Understanding Insurance Salesperson Internet Information Management Intentions: A Test of Competing Models

Kevin Celuch,* Steven A.Taylor,** and Stephen Goodwin***

Abstract: The present research compares two attitudinal models adapted from the Theory of Reasoned Action (TORA), which includes attitude and subjective norm components, and the Theory of Planned Behavior (TOPB), which includes TORA facets and also examines a decomposed perceived behavioral control construct that consists of self-efficacy and perceived control. Data from over 700 salespersons of a medium-sized, national insurance/financial services company are used to explore the models using structural equation modeling. The results suggest that the models are comparable in terms of standard fit indices, with the model adapted from the TOPB adding substantially to the variance explained for internet information management intentions for both customer and company contact. These results hold implications for future theory, research, and management of information technology–related salesperson motivation in the insurance industry. [Key words: salesperson, internet, intentions]

INTRODUCTION

Two recent critical imperatives driving salesforce management in general and salesforce management within the insurance industry in particular have been (1) the increasingly dominant orientation within

---

*Kevin Celuch (kceluch@usi.edu) is a Professor in the Department of Management and Marketing and holder of the Blair Chair in Business Science at the University of Southern Indiana.
**Steven A.Taylor is a Professor of Marketing at Illinois State University. He received his degree from Florida State University.
***Stephen Goodwin (Ph.D., University of Iowa) is a Professor of Marketing at Illinois State University.
marketing to build longer-term relationships and (2) the increasing influence of information technology, specifically the internet, in business in general and marketing in particular. The influence of relationship marketing on personal selling has been well documented as the transition from transactional sales to relationship/consultative selling or, in the insurance industry, consultative brokerage (cf. Ingram, 1996; Schuster, 1997; Shepherd and Bock, 1997; Ekern, 2001; Hanavan, 2001). As noted by Schuster (1997), relationship selling implies more than just relationships between the salesperson and the customer. Relationships between salespeople and internal (company) stakeholders are also important, as efficient and effective company problem solving can contribute to longer-term customer satisfaction. This is particularly important in service industries such as insurance.

The second imperative, the increasing prominence of information technology—specifically, the internet—is rapidly changing today’s business landscape. While business-to-consumer as well as business-to-business e-commerce has received a good deal of practitioner and academic interest, the critical salesforce-internet-relational selling interface has received only limited attention. While evidence has documented the substantial contribution of salesforce automation to salesforce performance and firm sales (Engle and Barnes, 2000), history has shown that past attempts at salesforce-technology integration have not been easy or without human and/or monetary costs (cf. McSparren, 1992; Gondert, 1993). This state of affairs has never been more evident than in the insurance industry. While agent access to the internet has grown tremendously, the nature of adoption has, overall, been varied and inconsistent as agents attempt to more systematically integrate the potential of the internet into their relationship marketing efforts (cf. Volker, 1998; Ruquet, 2001a, 2001b; Morgan, 2001, Eastman et al., 2002).

While there is strong consensus that the internet is likely to influence salesperson efforts to build relationships with internal and external stakeholders, there is less agreement as to the nature and extent of the impact. For example, potential benefits cited in information systems, purchasing, supply chain, and marketing literature include faster service, enhanced two-way communication and information sharing, and time savings, which can allow for more collaborative planning. On the other hand, the literature also notes the potential for such negative effects as high costs of implementation and training, trust and security concerns tied to information disclosure, resistance to change, and undermined face-to-face relationships (cf. Fingar, 2000; Kalakota, Oliva, and Donath, 1999; Kalakota and Robinson, 1999; Sheerin, 2000).
In sum, the intersection of two dominant forces within business in general and the insurance industry in particular—the increased prominence of relationship-building initiatives for insurance salespeople combined with the increasing access to internet technology—have focused attention on the need to better understand insurance salesperson adoption of the internet in relationship-building efforts. The present research examines insurance salesperson motivation relating to using the internet for external and internal relational activities, which holds significant implications for managing this increasingly important organizational function that can enhance competitive advantage in the financial services industry.

