

# Benefits of Security Service Adoption for B2B Clients

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## Abstract

The private security industry is considered one of the fastest growing industries in many countries. However, security providers' profit margins decrease because of intense competition and the spread of low-cost technology. As revenues increasingly depend on innovative services, the perceived value-in-use of security services is probably the biggest challenge facing the industry today. With data from the members of a national security association, we investigate the expected and perceived benefits of professional security services among business-to-business clients. The study reveals that improved operational efficiency has surfaced as a leading expected advantage of security services, but its effect on service adoption is not straightforward. A client organization adopts professional security services only if they produce safety and security at the workplace as well as better corporate image and stakeholder welfare. The results also show that outsourced security brings about market and operational benefits for service adopters.

## Introduction

The private security is among the few industries booming in the current down economy. The growth is related to concerns about crime, vandalism and terrorism. According to Yoshida (1999), the private security industry in Japan has grown from 775 companies in 1972 to 8,669 companies in 1996. Prentzler et al. (2007/2008) illustrate that the number of private security providers in Australia rose by 41 percent over the 10-year period from 1996 to 2006. The number of security workers actually outnumbers the police force in many developed countries. Canada had 82,000 security workers compared to 59,000 police in 2002 and Japan had 459,000 security guards as opposed to 240,000 police officers in 2003 (Van Steden and Sarre, 2011). The United States boasted 60,000 security companies that employed approximately 1.5 to 2 Million guards in 2005 (Van Steden and Sarre, 2011). Nevertheless, the market is expanding particularly in developing economies. Private security market in India consists of more than 5,000 guard companies employing over 1 Million people, with an expected annual growth rate of about 30 percent (Singh, 2007).

Security services are sold mainly business-to-business (B2B). Companies throughout the world are ramping up security systems and employing new strategies to keep themselves protected. However, security has been considered a grudge purchase that was bought at the cheapest possible cost and many clients scale back their security spending during the recession (Van Steden and Sarre, 2011). Increased costs of labor, the upsurge of inexpensive technology, and novel digital services have urged security providers to focus on the value-in-use of services. Providers have taken over many tasks that were traditionally carried by the client's own staff, such as visitor badging and guest access services. Securitas, which is one of the largest security firms in the world, currently state that they are a strongly client-focused company and their emphasis is on providing value-added services that enable them to become a long-term, strategic partner for security with their client organizations (Securitas 2010a). Understanding what drives clients' security service adoption and what the perceived benefits of using outsourced security services are is vital for all security providers.

This paper investigates the expected and perceived benefits that security companies' clients get by adopting professional security services. The study establishes a research model and tests it over a sample of firms that are members of a national security association in Finland. After reviewing the results, we propose that understanding and addressing properly the value-in-use of security services is probably the biggest challenge for security providers. Through this paper managers learn that by adopting professional security services they can get various business gains. Our study shows that these gains comprise market-related benefits and operational benefits. The former includes improved customer satisfaction, a better competitive position, and a positive reputation. The latter one contains an improved knowledge of security, superior innovations born of cooperation between the client and the service provider, and a more efficient use of the client organization's own resources.

### **Theory and hypotheses**

Value is one of the most discussed concepts in business and economics (Sánchez-Fernández and Iniesta-Bonillo, 2007; Chatain, 2010). Haksever et al. (2004) argue that value is 'the capacity of a good, service, or activity to satisfy a need or provide a benefit to a person or legal entity'. This definition focuses on value-in-use. Allee (2000) suggests that three types of intellectual capital matter for firms: people, processes and structures, and customers. Therefore, the aspects that provide value for a company are: i) structural capital (core operational systems, processes, and business concepts and models that bring competitive advantage), ii) human capital (internal capabilities, skills, and knowledge that reside in the staff, employees' health and safety, and corporate identity as opposed to corporate image), and iii) external capital (company's relationships with its customers, partners and other stakeholders, as well as brand recognition, corporate image and goodwill, and social responsibility). Protective actions in these qualities promote the firm's operation, making them good objects for professional security services.

