronic data interchange (EDI), eSCMS have different structure, technology, usage, and the ability of information exchanging (Liu et al. 2010; Yao et al. 2007). With the advantage of linking trading partners by an open, real-time, and global connected platform, eSCMS can enhance communication, coordination, and collaboration across firm boundaries at operational, tactical, and strategic levels (Ke et al. 2009; Liu et al. 2010). In addition, these systems allow firms to greatly improve their conventional performance by increasing transaction efficiencies and coordination effectiveness (Ke et al. 2009; Sawhney 2013; Soto-Acosta & Meroño-Cerdan 2008). The literature thus indicates that eSCMS could increase revenue, improve quality, and create loyalty through closer collaboration between partners in an entire supply chain (Ke et al. 2009; Liu et al. 2010; Wiengarten et al. 2012; Yao et al. 2007).

However, despite the purported benefits of eSCMS have been widely identified, making eSCMS work in practice would be challenging. Specifically, as one type of IOS, eSCMS cannot be adopted by firms independently in the supply chain (Liu et al. 2010). Firms need to move from a conventional relationship with channel members to new business partnership, which inevitably leads to risk. Liu et al. (2010), for example, argued that "due to the differences in partners' goals, knowledge about the resources, and means used to achieve a mission, such highly interdependent relationship is plagued with uncertainties that may result in partners' opportunistic behaviors, performance uncertainties, and strategic rigidity within the channel" (p.373). Meanwhile, it is suggested that the benefits from IOS can be distributed unevenly and skewed in favor of the powerful firm (Subramani 2004). That means, the powerful firm will benefit at the expense of the dependent firm. This indicates that uneven

distribution of the benefits from eSCMS among supply chain partners becomes the critical challenge when firms make the decision to adopt the systems.

According to socio-political theory, the power exercised by the dominant partner and the focal firm's trust toward the trading partner are significant antecedents of the adoption of IOS (He et al. 2013; Ke et al. 2009; Kettinger et al. 1995; Raymond & Bergeron 2008; Zhao et al. 2008). In this paper, we refer to the firm with power as the dominant firm and to the firm with higher dependence as the target or focal firm.

As Figure 1 shows, this study tries to develop a research model, which investigates how power and inter-organizational trust affect the firm's eSCMS adoption and how the organization culture moderates the relationship between power, trust, and eSCMS adoption. In this research, we focus on studying eSCMS adoption intention, rather than actual adoption because "the role of intention as a strong predictor of behavior has been well-established in IS and reference disciplines" (Ke et al. 2009; Komiak & Benbasat 2006; Liu et al. 2010).

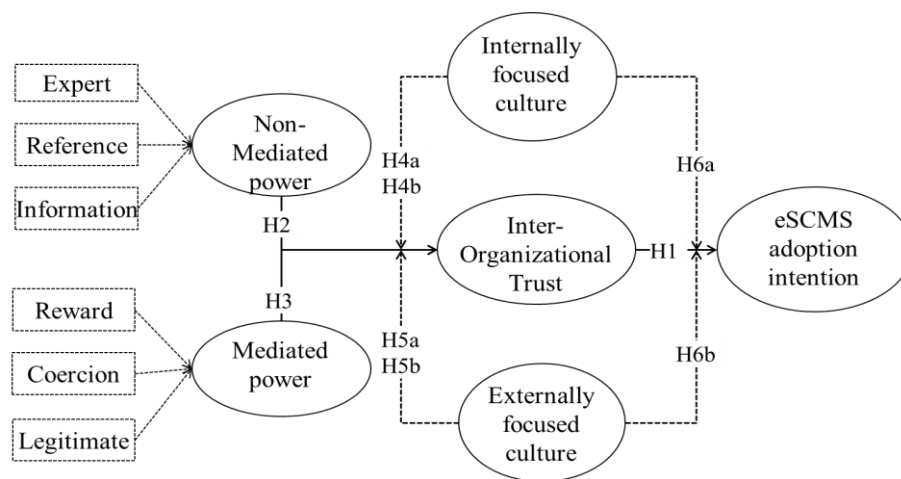


Figure 1. The research framework

2.2 Inter-organizational trust

Inter-organizational trust is defined "as one party's expectation that the other party can be relied on to fulfill obligations, behave in a predictable manner, and act and negotiate fairly even when the possibility for opportunism exists." (Cai et al. 2010 p. 260) Specifically, it is suggested that as a crucial component for a successful cooperated relationship, trust could support mutual dependence between firms and mediate their coordination requirements (Kettinger et al. 1995; Lai et al. 2008). It is thus has been regarded as a salient factor for success of IOS (Cousins & Stanwix 2001; Ireland & Webb 2007; Kettinger & Lee 1994; Lai et al. 2008; Tsai et al. 2013).