Perspectives for understanding information technology usage have included macroeconomic approaches (cf. Panko, 1991), firm-level approaches through an examination of relationships between information technology expenditures and firm performance (cf. Banker et al., 1993), and approaches examining determinants of usage at the individual level (cf. Davis, 1989; Davis et al., 1989; Taylor and Todd, 1995; Eastman et al., 2002). Within the latter approach, attitude-based models, which focus on the identification of the determinants of behavioral intention (i.e., attitudes, subjective norms, perceived control), have been viewed as a useful means of understanding determinants of usage. This work is grounded in social psychological theoretical perspectives, notably, the Theory of Reasoned Action (TORA) (Ajzen and Fishbein, 1980) and the Theory of Planned Behavior (TOPB) (Ajzen, 1985, 1991). A clear strength of this approach is that it combines well-grounded theory with practical, problem-relevant interventions. Recently, for example, investigations of technology-based self-service have utilized attitude-based models to understand intention and use of technology (Bobbitt and Dabholkar, 2001; Dabholkar and Bagozzi, 2002).

The present study extends this line of research. First, we examine two attitude models adapted from the Theory of Reasoned Action and the Theory of Planned Behavior. We echo Bobbitt and Dabholkar’s (2001) admonition related to the need for more theory-based technology-related research. Both the TORA and TOPB are well-developed theoretical orientations that aim not only to predict intentions and behavior but also to contribute to understanding the psychological processes underlying intentions and behavior. Aspects of both frameworks have been subjected to empirical verification in hundreds of studies and, in general, have explained considerable amounts of variance in intentions and behavior. However, it is important to note that, to our knowledge, within the context of the present study, the models have not been tested. Indeed, the present topic of interest—insurance salesperson motivation to use the internet for
customer and company information management activities—has received scant attention.

The authors recognize that an alternative framework—the Technology Acceptance Model (TAM) (cf. Taylor and Todd, 1995)—has received support in the literature. In a comparison of the TAM and the TOPB in the context of utilization of a university computer resource center, however, Taylor and Todd (1995) acknowledged that the TOPB showed an improvement over TAM in explaining behavioral intention and concluded that the TOPB provided a more complete understanding of intention than did TAM. Thus, a conscious decision was made by the present authors to examine the more established theories owing to their potential to offer a richer theoretical understanding of psychological processes.

Prior related research which has utilized attitude models to investigate technology adoption issues has relied heavily on consumer and academic settings and has often employed student samples (cf. Eagly and Chaiken, 1993; Dabholkar and Bagozzi, 2002; Taylor and Todd, 1995). Further, studies with more direct relevance to the insurance industry have been more descriptive in nature (cf. Eastman et al., 2002). While such studies provide valuable benchmarking information, they have not directly modeled and tested more complete attitudinal/motivational processes. In addition, beyond the theoretical strength of the TORA and TOPB, these approaches, through their delineation of variables that impact intention, offer problem-relevant interventions. Thus, this study holds the potential of helping insurance sales management understand how to better manage salesperson internet usage.

We further extend research in the area as related literature raises theoretical issues with respect to variables that might further our understanding of the determinants of insurance salesperson technology-related behavioral intentions. To this end, we focus on the decomposition of the perceived behavioral control construct into self-efficacy and perceived control, and we assess the research models using structural equation modeling. As noted by Conner and Armitage (1998), given that models such as the Theory of Planned Behavior are based on assumptions regarding causal processes, there is a need to examine causal relationships among attitude model constructs.

In the next section of the paper, the theoretical models that underlie this research are reviewed and we describe the specific models to be tested. Following, we provide an overview of the methodology of the study and then present the findings. The last section of the paper discusses results and addresses theoretical, research, and managerial implications.
Theoretical Models

The Theory of Reasoned Action (TORA) (Fishbein and Ajzen, 1975; Ajzen and Fishbein, 1980) places intention as the principal predictor of behavior. So conceived, the more one intends to engage in a behavior, the more likely the occurrence of the behavior. Determining intention are attitude and subjective norm (see Figure 1a). The attitudinal determinant of intention is defined as the overall evaluation of behavior. This overall evaluation, in turn, is composed of the salient beliefs: the perceived likelihood of particular consequences of the behavior occurring, weighted by an evaluation of the consequences. The subjective norm determinant of attitude is conceptualized as social pressure from significant others to perform or not perform the behavior. The subjective norm, in turn, is composed of normative beliefs: the perceived pressure from salient referents, weighted by the motivation to comply with the referents. The TORA has received support across a range of consumer and organizational contexts (cf. Eagly and Chaiken, 1993; Sheppard et al., 1988). A recognized limitation of the TORA is that it was developed to deal with behaviors that are completely under an individual’s volitional control (Ajzen 1988; Fishbein, 1993).

