



Marketing Science Institute Special Report 10-201

The Impact of Sales Control Systems on Sales Behaviors and Customer Relationships: Evidence from China

Guangping Wang, Wenyu Dou, and Nan Zhou

Copyright 2010 Guangping Wang, Wenyu Dou, and Nan Zhou

MSI special reports are in draft form and are distributed online only for the benefit of MSI corporate and academic members. Reports are not to be reproduced or published, in any form or by any means, electronic or mechanical, without written permission.

THE IMPACT OF SALES CONTROL SYSTEMS ON SALES BEHAVIORS AND CUSTOMER
RELATIONSHIPS: EVIDENCE FROM CHINA

Guangping Wang

Penn State University, 30 East Swedesford Rd., Malvern, PA 19355-1443, gww10@psu.edu

Wenyu Dou

City University of Hong Kong, Tat Chee Avenue, Kowloon, HKSAR, mkwydou@cityu.edu.hk

Nan Zhou

City University of Hong Kong, Tat Chee Avenue, Kowloon, HKSAR, mkzhou@cityu.edu.hk

April 11, 2008

ABSTRACT

Sales organizations design personnel control systems to maximize the productivity of their sales forces, in both short and long runs. Although such sales control systems may directly or indirectly affect customers, little research has investigated such effects. We develop a model to examine how sales control systems may influence relationship outcomes through their effects on customer-directed sales behaviors in different environmental conditions. Based on a survey study using data collected from matched business-to-business buyer-seller dyads in China, we find that input, output, and process controls have differential effects on relational, knowledge sharing, and opportunistic behaviors, which in turn influence relationship performance and customer share of wallet. Both internal and external environmental factors also moderate the formal control-behavior relationships. The findings have various research and managerial implications.

“The Impact of Sales Control Systems on Sales Behaviors and Customer Relationships: Evidence from China,” Copyright © 2008, Guangping Wang, Wenyu Dou, and Nan Zhou

ACKNOWLEDGEMENT

The authors gratefully acknowledge the financial support from the Marketing Science Institute (Grant #4-1397), the City University of Hong Kong (Grant #7001905), and the Institute for Study of Business of Markets of Penn State University (Grant #0513). The authors also thank Rick Netemeyer and Jan Heide for their helpful comments on earlier drafts of the paper.

REPORT SUMMARY

Sales organizations design their personnel control systems to implement their customer relationship strategies and maximize the productivity of their sales force. Although such sales control systems may directly or indirectly affect customers, little research has investigated such effects. This is considered a significant void in the sales management literature. In this study, the authors examine how sales control systems may influence relationship performance and customer share of wallet through their effects on customer-directed sales behaviors under different environmental conditions, using survey data collected from matched business-to-business buyer-seller dyads in China. Data on sales control and environmental variables were collected from salespeople and data on sales behaviors, relationship performance, and customer share of wallet from the salespeople's customers.

The authors find that three formal controls (i.e., input, output, and process) have differential effects on three customer-directed sales behaviors, namely, relational, knowledge sharing, and opportunistic behaviors. Input control does not affect the three customer-directed sales behaviors, but affect relationship performance directly, output control contributes to both relational and knowledge sharing behaviors, but in the same time encourages opportunistic behaviors, while process control is not associated with relational or knowledge sharing behavior, but promotes opportunistic behaviors.

The authors also find that informal control systems in the form of professional control and market-oriented cultural control have positive effects on relational behaviors and negative effects on opportunistic behaviors. In addition, these informal controls moderate the effect of input and output controls. Professional control enhances the input-knowledge sharing link and discourages opportunistic behaviors promoted by the output control system. Cultural control is found to weaken the overall effect of formal control on sales behavior, suggesting the culture may, to a degree, substitute the formal control system in regulating salespeople's behaviors.

In examining the role of external environmental factors in moderating control-behavior relationships, the authors find that when market turbulence is high, input control is more likely to lead to relational behaviors, while output control is less likely to generate relational behaviors but more likely to

promote opportunistic behaviors. Further, output control is more likely to promote knowledge sharing behaviors when the market is highly competitive than when it is not.

The study also links sales control and customer-directed sales behaviors to relationship effectiveness, and confirms that relational and knowledge sharing behaviors contribute to, and opportunistic behaviors damage, customer evaluation of relationship performance, which in turn positively affects customer share of wallet.

For sales managers, the study suggests that as customer-directed sales behaviors are critical to relationship effectiveness and are significantly affected by the sales control system, the control system should be designed with caution. Output control is a double-edged sword that can encourage both relationship building and relationship damaging behaviors. Strict process control can also lead to opportunistic behaviors. However, informal professional and market-oriented cultural control may be used to curb opportunistic behaviors. Effective input control can make a direct positive difference in relationship performance. Managers should also take into consideration critical external market factors when designing the control system. Input control may be more important when market is turbulent while output control can be employed more effectively when the market is highly competitive. As the data for this study were collected from China, the results are particularly useful for companies with sales operations in that country.

INTRODUCTION

Personnel control in sales organizations has fundamental importance for the implementation of the firm's marketing and sales strategy. Firms use input control to provide resources, support, and training opportunities to salespeople, output control to assess the achievement of sales objectives and goals, and process control to monitor whether salespeople follow the established sales procedures. These control mechanisms are employed to regulate the behaviors and operation of their sales forces to achieve organizational goals.

Researchers have examined sales control systems in terms of their classification and composition, organizational-level antecedents, individual salesperson-level consequences, and the influence of environmental factors (Challagalla and Shervani 1996; Cravens et al. 1993; Jaworski and MacInnis 1989; Jaworski, Stathakopolous, and Krishnan 1993; Krafft 1999; Oliver and Anderson 1994, 1995; Ramaswamy 1996). However, virtually all empirical investigations of the impact of sales controls remain limited to the marketing or sales organization, with little attention paid to the firm's customers. Although Oliver and Anderson (1994) call for research into the effects of sales control on customers' perceptions of salespeople's performance, studies on the outcomes of sales control systems unfortunately include only salespeople's self-reports or supervisor evaluations. This lack of attention to the customer perspective seems surprising, given the growing recognition of the critical importance of customer relationship strategy to firm performance (Cannon and Perreault 1999; Dwyer, Schurr, and Oh 1987; Ganesan 1994; Gupta, Lehmann, and Stuart 2004; Morgan and Hunt 1994; Rust, Zeithaml, and Lemon 2000).

In business-to-business settings, the success of customer relationship strategy largely depends on sales force behaviors, because salespeople function as the key link between the firm and its customers and play vital roles in creating and adding value for customers (Crosby, Evans, and Cowles 1990; Luthy 2000). To implement a customer relationship strategy in today's competitive market, salespeople must establish, build, and maintain effective relationships with their customers. Sales organizations must answer the question: How can the internal sales control systems be designed to motivate and enable

salespeople to build effective customer relationships? This critical question recognizes that design and evaluation of a sales control system must incorporate its potential impact on the customer. Unfortunately, current literature offers limited theoretical and empirical evidence to answer this question.

Accordingly, this research explores the impact of sales control systems on customer relationship effectiveness, with the assumption that any impact a sales control system has on the sales force is likely to be transmitted via the salespeople's customer-directed sales behaviors. Specifically, we have five objectives. First, following Jaworski and colleagues' (Jaworski and MacInnis 1989; Jaworski et al. 1993) idea that different control types can be used simultaneously, we examine the effects of different controls on customer-directed sales behaviors in one model. Second, while controls are designed to foster positive behaviors and outcomes, negative consequences may arise from controls-in-use (Jaworski and MacInnis 1989; Phillips 1982). As most research focuses on either positive or negative outcomes, we examine both positive and negative behaviors simultaneously. Third, we exclusively focus on customer-directed sales behaviors that have a great potential to influence customer perceptions and behaviors and that have not been examined in the extant sales control literature. Fourth, building on the contingency idea that control effectiveness is contingent upon the context in which controls are used (Jaworski 1988; Ouchi 1979), we test whether environmental conditions may affect the way formal controls influence the sales behaviors. Finally, we aim to minimize the common method pitfall regularly observed in survey research (Podsakoff et al. 2003) and provide a strong test of the model relationships by collecting data from two different but matched sources, i.e., salespeople and their business buyers.

In the remainder of this article, we develop a conceptual model that links sales controls to sales behaviors, and relationship outcomes. We then test the model with matched dyadic data collected from a sample of Chinese business-to-business salespeople and their corresponding purchasing agents. Following the empirical analysis and results, we discuss theoretical and managerial implications and future research directions.

CONCEPTUAL MODEL AND HYPOTHESES

Based on the notion that individual behaviors result from organizational design features (Anderson and Oliver 1987; Ferrell and Gresham 1985; Jaworski 1988), we posit that formal and informal controls influence customer relationship outcomes through their intermediate effects on salespeople's customer-directed behaviors. We focus on three kinds of customer-directed sales behaviors that have profound impacts on customer relationships, namely, relational behaviors, knowledge-sharing behaviors, and opportunistic behaviors. As environmental factors have been suggested to moderate the effect of controls on salesperson performance such that positive outcomes are more likely to occur when the environment and the control system match (Jaworski 1988; Ouchi 1979), we model the impact of two internal environmental factors (i.e., professional control and market-oriented cultural control) and two external environmental factors (i.e., market turbulence and competitive intensity) due to their prominent role in the marketing literature (Ganesan 1994; Han, Kim, and Srivastava 1998; Jaworski 1988; Jaworski and Kohli 1993; Robertson and Anderson 1993). Finally, we include customer perceptions of relationship performance and customer share of wallet as consequences of customer-directed sales behaviors (Anderson and Narus 1990; Reinartz and Kumar 2000; Rust et al. 2004). The conceptual model is illustrated in Figure 1.