Value-in-use embraces the idea of gaining various benefits by using a commodity. For example, Lapierre (2000) submits that customer-perceived value is a difference between the benefits and costs of obtaining a product or a service. Following Allee's (2000) typology of intellectual capital, we suggest that the benefits of using outsourced security services are threefold. First, we propose that security services enhance a company's *operational efficiency*.

This assumption refers to improved productivity and facilitated operations (Lapierre, 2000). It means that outsourced services enable the client to concentrate on its core business and save its resources for more crucial tasks. Second, we believe that outsourced security services promote the company's *internal perception* of security. This notion means that outsourced services allow the staff to become more aware of safety and security regulations and requirements, obtain more knowledge on the safety practices, and develop a security-oriented mindset. Third, we believe that outsourced security services enable the company to focus on its customer and stakeholder relationships and improve its brand recognition and visibility. We consider this thesis as a company's *external perception* of security, because it focuses on external aspects.

Operational efficiency has become a key sales argument for security companies. Security providers have grown beyond dealing with everyday security incidents and proclaim that clients can obtain a variety of business gains by using professional security services. For instance, Securitas (2010a) announced that the company's first task with clients is to perform an operational analysis that helps it to support clients' business objectives and improve their operational efficiency. We understand operational efficiency from a security perspective through four measures derived from existing literature and security companies' marketing material. These measures suggest that a client adopts outsourced security services, because they i) give it an ability to productively redeploy its internal resources for time and energy savings (Allen et al., 2003; Securitas, 2010a, p.1), ii) provide it with professional expertise and leading-edge best practices (Allee, 2000; Securitas, 2010a, p.1), iii) help it to reduce costs via outsourced non-core operations (Allen et al., 2003; Securitas, 2010a, p.1), and iv) allow it to focus on its core business (Securitas, 2010a, p.1).

Client organizations seek improved operational efficiency through 'exploitation strategy'. This strategy derives from organization and management literature and focuses on excellence in a company's existing business (March, 1991; Gupta et al., 2006). It consists of refinement, choice, production, efficiency, selection, implementation, and execution in resource capturing (Ancona et al., 2001). The exploitative company sustains a price competition with a high profit objective and supports structures designed for efficiency of operation (He and Wong, 2004). Exploitation requires routines and coordination for an efficient management of the activities and processes (Nooteboom, 1999). Products and services that result from improved processes and concentration on company's core business are likely to better satisfy customers, leading to increased revenues and profits (Benner and Tushman, 2003). Exploitation strategy also concerns whether companies emphasize improvements in their current operations and whether they pursue strengthening their customer relationships (Katila and Ahuja, 2002). Therefore, we hypothesize that:

*H1: Operational efficiency has a direct positive relationship with internal perception*

*H2: Operational efficiency has a direct positive relationship with external perception*

*H3: Operational efficiency has a direct positive relationship with service adoption*

We consider a client's internal perception of security through four aspects. After reviewing existing literature and service providers' marketing material, we suggest that a client organization adopts outsourced security services, because they i) reduce the number of disturbance and security incidents in the company (Allee, 2000), ii) promote employee

awareness of security and safety measures and practices (Allee, 2000; Securitas, 2010b, p.5), iii) comply and conform to legislative requirements and standards (Allee, 2000); and iv) enhance employee satisfaction by creating a peace-of-mind and increased feel of safety and security (Allee, 2000; Securitas, 2010b, p.5). Moreover, Haksever et al. (2004) argues that a company can create value for its staff by creating a safe, pleasant, friendly, and cooperative work environment. Training that upgrades employees' skills and knowledge, or gives them new skills and knowledge that are in demand, also creates value within the company. Therefore, we hypothesize that:

*H4: Internal perception has a direct positive relationship with service adoption*

A client's external perception of security refers to its operational environment, customers, and other stakeholders. Lapiere (1997) argues that the value-in-use of industrial services contains social outcomes that improve many stakeholders' standard of living. Haksever et al. (2004) posit that society at large can be a stakeholder, especially if a company's actions have an impact on the environment or other aspects of quality of life. Therefore, corporate social responsibility programs provide value for the society and other bodies outside the firm. Existing literature on value helps us to comprehend the external perception of security. We believe that a client organization adopts outsourced security services, because they i) forward its customers' welfare and operation (Allee, 2000), ii) advance the safety and welfare of its stakeholders (Allee, 2000), iii) add positive corporate brand recognition in the market (Allee, 2000) and, iv) give support to its corporate social responsibility objectives (Allee, 2000). Consequently, we hypothesize that:

*H5: External perception has a direct positive relationship with service adoption*

Existing literature on services lacks sound measures for security service adoption. Most common service characteristics in the security industry are difficult to measure on a few constructs, because the scale and scope of security services are large. We overcame this challenge by reviewing and collecting items from security firms' marketing material. We chose three different types of services to assess clients' security service adoption based on Securitas (2010a; 2010b). The three types include personnel-related security, infrastructure-related security, and property-related security.

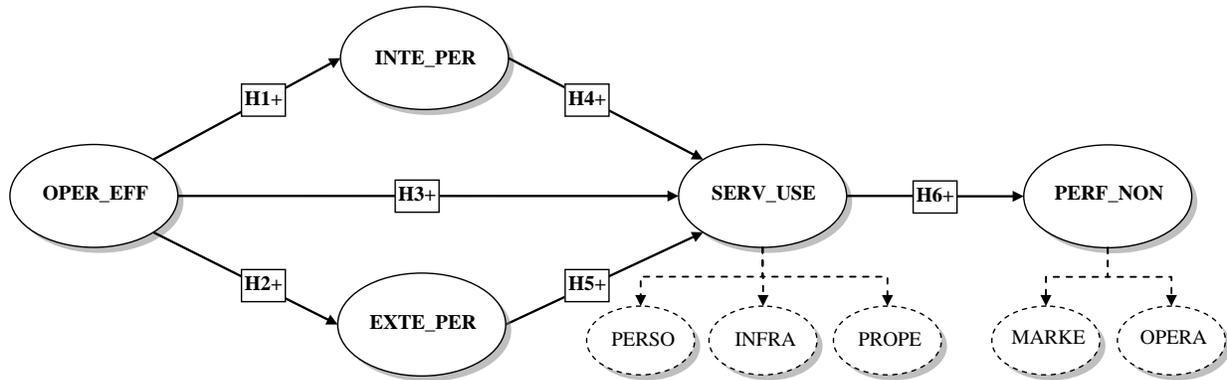
Personnel-related security services imply whether the clients use the following services for industrial or commercial site protection: i) guarding services, patrols and inspections and ii) access control and visitor badging, concierge and receptionist services. These services focus on human aspects of security. Infrastructure-related services include the use of i) structural security systems and ii) electronic security systems. They comprise installing physical or digital security systems, cameras and alarms, as well as monitoring for alarms and video. Property-related services refer to services that protect the client's intellectual or financial capital and sensitive information, such as information systems and trade secrets. Specifically, they include the use of i) cash management and logistics services and ii) IT and information security services. We contemplate that the client organization's use of these services during the previous three years or its intension to use them within the next three years reflects its adoption of security services.

We are interested not only in expected benefits, but also in the actual benefits or performance effects of using professional security services. We focus on perceived effects, because we believe that security service clients are motivated by factors beyond financial performance when they use the services. Moreover, our previously advocated expected advantages of using outsourced services exclude financial measures. This approach is congruent with the thesis of March and Sutton (1997), according to which one should consider not only economic performance as the dependent variable in organization research. Furthermore, Cohen et al. (2008) argue that financial performance is only one important piece of organizational performance measurement. The use of non-financial measures is rational in the security industry, where security and its consequences are largely cognitive and cannot be measured numerically.

We see that the client's actual benefits consist of its perceived market benefits and operational benefits. Client organization's market benefits encompass its i) customer satisfaction, ii) brand and corporate image, iii) competitive position in the market, and iv) differentiation from its competitors. According to Hennig-Thurau and Klee (1997), customer satisfaction with a company's services is the key to a company's success and long-term competitiveness. Smith et al. (2010) show that companies that have a positive brand image and market reputation experience significant market-value premium, superior financial performance, and lower cost of capital. In addition, Grant (1991) points out that a company's competitive position is an essential attribute of its competitive advantage and Porter (1980) argues that one of the key market strategies for companies is making a difference from their competitors.