In response to the aforementioned limitation of the TORA, Ajzen (1988, 1991) proposed an extension—the Theory of Planned Behavior (TOPB) (see Figure 1b). The TOPB was designed to address behaviors not completely under volitional control. This is relevant to the current research because insurance salesperson internet usage may not be totally under volitional control, particularly if top management in companies encourages utilization. However, as noted in literature related to salesforce automation, resource availability combined with a mandate from top management does
not necessarily translate to successful technology adoption. Further, an individual’s perception of control may not be totally accurate. Thus, we believe it is important to address the issue of volitional control through a direct comparison of two models, one relevant for contexts in which the volitional control of behavior is largely operative, and the other relevant for contexts in which behavior is not under volitional control.

The TOPB is identical to the TORA except that a perceived behavioral control construct has been added. Perceived behavioral control relates to the personal ease or difficulty of performing a behavior. Perceived behavioral control is affected by perceptions of access to necessary skills, resources, and opportunities to perform a behavior, weighted by the perceived valence of each factor to facilitate or inhibit the behavior. In the TOPB, perceived behavioral control is viewed as determining intention as well as behavior directly. The TOPB has received strong support in predicting a wide range of intentions and behaviors (cf. Godin and Kok, 1996; Sutton, 1998). Recently, calls have been renewed for the exploration of additional constructs that might add value to the TOPB (Conner and Armitage, 1998). In fact, as noted by Conner and Armitage (1998), Ajzen (1991) conceived of the model as open to further extensions, given the identification of important proximal variables.

Accordingly, Conner and Armitage (1998) highlighted the perceived behavioral control construct as ripe for reconsideration. Ajzen (1991) argued that perceived behavioral control and self-efficacy (perceived capabilities; Bandura, 1982) are synonymous. As a result, some researchers utilizing the TOPB have used self-efficacy instead of perceived behavioral control. However, Ajzen’s original conception reflects both control and skill/ability facets. In more recent work, Ajzen appears to orient perceived behavioral control to the easy/difficult dimension (Fishbein, 1993). Further, Bandura (1992) makes a theoretical distinction between control and self-efficacy. An individual may believe that he possesses the skills required for a given task but not believe that task performance is under his control. Indeed, empirical evidence also points to the notion of distinguishing between self-efficacy and perceived control (cf. Manstead and van Eekelen, 1998; Terry and O’Leary, 1995). Clearly, there is a need to further examine the self-efficacy–perceived control theoretical distinction, as we feel that the distinction might be particularly relevant when examining insurance salesperson motivation to use technology.

Theoretical Models of Insurance Salesperson Internet Information Management Intentions

On the basis of the preceding discussion, we offer two models adapted from the Theory of Reasoned Action and the Theory of Planned Behavior
to examine salesperson intentions to use the internet for internal and external communications. Our logic relates to the fact that internet usage encompasses a range of behaviors. Given that emphasis of the present research is oriented toward insurance salesperson motivation rather than consumer behavior, we are focusing on information management versus purchase behavior because information management issues encompass the more relevant domain in this context.

Models 2a and 2b are based on an adaptation of the TORA (see Figure 2a and 2b). In the first of the two models, intention to use the internet for information management in support of customer (i.e., external) marketing relationships is determined by the overall attitude toward using the internet for information management and the subjective norm for using the internet. In the second model, based on an adaptation of the TORA, intention to use the internet for information management in support of company (i.e., internal) marketing relationships is determined by the overall attitude toward using the internet for information management and the subjective norm for using the internet.

Note that related research not in insurance contexts has recognized the potential importance of similar constructs such as attitudes toward using the internet, individual perceptions of technology, and management support (which can be viewed as an aspect of subjective norm) to understand
technology usage (Bobbitt and Dabholkar, 2001, and Speier and Venkatesh, 2002). Thus, adapted from the TORA, these two models offer a parsimonious explanation of psychological processes underlying potential insurance salesperson internet usage.