Sales Control Systems

A control system comprises an organization's set of procedures for monitoring, directing, and evaluating its employees, designed to increase the probability that specified plans get implemented properly and desired outcomes achieved (Anderson and Oliver 1987; Henderson and Lee 1992; Jaworski 1988). Whereas Anderson and Oliver (1987) regard sales control as a combination of outcome- and behavior-based evaluation system, Jaworski (1988) classifies controls into two broad categories: formal and informal. Formal sales controls are written, management-initiated mechanisms, while informal sales controls are unwritten, typically worker-initiated mechanisms, both designed to influence salespeople's behaviors.

The timing of managerial intervention determines three major types of formal controls: input, output, and process (Flamholtz, Das, and Tsui 1985; Jaworski 1988; Snell 1992). Input control appears

prior to implementing a sales activity, such as selection criteria, recruitment and training programs, provision of sales technology, management support, planning, and other forms of resource allocation. Output control monitors and evaluates performance outcomes against standards set forth by the company, typically short-term goals such as sales volume and quota achievement. Process control monitors how salespeople perform their job and evaluates them on whether they follow the established procedural and behavioral prescriptions.

Jaworski (1988) identifies three informal controls: self, professional, and cultural. Self control means that each individual establishes personal objectives, monitors personal attainment, and adjusts individual behaviors and actions as necessary. Professional control exists when colleagues form norms and expectations of one another's work and behavior, and when an individual deviates from that norm, peer pressure often sets in to correct it. Finally, cultural control refers to the values and normative patterns shared by the entire organization that guide employee behaviors. Although self control can be successful for certain jobs, external mechanisms normally must exist to ensure the desired behavior occurs (Kerr and Slocum 1981). In this study, we investigate the role of professional and cultural controls in shaping salespeople's customer-directed behaviors.

Customer-Directed Sales Behaviors

Salespeople represent the physical manifestations of the organization's boundaries and the links between the organization and its customers as the salesperson often is the only contact the customer has with the firm (Adams 1976; Singh 1998). Some sales activities inherently focus internally, whereas others tend to be externally oriented and have a direct impact on customers (Behrman and Perreault 1982; Moncrief, Hart, and Robertson 1988). Sales literature suggests salespeople's relational, knowledge-sharing, and opportunistic behaviors are critical for customer relationship effectiveness (Saxe and Weitz 1982; Weitz and Bradford 1999).

Relational behaviors refer to the salesperson's customer-oriented effort and conduct that are conducive to maintaining, cultivating, and growing customer relationships (Crosby, Evans, and Cowles 1990; Saxe and Weitz 1982). Relational behaviors are a key component of partnering strategies in which

the salesperson solves customers' problems by creating and delivering value-added solutions (Berry and Parasuraman 1991; Weitz and Bradford 1999). Several relational behaviors that have emerged as critical for building and maintaining successful relationships include identifying customer needs and wants, customizing products and services to the customer's specific needs, and working with customers as long-term partners (Behrman and Perreault 1982; Beverland 2001; Saxe and Weitz 1982; Weitz and Bradford 1999).

Knowledge-sharing behaviors refer to the efforts salespeople spend to develop relevant product and market knowledge and share it effectively with customers (Hunter and Perreault 2007).

Knowledge-sharing behaviors may lead to higher customer satisfaction because they facilitate product and service customization to fulfill customers' special needs (Berry 1995). In addition, communicating knowledge provides an effective technique to manage conflict (Weitz and Bradford 1999). Research shows that salespeople seem more valuable to customers if they can provide education by imparting product and industry knowledge (Beverland 2001).

Opportunistic behaviors are behaviors intended to advance the salesperson's short-term self-interest with guile at the expense of the long-term interest of the sales organization and/or the customer (John 1984; Williamson 1975). Customer-directed opportunistic behaviors may include effort to secure short-term purchase orders without regard to long-term consequences, focusing solely on selling but neglecting service and other important responsibilities, overemphasizing particular products, overpromising or exaggerating product and service claims, and the like (Hampton 1970; Moncrief et al. 1988; Murphy 2004; Roman and Ruiz 2005).

Effect of Formal Controls on Sales Behavior

Input control. Input control is defined as measures used to ensure that salespeople have the right aptitude, skills, support, information, technology, and other resources for relationship building (Flamholtz, Das, and Tsui 1985). Such input resources equip salespeople to solicit, process, and make better sense of customer information and thus enhance their capability to perform relationship-building activities (Challagalla and Shervani 1996). Cognitive evaluation theory suggests that efforts to improve

salespeople's competence and skills should increase their intrinsic motivation and generate greater interest in building customer relationships (Deci and Ryan 1985). Therefore, we expect input control to contribute positively to both relational behavior and knowledge-sharing behavior. In addition, because input resources can increase salespeople's self-confidence and heighten their intrinsic motivation for better performance, the likelihood that they engage in opportunistic behaviors should decline. Thus, we hypothesize:

H₁: Greater use of input control is associated with (a) greater relational behavior, (b) greater knowledge-sharing behavior, and (c) less opportunistic behavior.

Output control. With greater output control, salespeople typically work without close supervision, and their evaluations rely on simple, objective outcome measures (Anderson and Oliver 1987). Because output control shifts the performance risk from the organization to salespeople, their obligation to the sales organization becomes a less important motivator than personal goals and customer needs (Anderson and Oliver 1987). Therefore, salespeople may be encouraged to develop a greater commitment to the customers than to the employers (Siguaw, Brown, and Widing 1994). Empirical research, which indicates output control is associated with lower organizational commitment (Oliver and Anderson 1994), seems to support this argument. In order to survive, salespeople may develop a higher level of customer orientation and hence greater motivation to engage in relational and knowledge-sharing behaviors to maintain long-lasting relationships.

On the flip side, short-term evaluation criteria generally lead to short-term behaviors. Developing and building customer relationships sometimes does not create immediate results and thus may be viewed as an opportunity cost to avoid (Saxe and Weitz 1982). Furthermore, the lack of supervision provides more chances for problematic behaviors to grow undetected. Empirical research confirms that with output control, salespeople tend to engage in dysfunctional behaviors (Cravens et al. 1993; Jaworski and MacInnis 1989; Murphy 2004; Oliver and Anderson 1994; Ramaswamy 1996). Therefore, we hypothesize:

H₂: Greater use of output control is associated with (a) greater relational behavior, (b) greater

knowledge-sharing behavior, and (c) greater opportunistic behavior.

Process control. Process controls specify and monitor daily activities and job procedures (Jaworski 1988). Because salespeople under process control are not rewarded or evaluated on their output results, researchers have argued that salespeople may in turn spend more time trying to solve customer problems, develop knowledge and expertise, and conduct service activities rather than generating orders (Oliver and Anderson 1994). Adherence to company policies and procedures may give the impression of fairness and objectivity, as well as perceptions of reliability and consistency in the services offered. However, since salespeople do not directly bear the consequences of customer dissatisfaction, they may be motivated to build customer relationships only to the extent that the organizational procedures stipulate (Oliver and Anderson 1994). Such dilemma may partially account for the inconsistent results regarding the effect of process control revealed in empirical research using salespeople's self-reports or sales managers' assessments. For example, Oliver and Anderson (1994) find no relationship between behavioral control and salespeople's product and company knowledge or smart selling behavior, whereas Cravens and colleagues (1993) indicate behavior-based control relates positively to customer satisfaction and relationship selling. When conflicts arise between the firm's procedural requirement and a customer's requirement, they are less likely to demonstrate flexibility to consider the best interest of the customer, because they are rewarded for sticking with procedures. Customer relationships may suffer as a result of this inflexibility. As such, we expect negative relationships between process control and relational and knowledge-sharing behaviors. Strict process control also limits employee autonomy and signals distrust in salespeople. Studies have shown process control prompts negative feelings and dysfunctional behavior, such as manipulating data or working against the long-term interests of the organization (Jaworski 1988; Jaworski and MacInnis 1989; Merchant 1985; Ramaswamy 1996). Thus, we posit:

H₃: Greater use of process control is associated with (a) less relational behavior, (b) less knowledge-sharing behavior, and (c) greater opportunistic behavior.

Role of Informal Controls

Professional control. Professional control establishes social and interpersonal patterns,

perspectives, and norms within the sales department (Waterhouse and Tiessen 1978), in areas such as sales processes, expense control, communication and interaction with customers, information sharing, skill and knowledge levels, and performance benchmarks. To respond to deviations from the established norms, the group may exercise explicit or implicit pressure on the deviant salesperson to get the behavior back on course (Jaworski 1988). With strong professional control, sales colleagues are well informed of one another's work, behavior, and performance. Jaworski and MacInnis (1989) find that professional control discourages dysfunctional behavior but encourages organizationally acceptable behaviors. Moreover, because both relationship building and opportunistic behaviors tend to get noticed in such an environment, strong professional control should promote relational and knowledge-sharing behaviors but discourage opportunistic behaviors.

H4: Stronger professional control is associated with (a) greater relational behavior, (b) greater knowledge-sharing behavior, and (c) less opportunistic behavior.

Professional control also may influence the effect of formal controls on sales behaviors. With strong professional control, colleagues share information and help one another, which facilitates learning across the organization. For example, if colleagues help one another, training will be more effective because group learning occurs (March 1991). In addition, colleagues can offer insights and interpretations from multiple perspectives, which results in more effective learning because interpretation represents a key process in individual learning (Chonko et al. 2003; Crossan, Lane, and White 1999). Therefore, professional control should enhance the effect of input resources on salespeople's skills, knowledge, and, in turn, knowledge-sharing behaviors.