The operational benefits that clients get by using security services include i) the development of security-related know-how within the organization, ii) the emergence of new ideas and innovations that result from the collaboration between the security service provider and the client, iii) improved problem-solving capability, and iv) enhanced resource efficiency. Semadeni and Anderson (2010) show that professional services foster know-how of the subject field in both the service provider and client organizations. Furthermore, the innovation management literature has numerous examples on that inter-organizational collaboration is a favorable breeding ground for innovations (Srivastava and Gnyawali, 2011). Problem-solving skills are the most complex of all intellectual functions, as they are a cognitive process that requires the modulation and control of routines or basic skills (Goldstein and Levin, 1987). Services that help a company to control its routines can enhance its problem-solving skills. In addition, Cohen et al. (2008) suggest that the efficient use of production resources is an important non-financial measure of operational performance. Therefore, we hypothesize that:

*H6: Service adoption has a direct positive relationship with non-financial performance*



**Figure 1 - Research model and hypotheses**

Figure 1 illustrates our hypotheses on the benefits of security service adoption. The model includes three constructs reflecting the expected advantages of using professional security services. These constructs are improved operational efficiency (OPER\_EFF), internal perception of security (INTE\_PER), and external perception of security (EXTE\_PER). Security service adoption is labeled as service use (SERV\_USE) in the model. It is a second-order construct consisting of three first-order constructs, which are personnel-related services (PERSO), infrastructure-related services (INFRA), and property-related services (PROPE). Non-financial performance (PERF\_NON) is a second-order construct that reflects actual benefits of using outsourced security services for the client. It comprises two first-order constructs, which are market benefits (MARKE) and operational benefits (OPERA).

## Methodology

We conducted an online survey in early 2010 among members of a national security association in Finland. To select the target companies, we used a convenience sampling method. The selected companies represent typical B2B customers in the field, either using professional security services by themselves, or adding these services on their own market offerings. Our contact at the association sent an invitation to participate the survey to potential respondents (N=312) by email. We used multi-item scales to measure all constructs. The survey addressed reasons to adopt professional security services and products. All items were measured on a five-point Likert-type scale (1="strongly disagree" to 5="strongly agree"). We developed the scales for the expected and actual benefits of service adoption based on a literature review. The study relies on the respondents' perceptions, because objective measures were not available from other sources. We regard service use synonymously with service adoption. The questionnaire yielded 141 usable responses for the analysis, thus giving a response rate of 45 percent.

We performed an empirical analysis using the SmartPLS 2.0 by Ringle et al. (2005). Partial Least Squares (PLS) path modeling is a component-based approach that does not require multivariate normal data and places minimum requirements on measurement levels (Tenenhaus et al., 2005). The advantages of PLS include the ability to model multiple constructs, the ability to handle multicollinearity among the independents, robustness in the face of missing data, and the creation of independent latents directly on the basis of cross-products involving the response



**Note:** SD = standard deviation;  $\rho_v$  = average variance extracted;  $\rho_c$  = composite reliability;  $\alpha$  = Cronbach's alpha; † = second-order construct of #4-6; †† = second-order construct of #7-8; square root of  $\rho_v$  on diagonal (in parentheses).

To assess discriminant validity, we examined the correlation matrix of the constructs. According to Fornell and Larcker (1981), satisfactory discriminant validity among constructs is obtained when the square root of the average variance extracted is greater than corresponding construct correlations. In our data, the square root of the average variance extracted exceeded their correlations for each pair of first-order constructs. All constructs met the criterion, which supports the discriminant validity of the constructs. PLS path modeling does not include proper single goodness of fit measure, but we used Tenenhaus et al.'s (2005) global fit measure (GoF) for PLS to evaluate it. The criteria for small, medium, and large effect sizes are .10, .25, and .36. The GoF of our model is .44, which indicates a large effect and a good fit to the data.