Questions regarding the degree of volitional control operational within the context of insurance salesperson behavior and also regarding the exclusion of variables might mitigate the explanatory power of the models. Models 2c and 2d are based on an adaptation of the TOPB (see Figure 2c and 2d). In Model 2c, intention to use the internet for information management in support of customer relationship marketing initiatives is determined by the overall attitude toward internet usage for information management and the subjective norm for using the internet. In addition, based on the rationale provided for exploring the influence of a decomposed perceived behavioral control construct, intention is also modeled as a function of internet self-efficacy and perceived control related to internet usage constructs. In Model 2d, intention to use the internet for information management in support of company relationship initiatives is determined by the overall attitude toward using the internet for information management, the subjective norm for using the internet, internet self-efficacy, and perceived control related to internet usage.

Related research has recognized the potential importance of perceived behavioral control, voluntariness, and self-efficacy constructs in understanding technology usage (Bobbitt and Dabholkar, 2001 and Speier and Venkatesh, 2002). These two models, adapted from the TOPB, offer a more comprehensive perspective on insurance salesperson motivation to use the internet with the inclusion of self-efficacy and perceived control constructs. The next section describes the methods used to test our research models.

METHODS

Data Collection and Procedure

The data for the study derived from a large sample of insurance agents of a medium-sized insurance/financial services firm that operates in more than a dozen states throughout the country. The company has between 50,000 and 100,000 employees, with between 15,000 and 20,000 individuals working as agents. This company has also recently begun expanding into new regions of the United States. The participating firm offers auto, home, life and annuity, health and disability, farm insurance products, and retirement planning/investment services. Agents typically receive approximately 20 weeks of in-depth educational and field-related training that includes the use of relevant technologies. Such training would be consistent
with what insurance agents typically receive at other firms within the industry. More than 1,200 questionnaires were distributed to agents, with postage-paid return envelopes directed to the research team.

**Measures**

The choice of a single industry—insurance/financial services—is based in part on the significance of the industry to the service sector. The insurance industry is an enormous component of the worldwide service economy, with almost $2.5 trillion in life, accident, and health insurance policies alone written worldwide in 2000 (Swiss Re, 2002). Further, single-industry research can yield depth that can be difficult to obtain when studying multiple industries that deal with similar issues but do so with different resources and bases of advantage (c.f., the competitiveness studies by Dertouzous et al., 1989; the study of channels of distribution, Morgan and Hunt, 1994).

The measures employed in the questionnaire consisted of scales developed specifically for model constructs in the insurance/financial services context studied and are presented in Appendix A. Scale items were developed on the basis of a literature review, coupled with lengthy discussions with managers. Early drafts of the questionnaire were reviewed by industry representatives (sales agents and managers) for readability, understandability, and comprehensiveness. In this study we employed multi-item scales for both the exogenous variables (attitudes, subjective norms, self efficacy, and perceived control) and for the endogenous variable (information management intentions).

*Attitude* toward using the internet for information management consisted of seven 6-point items, with respondents providing perceptions of the likelihood and importance relating to internet usage influencing the respondent’s ability to manage information regarding customer and company contact. All matched likelihood and importance items were multiplied together and summed to form overall attitude (adapted from Terry and O’Leary, 1995).

The *subjective norm* for using the internet consisted of four 6-point items, with respondents providing perceptions of the likelihood and motivation to comply relating to relative influences encouraging internet use for business communication and the competitive pressure to use the internet for business communication. All matched likelihood and motivation to comply items were multiplied together and summed to form overall subjective norm (adapted from Terry and O’Leary, 1995; Armitage and Conner, 1999).
An objective of this research was to explore a decomposed perceived behavioral control construct in an insurance salesperson-related context. Thus, self-efficacy and perceived control measures consistent with the work of Terry and O’Leary (1995) and Bandura (1992) were created. Internet self-efficacy consisted of three 6-point items relating to perceptions of difficulty in using and confidence in ability using the internet for communications. Perceived control related to internet usage was assessed via two 6-point items relating to perceptions tied to the degree of personal choice in using the internet for communications.