Strong professional control also means that one's behavior becomes more visible to one's colleagues, which reduces opportunities to engage in opportunistic behaviors. In other words, the informal monitoring system of such a close environment may mitigate the positive relationship between output and process controls and opportunistic behaviors. Therefore, we hypothesize:

H5: Professional control moderates the control-behavior relationship, such that with stronger professional control, (a) the positive relationship between input control and knowledge-sharing

behavior is stronger, and (b) the positive relationship between output and process controls and opportunistic behavior is weaker.

Market-oriented cultural control. Organizational culture offers the dominant control mechanism for jobs that require non-routine, non-programmatic decision making (Jaworski 1988). Sales jobs consist of non-routine tasks that often require creativity (Wang and Netemeyer 2004). The market-oriented culture is particularly relevant to sales personnel, because it can guide salespeople's conduct and indicates the level of meaningful organizational support for customer relationship (Jaworski and Kohli 1993; Narver and Slater 1990; Siguaw, Brown, and Widing 1994). The more salespeople perceive that their firm practices a market orientation and rewards market-oriented behaviors, the more they will internalize the cultural values, and the greater their focus will be on long-term customer relationships (Kohli and Jaworski 1990; Menguc 1996; Siguaw, Brown, and Widing 1994).

H6: A stronger market-oriented organizational culture is associated with (a) greater relational behavior, (b) greater knowledge-sharing behavior, and (c) less opportunistic behavior.

Because internalized value system could affect the whole gamut of sales force behaviors designed to satisfy customer needs, cultural control may minimize or even substitute for the influence of formal controls. For example, salespeople within a strong market-oriented culture may engage in relational behaviors, not as a response to the evaluation system but rather because they consider it the right thing to do. Furthermore, a market-oriented culture provides organizational support for salespeople to create and communicate superior value to customers (Siguaw, Brown, and Widing 1994). Even if they lack sufficient formal input resources, they may actively seek information and resources to serve customers better. Regardless of the formal control systems in use, salespeople committed to a strong market-oriented culture likely feel morally obliged to consider long-term organizational goals, which should deter any problematic behaviors. Therefore,

H7: A strong market-oriented organizational culture weakens the formal control-behavior relationship.

Role of External Environment

Market turbulence. Market turbulence refers to the rate of change in the composition of customers and their preferences (Jaworski and Kohli 1993). In a turbulent market, in which customer preferences and demands change frequently, the cause-and-effect relationship becomes more ambiguous and the path to sales success less certain (Chonko et al. 2003). Therefore, sales managers may find it difficult to design and implement output and process control systems that equitably evaluate salespeople's performance (Eisenhardt 1985; Jaworski 1988). Strict output or process control systems may generate perceptions of unfairness, which in turn limits motivations to engage in relationship-building (relational and knowledge sharing) behaviors for the long-term benefit of the organization. Jaworski (1988) postulates that if a sales force operates in a highly uncertain environment but management insists on formal output and process controls, increased role conflict, job tension, and gaming behaviors ensue. Yet, because market knowledge becomes outdated sooner in more turbulent environments, effective input controls should better prepare salespeople to cope with the changing marketplace. Such an environment makes training and management support more critical as means for the sales force to maintain its competency and conduct relationship-building activities.

H8: As market turbulence increases, input controls are more likely to lead to relational and knowledge-sharing behaviors, whereas outcome and process controls are less likely to lead to relational and knowledge-sharing behavior but more likely to lead to opportunistic behavior.

Competitive intensity. Competitive intensity refers to the degree of rivalry among firms that produce close substitute products (Jaworski 1988). High competitive intensity means alternative offerings are abundant, product features similar, and price wars typical. Buyers therefore attend more to price than other considerations, and suppliers focus mainly on improving efficiency, reducing costs, and designing more attractive promotional deals. In such an environment, both salespeople and sales managers must evaluate how their customers respond to their day-to-day selling efforts and promotional activities; they also must stay focused on sales, profit margins, market share, and cost controls. Output control helps salespeople recognize the customers' perspective and focus on communicating the key solution benefits by sharing information and knowledge that will affect customers' bottom line.

H9: As competitive intensity increases, outcome control is more likely to generate knowledge-sharing behaviors.

Consequences of Sales Behaviors: Relationship Performance and Share of Wallet

Ultimately, the litmus test of a sales control system is whether it enhances customer relationship and business performance (Rust et al. 2004). Therefore, we include in our model two critical consequences of sales behaviors: one subjective measure (i.e., overall relationship performance from the buyer's perspective) and one objective measure (i.e., customer share of wallet).

Relationship performance. Relationship performance entails a party's overall evaluation and assessment of its exchange relationship with another party (Li and Dant 1997). Perceptual evaluations of relationship performance have significant impacts on the objective economic performance of exchange relationships (Kumar, Stern, and Achrol 1992). In many sales contexts, customer satisfaction results from salespeople's appropriate behaviors in customer interactions that reduce perceived risk and uncertainty (Foster and Cadogan 2000). Various researchers demonstrate that relational and knowledge-sharing behaviors contribute to relationship quality and customer satisfaction (Crosby, Evans, and Cowles 1990; Palmatier et al. 2006; Swan, Trawick, and Silva 1985; Walker, Churchill, and Ford 1972). Opportunistic sales behaviors aimed at advancing the salesperson's self-interests, if detected, prompt negative customer evaluations and reduced buying intentions. Therefore, we expect relational and knowledge-sharing behaviors to contribute positively to relationship performance, whereas opportunistic behaviors should lead to less favorable evaluations of relationship performance.

Customer share of wallet. Researchers and managers alike have grown increasingly interested in customers' share of spending within a category as a behavioral measure of relationship effectiveness and customer loyalty (Coyles and Gokey 2002; Keiningham et al. 2005; Uncles, Dowling, and Hammond 2003; Zeithaml 2000), which in turn relates to firm profitability (Baumann, Burton, and Elliot 2005; Bowman and Narayandas 2004; Keiningham et al. 2003). Jones and Sasser (1995) even assert that the ultimate measure of customer loyalty is customer share of purchase. Customer share of wallet commonly is defined as the ratio of a customer's purchase in a particular category from supplier X to the customer's

total purchases in that category from all suppliers (Peppers and Rogers 1999). Relationship marketing and customer equity theories both posit that customers' perceptions and evaluations of a relationship shape their purchasing behaviors, including their share of wallet (e.g., Anderson and Narus 1990; Garbarino and Johnson 1999; Rust et al. 2004; Rust, Zeithaml, and Lemon 2000; Woodruff 1997). Changes in customer satisfaction levels also relate to changes in customers' share of wallet (Cooil et al. 2007). Thus, we expect a positive relationship between customer relationship performance evaluations and customer share of wallet.

METHODOLOGY

Sample and Data Collection

Data for this study were collected in China via personal interviews. We consider China an appropriate research setting because its vibrant transitional economy boasts many different types of firms (e.g., public, private, domestic, foreign, joint venture, state-owned, collective, as well as proprietary) trying out very different sales control mechanisms. We used a mailing list provided by a local market research consulting firm that contains 2,500 manufacturing firms across different industries (e.g., electronics, building materials, automobile parts and components, chemicals, beverages, processed foods, bearings/fasteners) and drew a random sample of 500 firms. We then randomly divided the companies into two halves, with 250 firms as the initial supplier sample and 250 firms as the initial customer sample.

To avoid potential selection biases from either the buyers or the sellers, we employed two complementary procedures to generate a matched buyer-seller dyad sample. The first procedure started with the salesperson and we contacted the sales departments of the 250 firms in the initial supplier sample to request their participation. We only asked for the participation of one salesperson from each firm to prevent any issues regarding the levels of analysis. This salesperson was asked to nominate four customers: one from his or her 25% largest customers, two from the 50% median-size customers, and one from 25% smallest customers. We then randomly selected one of the nominees for the buyer survey. If this buyer declined to participate, we would randomly select another from the remaining three nominees.

The second procedure started with contacting the purchase departments of the 250 firms in the initial customer sample to request one buyer from each firm to participate. The buyers were randomly assigned to select a supplier that meets one of the following four criteria: (1) long relationship (two or more years) and very important purchase; (2) long relationship, moderately important purchase; (3) short relationship (less than a year), very important purchase; and (4) short relationship, moderately important purchase (Ganesan 1994; Johnson, Sohi, and Grewal 2004). We then contacted and interviewed those salespeople identified by the buyers.

These efforts resulted in completed, matched questionnaires from 301 buyer–seller dyads, for an effective response rate of 60%. We provide the descriptive sample statistics in Table 1. We used two 7-point scales to gauge the qualification of the buyer respondents: level of familiarity with the supplier relationship (mean = 5.43) and the extent of their participation (mean = 5.10). We also compared a sample of 50 participating firms with nonparticipating firms for which we had data about annual sales in the previous year and number of employees and found no significant differences. Thus, non-response bias does not appear to be a major concern.

Construct Measures

We collected data pertaining to formal and informal sales controls and external environmental contexts (market turbulence and competitive intensity) from the salespeople and data on sales behaviors, relationship performance, and customer share of wallet from the buyers. With the exception of input control and customer share, we adapted the scales from existing literature. Before finalizing the survey instrument, we conducted 15 personal, in-depth interviews with a group of sales and purchasing professionals, and also collected responses from 30 buyer–seller dyads in a pilot study, based on which minor modifications were made to the questionnaires. All measures, except for two items in output control and two items in customer share of wallet, used 7-point Likert scales with 1 = “strongly disagree” and 7 = “strongly agree.”