## Results

Table 2 lists the results for the hypotheses. Hypotheses H1 and H2 are supported because operational efficiency has a strong positive relationship with internal perception ( $\beta=.60$ ,  $p<.001$ ) and external perception ( $\beta=.66$ ,  $p<.001$ ) of security. Hypothesis H3 lacks support, because operational efficiency does not have a direct effect on service adoption ( $\beta=.07$ , n.s.). Internal perception ( $\beta=.20$ ,  $p<.001$ ) and external perception ( $\beta=.25$ ,  $p<.001$ ) mediate the operational efficiency-service adoption relationship as predicted in hypotheses H4 and H5. Hypothesis H6 is supported, as service adoption has a strong positive effect ( $\beta=.41$ ,  $p<.001$ ) on company's non-financial performance. Therefore, all of our hypotheses, except H3, were supported, which indicates that the expected increase in operational efficiency fosters clients' security service adoption in B2B context. This effect is not straightforward, but takes place through service-provided improvements in client's safety and security at the workplace and the organization's market visibility. In addition, those firms that adopt professional security services gain operational and market benefits.

**Table 2 - Results of PLS analysis**

H#	Paths	Beta coefficients	t-values	Level of significance	Support for hypotheses
H1	<i>OPER_EFF</i> → <i>INTE_PER</i>	.60	27.97	<.001	Yes
H2	<i>OPER_EFF</i> → <i>EXTE_PER</i>	.66	32.84	<.001	Yes
H3	<i>OPER_EFF</i> → <i>SERV_USE</i>	.07	1.85	n.s.	No
H4	<i>INTE_PER</i> → <i>SERV_USE</i>	.20	4.56	<.001	Yes
H5	<i>EXTE_PER</i> → <i>SERV_USE</i>	.25	5.49	<.001	Yes
H6	<i>SERV_USE</i> → <i>PERF_NON</i>	.41	17.84	<.001	Yes

**Note:** Bootstrap=500; df=490; N=141

The explanatory power of the model for the dependent constructs were measured by the squared multiple correlations value ( $R^2$ ). Operational efficiency and internal and external perceptions of security explain 22 percent of the variation in service adoption. However, service adoption explains only 17 percent in client's non-financial performance. These figures indicate that the model may lack an important variable. Implications of the results are further discussed in the following.

### **Discussion and conclusion**

This study investigated the benefits of security service adoption for clients. Specifically, it examined what drives the outsourcing of these services and what the expectations and perceived outcomes of using them are. The results suggest that improved operational efficiency is a key expected advantage of using professional security services. However, its effect on service adoption in B2B context is not straightforward. Two perceptions of security mediate the improved operational efficiency-service adoption relationship. The first one is *internal perception* in terms of employees' safety and security at the workplace and the top-of-mind security awareness in the client organization. The second is *external perception* in terms of client's brand image in its market and among its stakeholders. Accordingly, clients adopt outsourced security services only if the increased operational efficiency improves their employee's awareness of security and their corporate reputation as a security-concerned firm.

Future research may extend this study in several ways. First, it may test the findings in other professional service industries or countries. The present study investigated the benefits of security service adoption in Finland. Although security is a global concern, there can be differences among countries. Second, companies in the present study covered the members of a national security association, and they may have above average interest towards security. An analysis among companies outside of the association could show different results. Third, the results may be different if either security service adoption or non-financial performance is measured using other variables. This study focused on the adoption of personnel-, property-, and infrastructure-related security services; other security classifications could give different results. Moreover, the study measured market benefits and operational benefits, but excluded potential economic benefits. Finally, future research could search for other expected and actual benefits of security service adoption, which were not considered in this study. It would be particularly interesting to investigate whether and to what extent the adoption of specific outsourced security services outperform the in-house sourcing of these services, and how they affect a company's financial performance and shareholder value.

### **Implications**

The results help security providers to apprehend what drives client organizations' security service adoption. Although especially security providers consider improved operational efficiency as a leading sales argument for the clients to use professional security services, our results show that it is not reason enough for clients to adopt these services. Adopters of professional security services expect outsourced services to improve their corporate image and create peace-of-mind to their customers and stakeholders. In addition, they expect these services

to enhance their employees' safety and security at the workplace. Security service adoption has significant non-financial benefits beyond financial performance. Adopters of services benefit from better reputation in their market. They further gain operational benefits that include improved knowledge of security requirements, methods, and standards, as well as innovations that result from the cooperation between the service provider and the client. Furthermore, outsourced security services improve their problem-solving capability and enable more efficient use of their own resources.