Finally, intention to use the internet for information management represents a summary endogenous construct that is designed to provide a multi-item operationalization of an agent’s overall intention to use the internet to manage information in support of customer and company relationships. Here we employed three 6-point scales capturing intention to use the internet for information management related to obtaining, sharing, and managing information over the upcoming year (adapted from Terry and O’Leary, 1995).

RESULTS

We received 734 usable surveys, representing a response rate in excess of 60 percent. Discussion with managers at the firm that enabled the research suggests that such response rates are very good, given the survey length and typical response patterns.

Before discussing how our models performed, it is important to consider the reliability and validity of the endogenous measure (i.e., information management intentions). Structural equation modeling (SEM) of endogenous variables requires assessment of measurement model fit. We employed the following two steps, as suggested by Hair et al. (1998). First, we verified that all variables used for analyses were significantly related to their specified constructs. Second, reliability estimates and variance-extracted measures for the endogenous variables were calculated for the constructs in our research models. Appendix A presents these results and demonstrates that our construct measures exceeded the generally accepted reliability standard of >.7. We next assessed the validity of our measures. Validity using structural equation models is supported by variance-extracted scores for each construct of >.5 (Hair et al., 1998; Raines-Eudy, 2000). The calculated variance-extracted scores exceeded the 50 percent recommended criteria. Table 1 presents correlations among study constructs.
The primary objective of the present research was to test two competing models that could be used to explain intentions related to insurance salesperson behavior. Structural equation modeling was employed for model evaluation using SPSS 10.0 and LISREL 8.51. We tested the models using item parcels with items summed (in the case of attitudes and subjective norms, related items were multiplied and summed) to form unique construct parcels. Bandolos and Finney (2001) note that the use of item parcels has become a common practice in structural equation modeling in recent years. Little, Cunningham, Shahar, and Widaman (2002), most recently, examine the issue of parceling and reach the same general conclusions as Bandolos and Finney (2001). In particular, they conclude that the use of parceling can be warranted in social science research.

Table 1. (a) Correlations Among the Study Constructs for Intentions Toward Using the Internet for Information Management with Customers

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td>Relational Intentions1</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Relational Intentions2</td>
<td>.813</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Relational Intentions3</td>
<td>.757</td>
<td>.761</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Attitude</td>
<td>.564</td>
<td>.574</td>
<td>.584</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Subjective Norm</td>
<td>.552</td>
<td>.555</td>
<td>.548</td>
<td>.660</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Self Efficacy</td>
<td>.544</td>
<td>.545</td>
<td>.494</td>
<td>.442</td>
<td>.486</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Perceived Control</td>
<td>-.105</td>
<td>-.093</td>
<td>-.066</td>
<td>-.114</td>
<td>-.154</td>
<td>-.056</td>
<td>1</td>
</tr>
</tbody>
</table>

Table 1. (b) Correlations Among the Study Constructs for Intentions Toward Using the Internet for Information Management with Company

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td>Relational Intentions1</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Relational Intentions2</td>
<td>.889</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Relational Intentions3</td>
<td>.812</td>
<td>.836</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Attitude</td>
<td>.519</td>
<td>.509</td>
<td>.510</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Subjective Norm</td>
<td>.498</td>
<td>.498</td>
<td>.475</td>
<td>.587</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Self Efficacy</td>
<td>.507</td>
<td>.495</td>
<td>.435</td>
<td>.383</td>
<td>.459</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Perceived Control</td>
<td>-.178</td>
<td>-.208</td>
<td>-.180</td>
<td>-.145</td>
<td>-.146</td>
<td>-.096</td>
<td>1</td>
</tr>
</tbody>
</table>
We thus combined measure items into unique global exogenous parcels, and considered their contributions to multiple-item dependent variables. The results of testing the competing models using structural equation analysis can be found in Table 2. There were no warning messages from the LISREL software or negative error covariances noted. These results suggest that the model that fits the data best is the adaptation of the Theory of Planned Behavior (Models 2c and 2d), particularly when considering not only statistical fit but explained variance and knowledge of the substantive domain as well. Note that both models are relatively comparable in terms of RMSEA, CFI, and SRMR fit indices. However, the TOBP adaptation adds substantially to the variance explained for both the customer and company models (i.e., explains 8 percent more of the variance). Importantly, the model adapted from the TORA fails to account for the important role of self efficacy in predicting information management intentions in both the customer and company-related settings. Perceived control was not found to have impact in the customer model, and had minor impact in the company model (i.e., the lowest significant weight in the model).