We developed items to measure input control from our conceptualization of the construct and qualitative interviews and followed the conventional procedure to refine the measures (Churchill 1979;

DeVellis 1991). The items tap into resources that are critical for relationship effectiveness, including training, recruiting, selection, management support, information sharing, and sales technology in the sales organization. We measured output control with three items adapted from Jaworski and MacInnis (1989) and two from Oliver and Anderson (1994). The two items from Oliver and Anderson (1994) were anchored on a 1 = “never used” to 7 = “always used” scale. The process control items were adapted from Jaworski and MacInnis (1989). Professional control was measured with four items adapted from Jaworski and MacInnis (1989), market-oriented cultural control was assessed with five items adapted from Deshpande and Farley’s (1996) market orientation scale. We assessed market turbulence with three items and competitive intensity with four items, both from Jaworski and Kohli (1993).

Eight items from Saxe and Weitz’s (1982) SOCO scale were adapted to measure relational behavior. The items assess the degree to which the salesperson has the customer’s best interest in mind, tries to understand the customer’s needs, and offers suitable solutions to the customer’s problems. Knowledge-sharing behavior was assessed with seven items adapted from Behrman and Perreault (1982) and Kumar, Stern, and Achrol (1992) that tap the salesperson’s sales knowledge and knowledge-sharing skills. We measured opportunistic behavior with ten items culled from Roman and Ruiz (2005), Murphy (2004), and Wuyts and Geyskens (2005).

To measure relationship performance, we used six items adapted from Li and Dant (1997) that ask respondents to evaluate the degree to which their relationships with the supplier company (three items) and the salesperson (three items) are productive, worthwhile, and satisfactory. Share of wallet was computed as a ratio derived from the answers to two items: “Your purchases from this supplier were: \$ ___,000 in year 200x” and “Your total purchases for the product lines that this supplier was able to offer were: \$ ___,000 in year 200x.” We measured share of wallet for two consecutive years, 2005 and 2006. All scales are listed in Table 2.

ANALYSIS AND RESULTS

Data analysis for this study is based on structural equation modeling (SEM) with maximum

likelihood estimation using LISREL8.71. In accordance with Anderson and Gerbing's (1988) recommendation, we estimated the measurement and structural models sequentially to reduce interpretational confounding.

Measurement Reliability and Validity

We followed well-established procedures in the item-purification process (Churchill 1979; DeVellis 1991), and evaluated the psychometric properties of the measures using confirmatory factor analysis (CFA). We estimated a CFA measurement model that included all 12 latent constructs. The fit statistics were as follows: $\chi^2 = 4507.71$ (df = 2013), root mean square error of approximation (RMSEA) = .062; non-normed fit index (NNFI) = .94, and confirmatory fit index (CFI) = .95, which indicate the model fit the data reasonably well.

We evaluated the measurement properties of our constructs in terms of unidimensionality, convergent validity, reliability, and discriminant validity. All items loaded significantly on their expected constructs, and modification indices indicated no significant cross-loadings, suggesting convergent validity of the measurement items and unidimensionality for the latent constructs. The average variance extracted (AVE) ranged from .50 to .77. Both Cronbach's alpha and composite reliability measures ranged from .74 to .95. We compared the squared correlation with their average AVE of any pair of latent constructs and found in no circumstance did the squared correlation exceed the average AVE, offering strong evidence for discriminant validity (Fornell and Larcker 1981). The results overall suggest acceptable measurement properties. In Table 3, we present the means, standard deviations, and correlation matrix of the latent constructs.

Overall Structural Model Fit

We first tested a main effect model (SEM1) that contained all seven exogenous (three formal controls and four environmental factors) and five endogenous constructs.¹ Although not hypothesized,

¹ For model specification purposes, we included three paths (relational → knowledge sharing, relational → opportunistic, and knowledge sharing → opportunistic) that accounted for the interrelationships among the three types of sales behaviors. The rationale behind this inclusion argues that relational salespeople, with their customer orientation, should be willing to develop and share knowledge with customers (Behrman and Perrault

we included market turbulence and competitive intensity and estimated paths from them to all endogenous constructs. The model fit the data reasonably well ($\chi^2 = 4539.27$, $df = 2026$, $RMSEA = .062$; $NNFI = .94$, $CFI = .95$), and the path estimates are presented in the SEM1 column in Table 4. This model explained a substantial amount of variance in the endogenous constructs, as indicated by the R^2 values (relational behavior = .17, knowledge-sharing behavior = .53, opportunistic behavior = .39, relationship performance = .58, and share of wallet = .07).

We then added interaction terms to form SEM2 to test the moderation hypotheses. Since a modification index in SEM1 indicated that a path from input control to relationship performance might be significant, we also added this path to SEM2. In line with H_5 , H_7 , H_8 , and H_9 , we added 10 interaction terms, using the procedure suggested by Ping (1995).. Because of the relatively large number of interaction path estimates, we eliminated the insignificant paths to achieve the most parsimonious model. The path estimates of the final model are presented in the SEM2 column of Table 4. The fit indices for this model were: $\chi^2 = 5217.63$ ($df = 2430$), $RMSEA = .060$; $NNFI = .94$, and $CFI = .94$.

SEM2 explained more variances in the endogenous constructs than did SEM1, increasing from .17 to .23 for relational behavior, from .53 to .59 for knowledge-sharing, from .39 to .42 for opportunistic behavior, and from .58 to .60 for relationship performance. The variance explained for share of wallet remained the same at .07. The path estimates for the main effects in SEM1 and SEM2 were virtually identical. We therefore interpret the results based on SEM2.

Effect of Formal Controls

The results show that input control has no effect on the three customer-directed sales behaviors, which contradicts H_1 . However, it has a direct effect on relationship performance ($\gamma = .11$, $p < .01$), which we did not hypothesize. In comparison, output control has a positive effect on all three sales behaviors ($\gamma = .17$, $p < .05$ for relational behavior; $\gamma = .37$, $p < .01$ for knowledge-sharing behavior; $\gamma = .18$, $p < .05$ for

1982; Hunter and Perreault 2007) and be wary of using problematic, opportunistic tactics to obtain short-term sales (Saxe and Weitz 1982). Salespeople with excellent skills and knowledge also can secure a loyal customer base without engaging in manipulative, opportunistic tactics.

opportunistic behavior), in full support of H₂. While the path coefficients for H₃ are in the hypothesized directions, only the path from process control to opportunistic behavior is significant ($\gamma = .21, p < .05$).

Thus, we find support for H_{3c} but not for H_{3a} or H_{3b}.

Role of Informal Controls

Support is found for the notion that the two informal controls increase relational behavior (H_{4a}: $\gamma = .29, p < .01$; H_{6a}: $\gamma = .23, p < .05$) and decrease opportunistic behavior (H_{4c}: $\gamma = -.31, p < .01$; H_{6c}: $\gamma = -.16, p < .05$). However, the paths from the two informal controls to knowledge sharing are not significant, so we cannot support H_{4b} and H_{6b}. Support for the moderation role of informal controls is mixed. The results show that professional control enhances the input–knowledge sharing relationship ($\gamma = .10, p < .05$), though the main effect path from input control to knowledge sharing is not significant. Professional control also weakens the effect of output control on opportunistic behavior ($\gamma = -.11, p < .05$). Thus, we find some support for H₅. Similarly, partial support for H₇ was found. Market-oriented culture weakens the effects of both input on knowledge sharing ($\gamma = -.14, p < .01$) and output on relational behavior ($\gamma = -.13, p < .05$).

Role of External Environment

We find significant moderating effects of the two external environmental factors. Specifically, market turbulence negatively moderates the output–relational behavior relationship ($\gamma = -.12, p < .05$) but positively moderates the output–opportunistic behavior relationship ($\gamma = .08, p < .05$). That is, market turbulence decreases the chance that salespeople under output control engage in relational behavior but increases the likelihood of opportunistic behavior. The positive coefficient for the path from turbulence*input to relational behavior ($\gamma = .18, p < .01$) suggests that market turbulence enhances the input–relational behavior relationship and input elements are more valuable for relationship building in turbulent markets. Thus, we find some support for H₈. Also, competitive intensity enhances the relationship between output control and knowledge sharing ($\gamma = .21, p < .01$), in support of H₉.

Sales Behaviors, Relationship Performance, and Customer Share of Wallet

The results confirm our expectations that relational and knowledge-sharing behaviors to relate

positively to relationship performance, and opportunistic behavior to relate negatively to relationship performance. The coefficients of the paths to relationship performance are $\beta = .18$ ($p < .01$) for relational behavior, $\beta = .52$ ($p < .01$) for knowledge-sharing behavior and $\beta = -.11$ ($p < .05$) for opportunistic behavior. Finally, as expected, customer evaluations of relationship performance contributes positively to share of wallet ($\beta = .26$, $p < .01$).

DISCUSSION

Before we discuss our results, a note on the study setting is warranted. The study was conducted in China, a transitional economy with a variety of firm governance structures and sales control systems in use, which leads us to believe the appropriateness of the sample for our research objectives. Yet, the Chinese culture, characterized by collectivism and high power distance (Hofstede 1991), may have unintended effects on the model relationships. Both collectivism and high power distance suggest greater acceptance of authority among subordinates, and as a result, formal output and process controls may be better received among Chinese salespeople and have a less negative effect than in the more individualistic and low power distance cultures. The fact the Chinese government has been, and still is, considered a totalitarian regime, may also contribute to such effects. In addition, given the transitional nature of the economy, the idea of market orientation may not be widely received among all companies, the variation on market orientation may be greater than that in a more developed market economy, and the effect of the market-oriented culture may be more salient in China than in Western countries. These are not necessarily downsides for a sales control study such as ours, but it is important to keep this context in mind. The fact that we have a number of hypotheses that were not supported indicates the possibility of such cultural effects. However, whether and to what degree cultural factors may indeed have affected the construct relationships in our model is a question to be addressed with future cross-cultural studies.