In the context of IOS, many scholars have proposed trust as the critical factor in IOS adoption, such as the eSCMS (Hart & Saunders 1997; Ke et al. 2009). Indeed, as an IOS, the adoption of eSCMS should be fully supported by all involved firms. To facilitate the adoption, the focal firm and the involved partners should invest special resources to transform their supply chain processes (Ke et al. 2009; Liu et al. 2010). However, although the benefits of eSCMS are attractive, the uncertainties of eSCMS adoption consequences, such as the opportunistic behavior of the partners and the uneven benefit distribution, will impede the adoption.

A high level of trust may help solve this dilemma. Specifically, when the focal firm realizes that the eSCMS adoption would involve high uncertain cooperation opportunity, its trust toward a dominant firm would make the focal firm has positive expectations about the dominant firm future behaviors. Such belief would make the focal firm be more optimistic of realizing the potential benefits of eSCMS. Meanwhile, the focal firm's trust toward the dominant firm would make the focal firm not only confident about the dominant firm's business sense and judgment, but also become more willing to make joint decisions. Therefore, we propose that trust has a positive effect on adoption of eSCMS.

H1: Inter-organizational trust should have a positive effect on adoption intention of eSCMS.

2.3 Organizational Power

Organizational power refers to the relative interdependence in a dyadic IOS across a supply chain (Ke et al. 2009; Kettinger et al. 1995; Raymond & Bergeron 2008; Willems et al. 2012; Zhao et al. 2008). It is suggested that the greater the relative dependence, the greater the power of a dominant firm to influence a target firm's decision and actions. The literature indicates that power is at the heart of IOS and plays a significant role in the supply chain (Cox 2001; Houshmand et al. 2012; Ke et al. 2009; Liu et al. 2010; Yao et al. 2007). It is suggested that coercion, reward, legitimate, expert, reference, and information are the key sources of organizational power. The most appropriate dichotomization of power is that between mediated and non-mediated power (Benton & Maloni 2005; Ke et al. 2009; Zhao et al. 2008).

Non-mediated power refers to power sources whose enforcements guiding the target firm's decision-making and behaviors are not mediated by the dominant firm (Ke et al. 2009; Zhao et al. 2008). It includes the source of expert, reference, and information. Reference power is the power held by the dominant firm when the target firm identifies with and hopes to be closely associated with the former. Expert power reflects the target firm's perception of the dominant firm's expertise or knowledge which is useful for the target firm. Information power is that the dominant firm has the ability to provide information not previously made available to the target firm, and can interpret existing information in ways that are meaningful but not yet known by the target firm.

In the context of eSCMS, the use of non-mediated power enables the dominant firm to help the target firm learn new technology and recognize the value creation opportunities offered by eSCMS. Through sharing information, understanding, and expertise with the target firm, the dominant firm demonstrates its competence and credibility, thus improving its trustworthiness (Ke et al. 2009; Raymond & Bergeron 2008; Zhao et al. 2008). Further, using non-mediated power allows the dominant firm to affect the target firm's attitudes toward the dominant firm, such as by enhancing the target firm's faith in the dominant firm's benevolence (Ke et al. 2009). Specifically, when a dominant firm shares information, understanding, and expertise with a target firm, the dominant firm can show that it cares about the mutual benefits of the channel relationship instead of only focusing on pursuing its own benefits at the expense of the target firm (Ke et al. 2009; Subramani 2004). In this view, we propose that non-mediated power has a positive effect on inter-organizational trust.