Managers in security companies can use our results on expected and actual benefits of security service adoption to promote their current security services. For example, they could stress the importance of organizational benefits including actual operational efficiency, employee safety and security, as well as customer and stakeholder welfare and enhanced corporate image. These strategic gains are beyond tackling with everyday security incidents, which is traditionally considered as the main benefit of using professional security services. Furthermore, the results can help service providers establish novel security services that meet the market needs better. On the other hand, the results indicate that security service adoption is a multifaceted phenomenon. This notion means that, instead of focusing only on operational efficiency outcomes in their service development and marketing communication, providers need to emphasize both internal and external perception of security. Winning security service providers help their clients to establish a security affirmative organizational atmosphere and a security-oriented business culture.

Our findings contribute to the emerging literature of security service adoption and provide interesting avenues for further consideration. For example, managers and scholars in the security industry could deliberate whether and to what extent the outsourcing of security services affects a client organization's financial performance. These questions are significant, because value-in-use is not only about benefits, but also about the difference between the benefits and costs of obtaining a service. As our study was limited to non-financial outcomes, we call for more research on other performance effects of security service adoption in organizations.

## References

- Allee, V., 2000, "The value evolution – Addressing larger implications of an intellectual capital and intangibles perspective", *Journal of Intellectual Capital*, 1(1): 17-32.
- Allen, J., Gabbard, D. and May, C., 2003, "Outsourcing managed security services", Security Improvement Module Report CMU/SEI-SIM-012, Paper 600, Software Engineering Institute, Carnegie Mellon University: PA, <http://repository.cmu.edu/sei/600>
- Ancona, D.G., Goodman, P.S., Lawrence, B.S. and Tushman, M.L., 2001, "Time: a new research lens", *Academy of Management Review*, 26: 645-663.
- Benner, M.J. and Tushman, M.L., 2003, "Exploitation, Exploration, and Process Management: The Productivity Dilemma Revisited", *Academy of Management Review*, 28(2): 238-256.
- Chatain, O., 2010, "Value creation, competition, and performance in buyer-supplier relationships", *Strategic Management Journal*, 32: 76-102.

- Chin, W.W., Marcolin, B.L. and Newsted, P.R., 2003, "A partial least squares latent variable modeling approach for measuring interaction effects: Results from a Monte Carlo simulation study and an electronic-mail emotion/adoption study", *Information Systems Research*, 14: 189-217.
- Cohen, B., Smith, B. and Mitchell, R., 2008, "Toward a Sustainable Conceptualization of Dependent Variables in Entrepreneurship Research", *Business Strategy and the Environment*, 17: 107-119.
- Diamantopoulos, A. and Siguaw, J., 2000, *Introducing Lisrel: A Guide for the Uninitiated*, SAGE, London.
- Fornell, C. and Larcker, D.F., 1981, "Evaluating structural equation models with unobservable variables and measurement error", *Journal of Marketing Research*, 18(1): 39-50.
- Goldstein, F. C. and Levin, H.S., 1987, "Disorders of reasoning and problem-solving ability", In M. Meier, A. Benton and L. Diller (Eds.), *Neuropsychological rehabilitation*. Taylor & Francis Group, London.
- Grant, R.M., 1991, "The Resource-Based Theory of Competitive Advantage: Implications for Strategy Formulation", *California Management Review*, 33(3):114-135.
- Gupta, A.K., Smith, K.G. and Shalley, C.E., 2006, "The interplay between exploration and exploitation", *Academy of Management Journal*, 49(4): 693-706.
- Haenlein, M. and Kaplan, A.M., 2004, "A beginner's guide to Partial Least Squares Analysis", *Understanding Statistics*, 3(4): 283-297.
- Haksever, C., Chaganti, R. and Cook, R.G., 2004, "A Model of Value Creation: Strategic View", *Journal of Business Ethics*, 49: 291-305.
- He, Z.-L. and Wong, P.-K., 2004, "Exploration vs. Exploitation: An Empirical Test of the Ambidexterity Hypothesis", *Organization Science*, 15(4): 481-494.
- Hennig-Thurau, T. and Klee, A., 1997, "The Impact of Customer Satisfaction and Relationship Quality on Customer Retention: A Critical Reassessment and Model Development", *Psychology & Marketing*, 14(8):737-764.
- Katila, R. and Ahuja, G., 2002, "Something old, something new: A longitudinal study of search behavior and new product introduction", *Academy of Management Journal*, 45(6): 1183-1194.
- Lapierre, J., 1997, "What does value mean in business-to-business professional services?", *International Journal of Service Industry Management*, 8(5): 377-397.
- Lapierre, J., 2000, "Customer-perceived value in industrial contexts", *Journal of Business and Industrial Marketing*, 15(2/3): 122-140.
- March, J.G., 1991, "Exploration and exploitation in organizational learning", *Organization Science*, 2(1): 71-87.
- March, J.G. and Sutton, R.I., 1997, "Organizational Performance as a Dependent Variable", *Organization Science*, 8(6): 698-706.
- Nooteboom, B., 1999, "Innovation and inter-firm linkages: new implications for policy", *Research Policy*, 28: 794-806.
- Podsakoff, P.M. and Organ, D.W., 1986, "Self-reports in organizational research: problems and prospects", *Journal of Management*, 12: 531-544.