Research Implications

As often acknowledged, there is a lack of knowledge about the impact of organizational controls on organizational effectiveness. Lawler (1976) observes that little research considers the impact of control systems on the behavior of organizational members, and Otley (1980) notes that researchers have

neglected the link between control and organizational effectiveness. In marketing and sales literature, even after the seminal works of Jaworski (1988) and Anderson and Oliver (1987), empirical research into the consequences of control systems is still severely lacking. To the best of our knowledge, this study represents the first attempt to investigate the effect of sales control systems on salespeople's customer-directed sales behaviors (both good and bad) and their subsequent impact on relationship performance and customer purchase behavior from the customer's perspective.

A few methodological strengths should be mentioned that enhance our contributions. First, the possibility of common method bias was reduced due to the two different data sources: salespeople and their customers. Second, the sample size was relatively large for a business-to-business study, providing more confidence in the results. Third, the sample included companies of different sizes and in different industries, increasing the generalizability of our findings. Finally, as noted, the data were from China, a country that has been under studied but is attracting increasing research attention. We know of no other study that has examined sales control and customer relationship in China. In this regard, our study contributes to the literature by showing the external validity of sales control theory developed in Western countries.

Formal sales controls. Contrary to our expectations, input control shows no effect on the three customer-directed sales behaviors, but it affects relationship performance directly and positively, suggesting input elements may enhance relationship performance through intermediaries other than the three sales behaviors we examine. For example, input elements may increase the efficiency and effectiveness of the administrative tasks that salespeople perform, which should improve the overall performance of their customer relationships (Hunter and Perreault 2007). Attitudinal intermediaries such as job tension and intrinsic motivation are also possible, as suggested by Lusch and Jaworski (1991) and Miao and colleagues (forthcoming). Additional research should consider those other mediating variables between input control and relationship performance.

Our findings pertaining to the effects of output and process controls are particularly noteworthy. Literature on sales control suggests that behavior-based controls contribute to knowledge and expertise,

customer-oriented selling, and customer satisfaction, whereas output control generates more negative consequences, even though empirical results have not been conclusive (Anderson and Oliver 1987; Cravens et al. 1993; Jaworski and MacInnis 1989; Oliver and Anderson 1995). From a customer's perspective, we find that output control promotes both relationship-building and opportunistic behaviors, whereas process control has no effect on the former but generates more of the latter. These findings confirm the argument that salespeople under outcome control tend to exhibit loyalty to customers and may be more customer-oriented than their counterparts under process control (Oliver and Anderson 1994; Siguaw, Brown, and Widing 1994). Although process control may help standardize sales behaviors, leading to perceptions of reliable and consistent services, it may diminish the motivation for relationship building and stifle creativity and flexibility for interacting with and servicing customers.

Echoing Ramaswamy (1996), our results suggest that both output and process controls contribute to customer-directed opportunistic behaviors, though perhaps for different reasons. Output control provides both opportunity (i.e., lack of supervision) and motivation (i.e., short-term focus) for engaging in opportunistic behaviors. In contrast, process control deprives the salesperson of freedom and autonomy and generates job stress and resentment, so the salesperson engages in opportunistic behaviors as retaliation. The results are consistent with findings in inter-organizational research that rigid bureaucratic structures reduce commitment and increase opportunistic behaviors (e.g., John 1984).

Informal controls. We note that informal controls both directly affect sales behaviors and moderate the relationship between formal controls and sales behaviors. The results show that professional and market-oriented cultural controls promote relational behaviors and curb opportunistic behavior. Professional control plays a salient role in enhancing the input control–knowledge sharing link. Peer support, interaction, and monitoring can promote group learning and help transform resources into communication capabilities that enhance customer relationship building. The negative effect of the professional*output interaction on opportunistic behavior suggests that as professional control makes salespeople's work and job activities more transparent, it increases the chance of detection of opportunistic behaviors, thereby reducing the temptation induced by output control to engage in them.

A strong market orientation culture seems to substitute for formal controls in regulating salespeople's behaviors. Specifically, we find cultural control makes input elements less important. Salespeople, guided by a strong internalized customer-oriented value system, may seek out resources proactively even when the firm fails to provide them. Echoing this finding, we note that the relationship between output control and relational behaviors is weaker under a strong market-oriented culture. Thus, internalized market-oriented values appear able to guide salespeople to build customer relationships, regardless of the formal control system.

Role of external environment. The two external environmental factors moderate the control-behavior relationships. First, market turbulence decreases the positive effect of output controls on relational behavior but increases their positive effect on opportunistic behavior, in support of Anderson and Oliver's (1987) suggestion that output controls are appropriate only when salespeople can clearly establish the link between their effort and outcome. In a turbulent market, this link is more ambiguous, and achieving output goals may be beyond the salespeople's control. A rigid output control system may appear unfair and misaligned with reality and lead to lower morale, prompting salespeople to engage in less relational and more opportunistic behaviors. In addition, we find market turbulence strengthens the relationship between input control and relational behaviors, indicating salespeople need more resources in terms of knowledge, training, and support to satisfy customers in turbulent markets.

Second, competitive intensity appears to work in a direction opposite to that of market turbulence, in that it enhances the likelihood of knowledge-sharing behavior under output control. This finding lends empirical support to Jaworski's (1988) theoretical proposition that tight financial and output-based controls are more appropriate when competitive intensity is high.

The empirical support for the moderation hypotheses provides some encouraging evidence to the contingency approach in control research. Although the two informal control factors both help salespeople in their relationship-building activities, they do so in different ways. Strong professional control helps transform input elements into knowledge and capabilities and discourages salespeople from engaging in opportunistic behavior, whereas market-oriented organizational culture substitutes formal

controls and weakens the overall power of formal control in shaping salespeople's behaviors. Similarly, the two external factors function differently in moderating the control-behavior link; strong output control enhances relationship building more in a competitive environment, whereas input control appears more effective in a turbulent market. These findings advance sales control literature, because available empirical evidence on the contingency effects of environment thus far has been scarce.

Relationship outcomes. Consistent with previous research, we find that relational and knowledge-sharing behaviors strengthen, whereas opportunistic sales behaviors damage, relationship performance. Echoing findings from Palmatier and colleagues' (2006) meta-analysis, of the three sales behaviors in our model, knowledge-sharing has the greatest impact on relationship performance. Furthermore, relational behavior has a strong effect on knowledge sharing, which suggests that relational behavior affects relationship performance not only directly but also indirectly through knowledge-sharing. These findings highlight the critical importance of salespeople's knowledge-sharing behavior when interacting with customers.

Sales research has not previously investigated customer-directed opportunistic behavior; most studies consider only dysfunctional behaviors directed toward the sales organization. In contrast, by using dyadic data from both salespeople and their customers, we establish links between control systems and relationship outcomes via three types of customer-directed sales behaviors. In noting that both relationship-building and relationship-damaging behaviors can result from the same control system, we suggest that although relational and knowledge-sharing behaviors are likely to shun opportunistic behaviors, these behaviors can co-exist.

Finally, as empirical evidence linking subjective relationship evaluations and objective outcomes has not been consistent, our results provide additional evidence that relationship marketing activities have significant impacts on customers' actual purchase behaviors (e.g., share of wallet), though the latter clearly are a function of multiple factors.

Managerial Implications

Although input control has no direct effect on any sales behaviors in our model, it influences

relationship performance directly and positively; thus, it appears that customers can discern the difference an effective input control system makes. This finding is consistent with the notion that hiring and training represent two of the most important factors contributing to sales force success (Zoltners, Sinha, and Zoltners 2001). If human resource is the most critical resource of the firm (Barney 1991), input control, which expands salespeople's capability to offer customer value, contribute to creating competitive advantages.

Our results suggest output control is a double-edged sword. Contrary to accepted wisdom, output control can be effective tools for building long-term customer relationships as it encourages salespeople to engage in relational and knowledge-sharing behaviors. To curb opportunistic behaviors motivated by output control, however, management should foster strong professional and cultural controls. An internal environment conducive to customer-oriented behaviors may offset the negative effects of output controls and enhance customer relationships.

Sales managers should recognize that process control does not necessarily motivate salespeople to engage in relationship-building but instead may limit autonomy, signal distrust, and stifle creativity. Selling requires freedom and autonomy; tight restrictions on daily routines and procedures can backfire to cause salespeople to retaliate and behave opportunistically.

Benefits can be reaped from fostering strong informal control mechanisms, such as professional control and a market-oriented culture, as both encourage relational and discourage opportunistic behaviors. Professional control alleviates the harmful effects of output control and helps translate input resources into knowledge-sharing activities. A strong market-oriented culture mobilizes salespeople to be more customer-oriented. Both informal controls can curb salespeople's motivation to engage in opportunistic behaviors. The practical significance is that even a low level of opportunistic behavior could be detrimental as people pay more attention to negatives than to positives (Shiv, Edell, and Payne 1997)

The design of a sales control system must also take into consideration the external environment. Our research shows that turbulent and competitive markets require different control mechanisms. Output control may be more appropriate when competition is intense but less so when the market is turbulent.

Salespeople rely more on organizational input elements in their relationship-building efforts when the market is more turbulent, because their existing information and knowledge quickly becomes outdated.