H2: *A target firm's perception of the non-mediated power of a dominant firm in the supply chain could positively impact on its trust toward the dominant firm.*

In supply chain literature, mediated power is external to the target firm and is based on the condition that the target firm does what the dominant firm wishes. It includes reward, coercion, and legal legitimate sources. Specifically, coercion power is that a dominant firm has the ability to mediate

punishment. Reward power is that a dominant firm has the ability to mediate rewards. Legal legitimate power is that a dominant firm has legitimate rights to influence a target firm (Benton & Maloni 2005; Maloni & Benton 2000). The literature suggested that mediated power is based on the target firm's perception, and it may lead to conflicts and negative feelings (Handley & Benton Jr 2012; Raymond & Bergeron 2008).

In the context of eSCMS, the use of mediated power may be risky and counterproductive because such power may increase conflict, which is unhealthy and destructive for IOS (Boyle et al. 1992; Hart & Saunders 1997; Ireland & Webb 2007; Ke et al. 2009). Specifically, mediated power could reflect the dominant firm's ability to administer punishments and assert legal authority, such as imposing financial penalties, withholding important support, or threatening to withdraw from initial promises, to the target firm (Leonidou et al. 2008). This power usage may lead the dominant firm to overemphasize the ways to achieve its benefits and ignore the opportunity to demonstrate its competence to the target firm (Ke et al. 2009; Maloni & Benton 2000). Meanwhile, a dominant firm normally uses mediated power, such as reward, to attempt to make the target firm comply with its individual requirements. This practice will cause the target firm to be subjugated to the dominant firm and to experience negative feelings from losing autonomy and being controlled, thus decreasing its trust toward the dominant firm (Ke et al. 2009; Leonidou et al. 2008).

H3: *A target firm's perception of the mediated power of a dominant firm in the supply chain could negatively impact on its trust toward the dominant firm.*

2.4 Organizational Culture

The concept of organizational culture is one of the most influential but also most controversial concepts in management research and practice (Deshpandé et al. 1993; Liu et al. 2010; Quinn & Rohrbaugh 1983). Organizational culture reflects the presence of shared values, beliefs, assumptions that organizational members have in common and reflected in organizational practices and goals (Deshpandé et al. 1993; Liu et al. 2010; Quinn & Rohrbaugh 1983). It is just like the personality of a firm, what makes the organization unique (McAfee et al. 2002). Previous studies have categorized organization culture into externally and internally focused culture to investigate the role of organizational culture in organizational decision making (e.g., McDerott and Stock 1999; Deshpande et al. 1993). In particular, an internal focused culture emphasizes the development of people and systems within the firm, while an external focused culture stresses external positioning and interaction with the external environment (Deshpande et al. 1993; Liu et al. 2010; Quinn & Rohrbaugh 1983).

As argued by contingency theorists, to be effective, a firm's managerial practices must be consistent with other aspects of the firm, especially factors that are human-related (Delery & Doty 1996; Greening & Gray 1994). In this view, scholars increasingly realized that organizational culture could play a key role on decisions such as adopting advanced technology (Liu et al. 2010; McDermott & Stock 1999). Specifically, it is suggested that organizational culture can impact managers' ability to process information, rationalize, and exercise discretion in their decision-making processes (Liu et al. 2010; Oliver 1990). For example, Hartmann (2006) proposed that organizational culture can stimulate innovative behavior among the members of an organization since it can lead them to accept innovation as a basic value of the organization and can foster commitment to it.

Previous studies indicated that internally focused and external focused cultures have differential effects on the firm's interpretations of external events, and thus differentially affect their responses to

the expectations and requirements of the environment (Deshpandé et al. 1993; Hewett et al. 2002). As Hewett et al. (2002) contend, dividing organizational culture into the internally/ externally focused culture is particularly appropriate to investigate supply chain relationships. Compared to an internally focused firm, an externally focused firm might act differently in a specific supply chain relationship, and such differences would affect how firms benefit from the supply chain relationship (Deshpandé et al. 1993; Hewett et al. 2002). Indeed, social-political theorists acknowledge that firms exercise their own discretion in responding to external pressures (Heugens and Lander 2009; Oliver 1991). Therefore, we suggest that internally focused and externally focused culture may have different influences on how the firm responds to social-political factors for eSCM adoption.