- Porter, M. E., 1980, *Competitive Strategy: Techniques for Analysing Industries and Competitors*, The Free Press, New York, NY.
- Prenzler, T., Sarre, R. and Earle, K., 2007/2008, "Developments in the Australian Private Security Industry", *Flinders Journal of Law Reform*, 10: 403-417.
- Ringle, C.M., Wende, S. and Will, S., 2005, *SmartPLS 2.0 (M3) Beta*, Hamburg, <http://www.smartpls.de>
- Sánchez-Fernández R. and Iniesta-Bonillo, A., 2007, "The concept of perceived value: a systematic review of the research", *Marketing Theory*, 7(4): 427-451.
- Securitas, 2010a, "Value Added Security Solutions", Securitas Security Services USA, Inc., [http://www.securitas.com/Global/United%20States/Brochures/Value\\_Added\\_Security\\_Services.pdf](http://www.securitas.com/Global/United%20States/Brochures/Value_Added_Security_Services.pdf)
- Securitas, 2010b, "Top security threats and management issues facing corporate America – 2010 survey of Fortune 1000 companies", Securitas Security Services USA, Inc., [https://www.securitas.com/Global/United%20States/2010%20Top%20Security%20Threats%20-%20PRINTED\\_FINAL.pdf](https://www.securitas.com/Global/United%20States/2010%20Top%20Security%20Threats%20-%20PRINTED_FINAL.pdf)
- Semadeni, M. and Anderson, B.S., 2010, "The Follower's Dilemma: Innovation and Imitation in the Professional Services Industry", *Academy of Management Journal*, 53(5): 1175-1193.
- Singh, G.B. (2007). "The Indian Security Industry Market – The Growing Opportunity", *Security Today*, May 2007, <http://www.securitytodayonline.com/>
- Smith, K.T., Smith, M. and Kun, W., 2010, "Does brand management of corporate reputation translate into higher market value?", *Journal of Strategic Marketing*, 18(3): 201-221.
- Srivastava, M.K. and Gnyawali, D.R., 2011, "When Do Relational Resources Matter? Leveraging Portfolio Technological Resources for Breakthrough Innovation", *Academy of Management Journal*, 54(4): 797-810.
- Tenenhaus, M., Vinzi, V.E., Chatelin, Y.-M. and Lauro, C., 2005, "PLS path modeling", *Computational Statistics and Data Analysis*, 48(1): 159–205.
- Teo, H.H., Kwok, K.W. and Benbasat, I., 2003, "Predicting intention to adopt interorganizational linkages: An institutional perspective", *MIS Quarterly*, 27(1): 19-49.
- Van Steden, R. and Sarre, R., 2011, "The Tragic Quality of Contract Guards: A Discussion of the Reach and Theory of Private Security in the World Today", *Journal of Criminal Justice Research*, 1(1):1-19.
- Wold, H., 1982, "Systems under indirect observation using PLS", In: Fornell, C. (Ed.), *A second generation of multivariate analysis*, Praeger, New York.
- Yoshida, N., 1999, "The taming of the Japanese private security industry", *Policing and Society*, 9(3): 241-261.