Limitations and Future Research Directions

Our findings should be interpreted in the context of the study's limitations. First, given a cross-sectional design, any causal inferences must be drawn with caution. In the future, longitudinal studies should investigate how changes in sales control mechanisms may affect changes in customer relationships. Second, it will be useful to identify the exact mechanism by which control systems affect sales behaviors by investigating possible intervening variables between controls and sales behaviors, such as motivation, role perceptions, job stress, or job attitudes, which could help explain our findings that input control has no direct effect on the three customer-directed sales behaviors, and that process control has a direct effect only on opportunistic behaviors. Third, though the contingency argument makes sound theoretical sense, it lacks consistent empirical support. In our case, the independent and dependent variables come from different sources and the moderation effects appear to provide reasonably strong support of our contingency hypotheses. Nevertheless, the minimal amount of research in this area suggests it would be desirable to replicate our findings in other settings, with perhaps a more comprehensive model that incorporates a greater number of explanatory, mediating, and moderating variables. Finally, we only solicited one respondent from each organization, and were unable to conduct group-level analyses to control for idiosyncratic contributions by any company-level factors. Future researchers are encouraged to collect data from multiple informants from the same firms and analyze the effect of control on customer relationship from a multi-level perspective.

REFERENCES

- Adams, Stacey J. (1976), "The Structure and Dynamics of Behavior in Organizational Boundary Roles," in *Handbook of Industrial and Organizational Psychology*, M. D. Dunnette, ed. Chicago: Rand McNally.
- Anderson, Erin and Richard Oliver (1987), "Perspectives on Behavior-Based Versus Outcome-Based Salesforce Control Systems," *Journal of Marketing*, 51, 76-88.
- Anderson, James C. and David W. Gerbing (1988), "Structural Equation Modeling in Practice: A Review and Recommended Two-Step Approach," *Psychological Bulletin*, 103 (3), 411-23.
- and James A. Narus (1990), "A Model of Distributor Firm and Manufacturer Firm Working Partnerships," *Journal of Marketing*, 54, 42-58.
- Barney, Jay (1991), "Firm Resources and Sustained Competitive Advantage," *Journal of Management*, 17 (1), 99-120.
- Baumann, Chris, Suzan Burton, and Greg Elliot (2005), "Determinants of Customer Loyalty and Share of Wallet in Retail Banking," *Journal of Financial Services Marketing*, 9 (3), 231-48.
- Behrman, Douglas N. and William D. Perrault, Jr. (1982), "Measuring the Performance of Industrial Salespersons," *Journal of Business Research*, 10, 355-70.
- Berry, Leonard L. (1995), "Relationship Marketing of Services-Growing Interest, Emerging Perspectives," *Journal of the Academy of Marketing Science*, 23 (4), 236-45.
- and A. Parasuraman (1991), *Marketing Services: Competing Through Quality*. New York: The Free Press.
- Beverland, Michael (2001), "Contextual Influences and the Adoption and Practice of Relationship Selling in a Business-to-Business Setting: An Exploratory Study," *Journal of Personal Selling & Sales Management*, 21 (3), 207-15.
- Bowman, Douglas and Das Narayandas (2004), "Linking Customer Management Effort to Customer Profitability in Business Markets," *Journal of Marketing Research*, 41 (November), 433-47.
- Cannon, Joseph P. and William D. Perreault, Jr. (1999), "Buyer-Seller Relationships in Business Markets," *Journal of Marketing Research*, 36 (November), 439-60.
- Challagalla, Goutam N. and Tasadduq A. Shervani (1996), "Dimensions and Types of Supervisory Control: Effects on Salesperson Performance and Satisfaction," *Journal of Marketing*, 60, 89-105.
- Chonko, Lawrence B., Alan J. Dubinsky, Eli Jones, and James A. Roberts (2003), "Organizational and Individual Learning in the Sales Force: An Agenda for Sales Research," *Journal of Business Research*, 56, 935-46.
- Churchill, Gilbert A., Jr. (1979), "A Paradigm for Developing Better Measures of Marketing Constructs," *Journal of Marketing Research*, 16, 64-73.
- , Neil M. Ford, Steven W. Hartley, and Orville C. Walker Jr. (1985), "The Determinants of Salesperson Performance: A Meta-Analysis," *Journal of Marketing Research*, 22, 103-18.
- Cooil, Bruce, Timothy L. Keiningham, Lerzan Aksoy, and Michael Hsu (2007), "A Longitudinal Analysis of Customer Satisfaction and Share of Wallet: Investigating the Moderating Effect of Customer Characteristics," *Journal of Marketing*, 71 (January), 67-83.
- Coyles, Stephanie and Timothy C. Gokey (2002), "Customer Retention Is Not Enough," *The McKinsey Quarterly*, 2 (2), 81-89.
- Cravens, David W., Thomas N. Ingram, Raymond W. LaForge, and Clifford E. Young (1993), "Behavior-Based and Outcome-Based Salesforce Control Systems" *Journal of Marketing*, 57 (October), 47-59.
- Crosby, Lawrence A., Kenneth R. Evans, and Deborah Cowles (1990), "Relationship Quality in Services Selling: An Interpersonal Influence Perspective," *Journal of Marketing*, 54 (July), 68-81.
- Crossan, M. M., H. M. Lane, and R. E. White (1999), "An Organizational Learning Framework: From Intuition to Institution," *Academy of Management Review*, 24 (3), 522-37.
- Deci, Edward L. and Richard Ryan (1985), *Intrinsic Motivation and Self-Determination in Human Behavior*. New York: Plenum Press.

- Deshpande, Rohit and John U. Farley (1996) *Understanding Market Orientation: A Prospectively Designed Meta-Analysis of Three Market Orientation Scales*. Cambridge, MA: Marketing Science Institute.
- DeVellis, Robert F. (1991), *Scale Development: Theory and Applications*. Newbury Park, CA: Sage.
- Dwyer, F. Robert, Paul H. Schurr, and Sejo Oh (1987), "Developing Buyer-Seller Relationships," *Journal of Marketing*, 51 (April), 11-27.
- Eisenhardt, Kathleen M. (1985), "Control: Organizational and Economic Approaches," *Management Science*, 31 (2), 134-149.
- Ferrell, O. C. and Larry G. Gresham (1985), "A Contingency Framework for Understanding Ethical Decision Making in Marketing," *Journal of Marketing*, 49 (Summer), 87-96.
- Flamholtz, Eric G., T. K. Das, and Anne Tsui (1985), "Toward an Integrative Framework of Organizational Control," *Accounting, Organizations and Society*, 10, 35-50.
- Fornell, Claes and David F. Larcker (1981), "Evaluating Structural Equation Models with Unobservable Variables and Measurement Error," *Journal of Marketing Research*, 18 (February), 39-50.
- Ganesan, Shankar (1994), "Determinants of Long Term Orientation in Buyer Seller Relationships," *Journal of Marketing*, 58 (April), 1-19.
- Garbarino, Ellen and Mark S. Johnson (1999), "The Different Roles of Satisfaction, Trust, and Commitment in Customer Relationships," *Journal of Marketing*, 63 (April), 70-87.
- Gruen, Thomas W., John O. Summers, and Frank Acito (2000), "Relationship Marketing Activities, Commitment, and Membership Behaviors in Professional Associations," *Journal of Marketing*, 64 (July), 34-49.
- Gupta, Sunil, Donald R. Lehmann, and Jennifer Ames Stuart (2004), "Valuing Customers," *Journal of Marketing Research*, 41 (1), 7-18.
- Hampton, D.R. (1970), "Contests Have Side Effects Too," *California Management Review*, 12, 86-94.
- Han, Jin K., Namwoon Kim, and Rajendra K. Srivastava (1998), "Market Orientation and Organizational Performance: Is Innovation a Missing Link?" *Journal of Marketing*, 62 (October), 30-45.
- Henderson, John C. and Soonchul Lee (1992), "Managing I/S Design Teams: A Control Theories Perspective," *Management Science*, 38 (6), 757-777.
- Hofstede, Geert H. (1991), *Cultures and Organizations*. London: McGraw-Hill.
- Hunter, Gary K. and William D. Perreault, Jr. (2007), "Making Sales Technology Effective," *Journal of Marketing*, 71 (January), 16-34.
- Jaworski, Bernard J. (1988), "Toward a Theory of Marketing Control: Environmental Context, Control Types, and Consequences," *Journal of Marketing*, 52 (July), 23-39.
- and Ajay K. Kohli (1993), "Market Orientation: Antecedents and Consequences," *Journal of Marketing*, 57 (July), 53-70.
- and Deborah J. MacInnis (1989), "Marketing Jobs and Management Controls: Toward a Framework," *Journal of Marketing Research*, 26 (November), 406-19.
- , Vlasis Stathakopoulos, and H. Shanker Krishnan (1993), "Control Combinations in Marketing: Conceptual Framework and Empirical Evidence," *Journal of Marketing*, 57 (1), 57-69.
- John, George (1984), "An Empirical Investigation of Some Antecedents of Opportunism in a Marketing Channel," *Journal of Marketing Research*, 21 (August), 278-89.
- Johnson, Jean L., Ravipreet S. Sohi, and Rajdeep Grewal (2004), "The Role of Relational Knowledge Stores in Interfirm Partnering," *Journal of Marketing*, 68 (July), 21-36.
- Jones, Thomas O. and W. Earl Sasser, Jr. (1995), "Why Satisfied Customers Defect," *Harvard Business Review*, 73 (November/December), 88-99.
- Keiningham, Timothy L., Tiffany Perkins-Munn, and Heather Evans (2003), "The Impact of Customer Satisfaction on Share of Wallet in a Business-to-Business Environment," *Journal of Service Research*, 6 (August), 37-50.
- , Terry G. Vavra, Lerzan Aksoy, and Henri Wallard (2005), *Loyalty Myths: Hyped Strategies That Will Put You Out of Business and Proven Tactics That Really Work*. Hoboken, NJ: John Wiley.
- Kerr, Steven and John W. Slocum (1981), "Controlling the Performance of People in Organizations," in *Handbook of Organizational Design*, Paul C. Nystrom and William H. Starbuck, eds. London:

- Oxford University Press.
- Kohli, Ajay K. and Bernard J. Jaworski (1990), "Market Orientation: The Construct, Research Propositions, and Managerial Implications," *Journal of Marketing*, 54 (April), 1-18.
- Krafft, Manfred (1999), "An Empirical Investigation of the Antecedents of Sales Force Control Systems," *Journal of Marketing*, 63 (July), 120-34.
- Kumar, Nirmalya, Louis W. Stern, and Ravi S. Achrol (1992), "Assessing Reseller Performance from the Perspective of the Supplier," *Journal of Marketing Research*, 29, 238-53.
- Lawler, Edward E (1976), "Control Systems in Organizations," in *Handbook of Industrial and Organizational Psychology*, M. D. Dunnette, ed. Chicago: Rand McNally, Inc.
- Li, Zhan and Rajiv P. Dant (1997), "An Exploratory Study of Exclusive Dealing in Channel Relationships," *Journal of the Academy of Marketing Science*, 25 (3), 201-13.
- Lusch, Robert and Bernard J. Jaworski (1991), "Management Controls, Role Stress, and Retail Store Manager Performance," *Journal of Retailing*, 67 (Winter), 397-419.
- Luthy, Michael R. (2000), "Preparing the Next Generation of Industrial Sales Representatives," *Industrial Marketing Management*, 28, 201-13.
- March, James G. (1991), "Exploration and Exploitation in Organizational Learning," *Organization Science*, 2 (1), 71-87
- Menguc, Bulent (1996), "The Influence of the Market Orientation of the Firm on Sales Force Behavior and Attitudes," *International Journal of Research in Marketing*, 13, 277-91.
- Merchant, Kenneth A (1985), *Control in Business Organizations*. Boston: Pitman Publishing.
- Miao, C. Fred, Kenneth R. Evans, and Shaoming Zou (forthcoming), "How Formal Sales Control Systems Affect Job Performance: Intrinsic and Extrinsic Motivation Revisited," *Journal of Business Research*.
- Moncrief, William C., Sandra H. Hart, and Daniel Robertson (1988), "Sales Contests: A New Look at an Old Management Tool," *Journal of Personal Selling & Sales Management*, 8 (3), 55-61.
- Morgan, Robert M. and Shelby D. Hunt (1994), "The Commitment-Trust Theory of Relationship Marketing," *Journal of Marketing*, 58 (July), 20-38.
- Murphy, William H. (2004), "In Pursuit of Short-Term Goals: Anticipating the Unintended Consequences of Using Special Incentives to Motivate the Sales Force," *Journal of Business Research*, 57, 1265-75.
- Narver, John C. and Stanley F. Slater (1990), "The Effect of a Market Orientation on Business Profitability," *Journal of Marketing*, 54 (October), 20-35.
- Oliver, Richard L. and Erin Anderson (1994), "An Empirical Test of the Consequences of Behavior- and Outcome-Based Sales Control Systems," *Journal of Marketing*, 58 (October), 53-67.
- and ——— (1995), "Behavior- and Outcome-Based Sales Control Systems: Evidence and Consequences of Pure-Form and Hybrid Governance," *Journal of Personal Selling & Sales Management*, 15 (4), 1-15.
- Otley, David (1980), "The Contingency Theory of Management Accounting: Achievement and Prognosis," *Accounting, Organizations and Society*, 5, 413-28.
- Ouchi, William G. (1979), "A Conceptual Framework for the Design of Organizational Hierarchy," *Management Science*, 25 (9), 833-848.
- Palmatier, Robert W., Rajiv P. Dant, Dhruv Grewal, and Kenneth R. Evans (2006), "Factors Influencing the Effectiveness of Relationship Marketing: A Meta-Analysis," *Journal of Marketing*, 70 (October), 136-53.
- Peppers, Don and Martha Rogers (1999), *Enterprise One-to-One: Tools for Competing in the Interactive Age*. New York: Doubleday.
- Pillips, Lynn (1982), "Exploring Control Losses in Corporate Marketing Channels: An Organizational Analysis," *Journal of Marketing Research*, 19 (November), 525-49.
- Ping, Robert A., Jr. (1995), "A Parsimonious Estimating Technique for Interaction and Quadratic Latent Variables," *Journal of Marketing Research*, 32 (August), 336-47.
- Podsakoff, Philip M., Scott B. MacKenzie, Jeong-Yeon Lee, and Nathan P. Podsakoff (2003), "Common Method Biases in Behavioral Research: A Critical Review of the Literature and Recommended

- Remedies," *Journal of Applied Psychology*, 88 (5), 879-903.
- Ramaswamy, Sridhar N. (1996), "Marketing Controls and Dysfunctional Employee Behaviors: A Test of Traditional and Contingency Theory Postulates," *Journal of Marketing*, 60 (April), 105-20.
- Reinartz, Werner and V. Kumar (2000), "On the Profitability of Long-Life Customers in a Noncontractual Setting: An Empirical Investigation and Implications for Marketing," *Journal of Marketing*, 64 (October), 17-35.
- Robertson, Diana C. and Erin Anderson (1993), "Control System and Task Environment Effects of Ethical Judgement: A Exploratory Study of Industrial Salespeople," *Organization Science*, 4 (4), 617-44.
- Roman, Sergio and Salvador Ruiz (2005), "Relationship Outcomes of Perceived Ethical Sales Behavior: The Customer's Perspective," *Journal of Business Research*, 58, 439-45.
- Rust, Roland T., Tim Ambler, Gregory S. Carpenter, V. Kumar, and Rajendra K. Srivastava (2004), "Measuring Marketing Productivity: Current Knowledge and Future Directions," *Journal of Marketing*, 68 (October), 76-89.
- , Christine Moorman, and Peter R. Dickson (2002), "Getting Return on Quality: Revenue Expansion, Cost Reduction, or Both?" *Journal of Marketing*, 66 (October), 7-24.
- , Valarie A. Zeithaml, and Katherine N. Lemon (2000), *Driving Customer Equity: How Customer Lifetime Value Is Reshaping Corporate Strategy*. New York: The Free Press.
- Saxe, Robert and Barton A. Weitz (1982), "The SOCO Scale: A Measure of the Customer Orientation of Salespeople," *Journal of Marketing Research*, 19 (August), 343-51.
- Shiv, Baba, Julie Edell, and John W. Payne (1997), "Factors Affecting the Impact of Negatively and Positively Framed Ad Messages," *Journal of Consumer Research*, 24 (December), 285-94.
- Siguaw, Judy A., Gene Brown, and II Widing, Robert E. (1994), "The Influence of the Market Orientation on Sales Force Behavior and Attitudes," *Journal of Marketing Research*, 31 (February), 106-16.
- , Penny M. Simpson, and Thomas L. Baker (1998), "Effects of Supplier Market Orientation on Distributor Market Orientation and the Channel Relationship: The Distributor Perspective," *Journal of Marketing*, 62 (July), 99-111.
- Singh, Jagdip (1998). "Striking a Balance in Boundary-Spanning Positions: An Investigation of Some Unconventional Influences of Role Stressors and Job Characteristics on Job Outcomes of Salespeople," *Journal of Marketing*, 62 (July), 69-86.
- Snell, S (1992), "Control Theory in Strategic Human Resource Management: The Mediating Effect of Administrative Information," *Academy of Management Journal*, 35 (2), 292-327.
- Swan, J. E., I. F. Trawick, and D. W. Silva (1985), "How Industrial Salespeople Gain Customer Trust," *Industrial Marketing Management*, 14 (3), 203-11.
- Uncles, Mark D., Grahame R. Dowling, and Kathy Hammond (2003), "Customer Loyalty and Customer Loyalty Programs," *Journal of Consumer Marketing*, 20 (4), 294-316.
- Walker, Orville C., Jr., Gilbert A. Churchill, Jr., and Neil M. Ford (1972), "Reactions to Role Conflict: The Case of the Industrial Salesman," *Journal of Business Administration*, 3 (Spring), 25-36.
- Wang, Guangping and Richard G. Netemeyer (2004), "Salesperson Creative Performance: Conceptualization, Measurement, and Nomological Validity," *Journal of Business Research*, 57, 805-12.
- Waterhouse, J. H. and P. Tiessen (1978), "A Contingency Framework for Management Accounting Systems Research," *Accounting, Organizations and Society*, 3, 65-76.
- Weitz, Barton A. and Kevin D. Bradford (1999), "Personal Selling and Sales Management: A Relationship Marketing Perspective," *Journal of the Academy of Marketing Science*, 27 (2), 214-54.
- Williamson, Oliver E. (1975), *Markets and Hierarchies: Analysis and Antitrust Implications*. New York: The Free Press.
- Woodruff, Robert B. (1997), "A Framework for Customer Relationship Management," *Journal of the Academy of Marketing Science*, 25 (Spring), 139-53.
- Wuyts, Stefan and Inge Geyskens (2005), "The Formation of Buyer-Supplier Relationships: Detailed Contract Drafting and Close Partner Selection," *Journal of Marketing*, 69 (October), 103-17.
- Zeithaml, Valarie A. (2000), "Service Quality, Profitability, and the Economics Worth of Customers: What We Know and What Need to Learn," *Journal of the Academy of Marketing Science*, 28 (1), 67-85.

Zoltners, Andris A., Prabhakant Sinha, and Greggor A. Zoltners (2001), *The Complete Guide to Accelerating Sales Force Performance*. New York: AMACOM.