The literature indicates that an internally focused firm would emphasize internal improvement with expending resources to improve human relations and to optimize existing operational equipment and practices (Panayotopoulou et al. 2003). Specifically, this culture may strengthen the role of non-mediated power in developing inter-organizational trust as it emphasizes practices' consistency and process improvement (Detert et al. 2000). Specifically, this culture favors standardizing business processes in the firm and the approach by which the firm does business with partners (Chan et al. 2004; Panayotopoulou et al. 2003). The consistency of the skill development, procedure standards, and employee communication would facilitate the focal firm to follow a dominant firm's non-mediated power, such as knowledge, information, and reference, and then promote trust toward the dominant firm (Chan et al. 2004; Panayotopoulou et al. 2003).

Further, an internally focused culture places a great emphasis on the development of internal processes, values internally generated information, and prefers managing documents within the confine of the firm (Berthon et al. 2001; McDermott & Stock 1999). This focus may strengthen the negative influence of mediated power on inter-organizational trust. Specifically, the focus of employee cohesiveness, participation, and teamwork provides employees with an increased sense of ownership and responsibility (Chan et al. 2004; Deshpandé et al. 1993; McDermott & Stock 1999). However, when a dominant firm applies mediated power, it normally requires the focal firm to follow its demand. The internally focused culture may make the focal firm realize that the dominant firm uses the mediated power because it wants to take advantage of other firms' dependence to succeed.

H4a: An internally focused culture could strengthen the positive relationship between non-mediated power and inter-organizational trust.

H4b: An internally focused culture could strengthen the negative relationship between mediated power and inter-organizational trust.

An externally focused culture takes the environment as complex, turbulent, and politicized, and a significant factor that affects firm survival (Detert et al. 2000). Specifically, as it encourages initiatives, novel service, and achievement of measurable goals and targets, this culture would lead a firm to actively scan the external environment to assess its strengths and weaknesses, and strive to meet customer demands (McDermott & Stock 1999). Under this condition, external knowledge, information and reference is the critical and valuable source for a focal firm to respond to external changes. In this view, an externally focused culture would strengthen the positive relationship between non-mediated power and inter-organizational culture.

On the other hand, given that an externally focused culture encourages firms to adapt quickly to market conditions (Hewett et al. 2002), it may weaken the negative impact of mediated power on inter-organizational trust. Specifically, to ensure flexibility (Zammuto & O'Connor 1992), a firm with

an externally focused culture would encourage the coordination of operations across the supply chain. Therefore, when the dominant use mediate power, the externally focused partner would be likely to trust that the dominant firm would keep its promise.

H5a: An externally focused culture could strengthen the positive relationship between non-mediated power and inter-organizational trust.

H5b: An externally focused culture could weaken the negative relationship between mediated power and inter-organizational trust.

The literature indicates that the impact of relationship quality on firm decision would be strengthened by the internally focused culture (Hewett et al. 2002). It is suggested that an internally focused culture normally facilitate the firm to make decisions based on the established business relationships. Under this condition, an internally focused firm would be more willing to venture inside a known circle of partners, which have become part of its internal focus. In this view, in the context of eSCMS, an internally focused culture would strengthen the influence of inter-organizational trust and eSCMS adoption intention. However, when the focal firm is externally focused, the relationship between inter-organizational trust and eSCMS adoption intention would be weakened. Indeed, an externally focused culture encourages firms to adapt quickly to market conditions (Deshpandé et al. 1993; Liu et al. 2010; Quinn & Rohrbaugh 1983). This culture would make the focal firm be focused on the best operations, and changing partners quickly. This tendency further encourages the focal firm to adapt quickly to whatever market conditions it perceive will grow their business at the time (Hewett et al. 2002). In this view, the role of trust in firm decision will be limited by the externally focused culture.

H6a: An internally focused culture could strengthen the positive relationship between inter-organizational trust and eSCMS adoption intention.

H6b: An externally focused culture could weaken the positive relationship between inter-organizational trust and eSCMS adoption intention.

3. METHODOLOGY

3.1 Sample

We collected data through a questionnaire survey in Chinese firms that operate in the manufacturing and service industries. China is a strong global manufacturing base, which provides a good opportunity for supply chain research. With the help of an institution which is famous for its executive training programs, we distributed 202 questionnaires to senior executives from the identified firms that had not adopted eSCMS. These senior executives have good knowledge about the issue examined by our research, especially the issues about the relationship with other business partners and the firm's environment. To ensure that these respondents would have the same understanding of eSCMS as the authors, we provided a clear definition and description of eSCMS at the beginning of the questionnaire.

To improve the response rate, we made follow-up phone calls and sent reminder emails. At last we received 148 returned questionnaires and 16 incomplete questionnaires were discarded. Finally, we get 132 useful questionnaires and a response rate is approximately 65%. We further evaluated the non-response bias by comparing the early and late replies to all variables using the chi-squares according to Armstrong and Overton (1977). Our results indicated that no significant differences were

found, which suggests that non-response bias was not a serious issue in this study. The demography of the respondents is shown in Table 1.

	N	Percentage
Industry		
Manufacturing	61	46.21%
Service	71	53.79%
Ownership type		
State-owned	53	40.15%
Privately-owned	34	25.75%
Foreign-controlled	45	34.10%
Number of Employees		
<100	35	26.52%
100-500	30	22.73%
500-1000	19	14.39%
More than 1000	48	36.36%
Number of IT Employees		
≤5	53	40.15%
6-10	24	18.18%
11-15	14	10.61%
More than 15	42	30.06%

Table 1 Sample demographic information (132)

3.2 Measures

We first developed an English questionnaire based on previously validated measures. All items were measured with 7-point Likert scales, ranging from “strongly disagree” to “strongly agree”. To ensure the face and content validity of the questionnaire, we invited three scholars from the areas of information systems and operations management to review it. Given that this research is conducted in china, we translated the English questionnaire into Chinese based on the translation committee approach (van de Vijver & Leung 1997).

The measurement items for the dependent variable, namely, eSCMS adoption intention, were adopted from the work of Liu et al. (2010). These items indicate the current target (eSCMS) and timeframe (1 year). The items measuring the six power sources were adopted from Brown et al. (1995). In the current study, we treated coercion, reward, legitimate power as the mediated power, and defined expert, information, and reference power as the non-mediated power. The items used to measure the inter-organizational trust were adopted from Cummings and Bromiley (1996) and Sako (2011). We measured the organizational culture using items adapted from the works of Deshpandé et al. (1993) and Khazanch et al. (2007).

4. DATA ANALYSIS AND RESULTS

4.1 Measurement reliability and validity

In this study, we selected PLS Graph for our data analysis. PLS graph can conduct the analysis without the limitation of sample size and simultaneously analyze the measurement model and the structural model. Specifically, we first tested the reliability and validity. First, we tested the reliability by using composite reliability and the value of Cronbach's alpha. The values of the composite reliability presented in Table 2 ranges from 0.821 to 0.923, all being greater than 0.70, and the value of Cronbach's alpha ranges from 0.670 to 0.876, all being greater than 0.60. Further, we tested the construct validity by focusing on convergent validity and discriminant validity. The results showed that the loadings of all items range from 0.687 to 0.917, all being higher than 0.60. In addition, the values of the Average Variance Extracted (AVE) ranged from 0.545 to 0.829, all being higher than 0.50. These results indicated that our measurement model has good convergent validity.

Constructs	Items	Loading	Composite reliability	AVE	Cronbach Alpha
Internally focused culture	4	0.69-0.79	0.83	0.55	0.72
Externally focused culture	4	0.75-0.76	0.85	0.58	0.75
Inter-organizational trust	4	0.75-0.85	0.88	0.64	0.81
Coercion power	3	0.81-0.90	0.90	0.75	0.83
Reward power	3	0.74-0.83	0.82	0.60	0.67
Legitimate power	2	0.91-0.91	0.91	0.83	0.79
Expert power	3	0.80-0.88	0.88	0.71	0.79
Reference power	2	0.88-0.88	0.87	0.77	0.70
Information power	3	0.77-0.81	0.83	0.62	0.69
Adoption intention	3	0.88-0.92	0.92	0.80	0.88

Table 2 Results of factor analysis

	Mean	S.D.	1	2	3	4	5	6	7	8	9	10
1. Internally focused culture	3.37	1.12	0.74									
2. Externally focused culture	3.19	1.10	0.70**	0.76								
3. Inter-organizational trust	3.27	0.91	0.40**	0.40**	0.80							
4. Coercion power	3.84	1.27	-0.07	0.03	-0.14	0.87						
5. Reward power	3.60	0.93	0.08	0.08	0.04	0.40**	0.78					
6. Legitimate power	4.21	1.31	-0.07	-0.06	-0.02	0.48**	0.49**	0.91				
7. Expert power	3.67	1.07	0.22*	0.18*	0.22*	0.35**	0.47**	0.45**	0.84			
8. Information power	3.35	0.87	0.29**	0.39**	0.36**	0.30**	0.37**	0.28**	0.51**	0.78		
9. Reference power	3.33	1.00	0.32**	0.32**	0.36**	0.11	0.34**	0.24**	0.44**	0.50**	0.87	
10. Adoption intention	3.52	1.38	0.25**	0.22*	0.24**	-0.08	-0.07	-0.07	0.07	0.10	0.17*	0.89