Table 1: Descriptive Sample Statistics

	Supplier Sample	Buyer Sample
Gender (% males)	81%	76%
Mean age (years)	34	35
Education (% college graduates)	42%	49%
Mean company tenure (years)	4.7	5.3
Mean job tenure (years)	3.8	4.6
Mean job experience (years)	8.4	9.0
Mean annual sales per salesperson (RMB yuan)	17 million	n/a
Median proportion of fixed compensation	40%	n/a
Company ownership	Private: 46% Public: 26% Foreign owned or Sino-foreign joint venture: 8% Others*: 8%	Private: 64% Public: 16% Foreign owned or Sino-foreign joint venture: 5% Others*: 15%
Mean company size (number of employees)	557	460
Mean company sales (2006 in RMB yuan)	1.4 billion	367 million
Mean personal relationship length (years)		2.7
Mean company relationship length (years)		3.5

*Others include sole proprietors, collectives, state-owned, and other forms of ownership.

Table 2: Measurement Items and Standardized Factor Loadings

Construct	Measures	Factor Loading
Input control	1. In my company, salespeople receive adequate training in product and market knowledge.	.76
	2. Salespeople receive adequate training in problem-solving skills.	.79
	3. New salespeople go through extensive training before they start their job.	.76
	4. Periodic training sessions are conducted to help the salespeople learn new skills and knowledge.	.69
	5. We receive detailed updates on our company's new development.	.68
	6. Management makes sure salespeople have the right information, technology, and other resources in order to serve customers the best way possible.	.77
	7. Salespeople in the company have been carefully selected to make sure their background and skills are suitable for relationship building.	.66
	8. The sales manager is supportive of the salespeople's effort to build customer relationships.	.64
Output control	1. Specific sales and profit goals are established for my job.	.64
	2. My immediate boss monitors the extent to which I attain my sales volume goals.	.77
	3. If my sales performance goals were not met, I would be required to explain why.	.75
	How often are these kinds of measures used in evaluating the salespeople's performance in your company?	
	4. Sales volume	.66
Process control	5. Achievement of sales quota	.67
	1. My immediate boss monitors the extent to which I follow established sales procedures.	.80
	2. My immediate boss evaluates the sales procedure I use to accomplish a given task.	.68
	3. My immediate boss modifies my sales procedures when desired results are not obtained.	.72
Professional control	4. I receive feedback on how I accomplish my performance goals.	.65
	1. My sales department encourages cooperation between sales and marketing professionals.	.71
	2. Most of the sales and marketing professionals in my department are familiar with each other's work and productivity.	.66
	3. My department fosters an environment where sales and marketing professionals respect each other's work.	.69
Market-oriented cultural control	4. My department encourages job-related discussions among sales and marketing professionals.	.79
	1. As a company, we constantly monitor our level of commitment and orientation to serving customer needs.	.70
	2. Our company measures customer satisfaction systematically and frequently.	.88
	3. Our company has routine or regular measures of customer service.	.88
	4. We are more customer-focused than our competitors.	.64
Market turbulence	5. Our company exists primarily to serve customers.	.63
	1. In our kind of business, customers' product preferences change quite a bit over time.	.76
	2. Our customers tend to look for new product all the time.	.84
	3. New customers tend to have product-related needs that are different from those of our existing customers.	.60
Competitive intensity	1. There are many "promotion wars" in our industry.	.77
	2. Anything that one competitor can offer, others can match readily.	.73
	3. Price competition is a hallmark of our industry.	.65
	4. One hears of a new competitive move almost every day.	.70
Relational behaviors	1. This salesperson tries to help us achieve our business goals.	.71
	2. This salesperson tries to achieve his/her goals by satisfying customers.	.68
	3. This salesperson has the customer's best interest in mind.	.74
	4. This salesperson tries to get us to discuss our needs with him/her.	.62

	5. This salesperson tries to influence a customer by information rather than by pressure.	.64
	6. This salesperson offers solutions that are best suited to our problems.	.77
	7. This salesperson tries to find out what kind of product would be most helpful to us.	.74
	8. This salesperson tries to bring us with a product that can help us solve a business problem.	.74
Opportunistic behaviors	1. This salesperson lies about product availability in order to make a sale.	.76
	2. This salesperson lies about competition in order to make the sale.	.73
	3. This salesperson gives answers when he/she doesn't really know the answers.	.60
	4. This salesperson applies sales pressures even though he/she knows the product is not right for me.	.83
	5. This salesperson paints rosy pictures of the products to make them sound as good as possible.	.65
	6. This salesperson encourages us to make extra purchase ahead of schedule.	.68
	7. This salesperson tried to avoid certain responsibilities.	.80
	8. This salesperson overemphasizes certain products when other offerings may be better for us.	.76
	9. This salesperson makes occasional exaggerated claims of their products.	.76
	10. This salesperson alters the facts to get what he/she wants.	.81
Knowledge sharing behaviors	1. This salesperson knows the technical aspects of the products he/she is selling.	.61
	2. This salesperson shares with me his/her product and market knowledge.	.64
	3. This salesperson develops business partners by communicating information and knowledge.	.67
	4. This salesperson communicates his/her ideas clearly and concisely.	.81
	5. This salesperson makes effective use of communication and presentation tools.	.63
	6. This salesperson uses his/her knowledge to work out solutions to our business problems.	.74
	7. This salesperson has the knowledge, skills, and competence necessary to serve his/her customers effectively.	.80
Relationship performance	1. Our relationship with this supplier company has been productive.	.84
	2. The time and effort we spent in the relationship with this supplier company has been worthwhile.	.91
	3. The relationship with this supplier company has been satisfactory.	.90
	4. Our relationship with this supplier salesperson has been productive.	.85
	5. The time and effort we spent in the relationship with this supplier salesperson has been worthwhile.	.88
	6. The relationship with this supplier salesperson has been satisfactory.	.88
Customer share of wallet	The ratio of the following: Your purchases from this supplier were: \$ _____,000 in 200x. Your total purchases for the product lines that this supplier was able to offer were: \$ _____,000 in 200x.	
	2005	.80
	2006	.74

Table 3: Means, Standard Deviations, and Construct Correlations

	Mean	SD	1	2	3	4	5	6	7	8	9	10	11	12
1. IN	5.69	.81	.52											
2. OUT	5.81	.76	.51	.50										
3. PROC	4.85	.94	.61	.58	.51									
4. PROF	5.59	.85	.66	.54	.60	.51								
5. MO	4.84	1.01	.58	.27	.64	.41	.57							
6. MKT	4.66	1.14	.33	.25	.34	.46	.37	.55						
7. CMP	5.13	1.03	.26	.10	.22	.31	.23	.39	.52					
8. RB	5.20	.73	.28	.33	.30	.36	.30	.16	.13	.50				
9. OB	2.74	1.04	-.20	-.10	-.09	-.33	-.21	-.09	-.09	-.54	.55			
10. KS	5.41	.78	.32	.48	.30	.43	.22	.13	.08	0.68	-.48	.50		
11. PERF	5.33	.86	.35	.36	.27	.34	.27	.08	.11	0.63	-.48	.73	.77	
12. WAL	.39	.31	.05	.03	.05	.07	.06	-.03	-.09	0.20	-.04	.07	.24	.59

Notes: Correlations greater than .11 are significant at $p < .05$; correlations greater than .14 are significant at $p < .01$. Salesperson ratings: IN = input control; OUT = output control; PROC = process control; PROF = professional control; MO = market orientation; MKT = market turbulence; and CMP = competitive intensity. Customer ratings: RB = relational behavior; OB = opportunistic behavior; KS = knowledge sharing behavior; PERF = relationship performance; and WAL = customer share of wallet. Average variances extracted are on the diagonal.

Table 4: Standardized Path Estimates for Structural Models

Path	SEM1	SEM2
Input → Relational	-.09	-.09
Input → Knowledge sharing	.01	.01
Input → Opportunistic	.03	.02
Input → Performance		.11**
Output → Relational	.23*	.17*
Output → Knowledge sharing	.27**	.37**
Output → Opportunistic	.17*	.18*
Process → Relational	-.08	-.06
Process → Knowledge sharing	-.11	-.14
Process → Opportunistic	.24*	.21*
Professional → Relational	.25*	.29**
Professional → Knowledge sharing	.10	.14
Professional → Opportunistic	-.33**	-.31**
Culture → Relational	.26**	.23*
Culture → Knowledge sharing	.01	.01
Culture → Opportunistic	-.16*	-.16*
Market turbulence → Relational	.03	.04
Market turbulence → Knowledge sharing	-.03	-.02
Market turbulence → Opportunistic	.01	.01
Market turbulence → Performance	.05	.03
Market turbulence → Share of wallet	-.11	-.08
Competitive intensity → Relational	-.07	-.08
Competitive intensity → Knowledge sharing	-.07	-.08
Competitive intensity → Opportunistic	.07	.05
Competitive intensity → Performance	-.05	-.09
Competitive intensity → Share of wallet	.00	-.01
Relational → Knowledge sharing	.57**	.58**
Relational → Opportunistic	-.37**	-.38**
Knowledge sharing → Opportunistic	-.22**	-.22**
Relational → Performance	.20**	.18**
Knowledge sharing → Performance	.54**	.52**
Opportunistic → Performance	-.11*	-.11*
Performance → Share of wallet	.26**	.26**
Professional*Input → Knowledge sharing		.10*
Professional*Output → Opportunistic		-.11*
Culture*Input → Knowledge sharing		-.14**
Culture*Output → Relational		-.13*
Market turbulence*Input → Relational		.18**
Market turbulence*Output → Relational		-.12*
Market turbulence*Output → Opportunistic		.08*
Competitive*Output → Knowledge sharing		.21**

* $p < .05$ (one-tailed); ** $p < .01$ (one-tailed).

Figure 1: Sales Controls, Sales Behaviors, and Customer Relationship