Table 3 Mean, standard deviation, and correlations

To assess the discriminant validity, we compared the relationship between correlations among constructs and the square roots of AVEs as recommended by Fornell and Larcker (1981). As shown in Table 3, the square roots of AVE for all constructs were greater than the correlations between constructs, which indicating the adequate discriminant validity of the measurement.

4.2 Hypotheses testing

Figure 2 presents the results of the structural model. Specifically, we found that inter-organizational trust can influence eSCMS adoption intention positively and significantly ($\beta=0.24$, $p<0.01$), which supported H1. Meanwhile, the results demonstrate that non-mediated power has a positive effect on inter-organizational trust ($\beta=0.54$, $p<0.01$), which supported H2. The impact of mediate power on inter-organizational trust was negative and significant ($\beta=-0.32$, $p<0.01$), and therefore H3 was supported.

In addition, we tested the moderating role of organizational culture in the relationships between power, inter-organizational trust, and eSCMS adoption intention. Specifically, the results presented that internally focused culture could weaken the negative relationship between mediated power and trust ($\beta=-0.36$, $p<0.01$), but could not leverage the relationship between non-mediated power and trust ($\beta=0.17$), therefore both H4a and H4b were not supported. Further, we found that externally focused culture could weaken the positive relationship between non-mediated power and trust ($\beta=-0.25$, $p<0.05$), and the negative relationship between mediated power and trust ($\beta=-0.39$, $p<0.01$). As such, H5a was not supported, while H5b was supported. Finally, the result indicated that externally focused culture could weaken the relationship between trust and eSCMS adoption intention ($\beta=-0.28$, $p<0.1$), while internally focused culture did not ($\beta=0.19$). Thus, H6a was not supported, while H6b was supported.

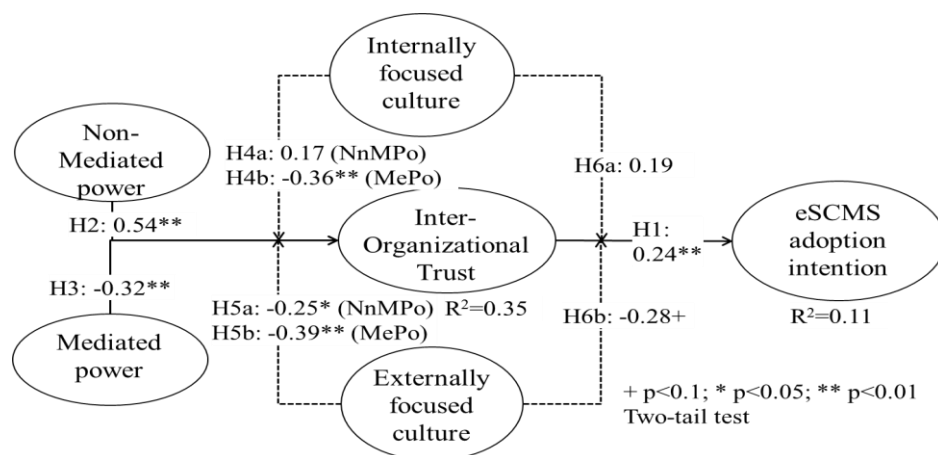


Figure 2 Results for the structural model

5. DISCUSSION AND CONCLUSION

5.1 Discussion

Our findings on the relationship between power, trust, culture, and eSCMS adoption are not only consistent with prior research, but also offer some new empirical findings about the role of power, trust, and culture in driving the target firm to adopt eSCMS. Specifically, the results suggest that the

two types of organization power, namely mediated power and non-mediated power have differential effects on inter-organizational trust. Specifically, non-mediated power has positive influence on inter-organizational trust, while mediated power has negative impact on inter-organizational trust. These results are consistent with the findings in the existing literature, that is, mediated power is based on the target firm's perception, and it may lead to conflicts and negative feelings (Handley & Benton Jr 2012; Ke et al. 2009; Raymond & Bergeron 2008), while "non-mediated power produces fewer conflicts in inter-organizational relationships, and thus enhances the quality of the dyadic relationship" (Ke et al. 2009 p.841). In addition, the result showed that inter-organizational trust is the critical determine of a target firm's intention to adopt eSCMS. This finding is consistent with the existing literature (Hart & Saunders 1997; Ke et al. 2009).

The results further indicate that organizational culture (i.e., internally focused or externally focused culture) moderates the relationships between power, trust, and eSCMS adoption. Specifically, the present study shows that externally focused culture could significantly weaken the negative relationship between mediated power and trust, which is consistent with our hypotheses. However, the result further suggests that externally focused culture would weaken the positive relationship between non-mediated power and trust either, which is inconsistent with our hypotheses. Although this finding is somewhat surprising, it highlights the essential role of externally focused culture in the relationship between power and trust in China. A possible explanation may be that an external culture emphasizes the achievement of measurable goals (Chan et al. 2004; McDermott & Stock 1999). For the non-mediated power, its influence is normally tacit, indirect, and difficult to measure. Thus, the impact of non-mediated power on trust would be decreased by the externally focused culture. Further, we found that the externally focused culture could decrease the influence of trust on eSCMS adoption intention, which is consistent with our hypotheses.

On the other hand, the results show that internally focused culture could significantly weaken the negative relationship between mediated power and trust, which is inconsistent with our hypotheses. The possible explanation may be that an internally focused culture may treat the relationship with a dominant partner as the internal issue (Ke et al. 2009). Given this culture favors the control of business processes, it may be inclined to improve itself through expending resources on optimizing existing operational equipment and practices (McDermott and Stock 1999). Thus, this culture would help weaken the negative influence of mediated power on trust.

The present study further finds that internally focused culture cannot significantly strengthen the relationship between non-mediated power and trust, and the relationship between trust and eSCMS adoption intention, while its moderating effects are positive. The possible explanation may be internally focused culture's high emphasis on the development of people and systems within the firm (Deshpande et al., 1993). Such emphasis may limit the role of external information, knowledge and reference in an internally focused firm's decision making.

5.2 Implications and Limitations

The objective of the current study is to explore how the social-political factors influence firm eSCMS adoption intention, and how organizational culture moderates such influences. The results generally support the theoretical propositions on the relationships between power, trust, and eSCMS adoption intention, and the moderating effects of organizational culture. Specifically, the present study contributes to the extant eSCMS literature by exploring the influence of social political factors,

namely power and trust, on adoption intention. Our findings indicate that mediated and non-mediated power have differential role in influencing inter-organizational trust. Further, we extend the existing social-political research by exploring the moderating effects of the contextual factor (i.e., organizational culture). The findings suggest that, in addition to their direct effects, power would interact with organizational culture and have interactive effects on trust, and the influence of trust on eSCMS adoption intention would be leveraged by culture.

In addition, the current study has important managerial implications for firms striving to diffuse eSCMS in China. First, manager should pay more attention to the role of social-political factors in firm decision, especially power and trust. Specifically, guidelines for managers in a dominant firm on the use of power are provided. The results indicate that managers should be cautious to use the mediated power to influence the target firm's decisions. Further, the current research cautions managers to note the critical role of organizational culture in affecting the relationship between power, trust, and eSCMS adoption intention. In particular, externally focused culture can weaken the relationship between power, trust, and eSCMS adoption intention, while internally focused culture only weakens the relationship between mediated power and trust.

The results and contributions of the current study must be evaluated in light of its limitations. First, our research focuses on a firm's eSCMS adoption intention instead of on the actual adoption. Although the role of intention is a strong predictor of behavior, we believe that investigating the actual action may help achieve an interesting insight. Third, we collected data from one informant per firm. Second, the eSCMS adoption is a strategic decision that requires groups of executives to make joint decisions. Multiple informants in top management teams may help collect more appropriate data. Third the relationships between trust, power, and adoption of eSCMS may be different for firms in different regions or context. We suggest future research to be cautious to extend the findings of this study to other context, which has different cultural, economic, and political conditions.

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