**DISCUSSION**

The intent of the present research was to compare two models adapted from the Theory of Reasoned Action and the Theory of Planned Behavior with regard to understanding the determinants of salesperson intentions...
to use the internet for information management in the insurance industry. The model adapted from the TOPB examined a decomposed perceived behavioral control construct that consisted of self-efficacy and perceived control. Data from over 700 insurance agents were used to explore the models using structural equation modeling.

While the two models were comparable in terms of standard fit indices, the TOPB adaptation with self-efficacy and perceived control variables, added substantially to the variance explained for information management intentions for both customer and company contact. Implications of these findings are discussed in detail below.

From the standpoint of theory testing, this study sheds additional light on the applicability of attitude-based models for understanding motivation to use technology. First, on the basis of the explained variances observed in the present research, the TOPB variation appears to be a viable conceptual framework from which to understand insurance salesperson technology-related motivation. The proportion of variances accounted for in the current study compare very favorably with variances explained in reviews of research employing attitude-based models (cf. Godin and Kok, 1996; Sutton, 1998).

This research also provides evidence relevant to the argument for distinguishing between self-efficacy and perceived control constructs. Behavior control is at the heart of the TOPB in that it was formulated to explain behavior not completely under an individual’s volitional control. This study found internet self-efficacy to be a strong predictor of information management intentions for customer and company contact. In contrast, perceived control was not found to have impact in the customer model and was found to exert weak influence in the company model. Thus, findings with respect to the influence of self-efficacy on intentions in the present context mirror results reported in consumer, self-help, and academic settings (Conner and Armitage, 1998).

Future research might build on the models examined in the current study through further exploration of insurance salesperson technology-related motivation by examining the influence of additional measures/variables. As noted previously, much of the research examining attitude-based models has examined consumer and academic contexts or relied heavily on student samples. The present research provides support for the viability of using attitude-based models to understand insurance salesperson technology-related motivation.

With respect to measurement issues, given the centrality of the notion of control in the TOPB, an examination of alternative measures of perceived control may prove fruitful in future research. Skinner (1995) delineates a more fine-grained approach to assessing control beliefs. In much the same
way that belief-based measures of attitude have been found to contribute to intention in ways that differ from simpler attitude measures (Nucifora et al., 1993), this approach may allow for a more detailed assessment and may better capture the construct and enhance explanatory power. Further, the addition of actual behavior would allow for the examination of direct as well as indirect effects (working through intention) of perceived control and efficacy.

Moving beyond a subjective norm to the inclusion of a behavioral norm might also prove useful. A behavioral norm addresses what significant others are perceived to do. Alternatively, a subjective norm addresses what a significant other is perceived to think an actor should do. Adding such a distinction could broaden the concept of normative influence in models for insurance salesperson contexts.

**MANAGERIAL IMPLICATIONS**

From a practical standpoint, the TOPB variant provides insurance management with leverage points from which to affect salesperson behavior. As demonstrated by the impact of internet self-efficacy in models, efforts aimed at enhancing user self-efficacy would help strengthen internet use intentions.

Social cognitive theory (Bandura, 1986, 1997) accords beliefs of personal efficacy a central role in the regulation of motivation and performance. The work of Bandura and colleagues has demonstrated that in addition to knowledge and skills, competent behavior in any situation requires specific self-beliefs of efficacy (i.e., judgments of what one can *do with* the knowledge or skills one possesses to meet situational demands). As noted by Wood and Bandura (1989), there is a difference between possessing skills and being able to use them consistently well under various circumstances. Task-specific self-beliefs of efficacy help account for why an individual possessing the requisite skills performs suboptimally in a given task context and why two individuals at the same skill level perform differently in the same task situation. Within this view, perceived self-efficacy is a dynamic and generative cognition. That is, efficacy judgments may change over time, given new experiences, and may include a mobilization component involving the orchestration of behavior to fit changing contexts (Gist and Mitchell, 1992).

Bandura (1997) details sources of experiences that can contribute to an individual’s efficacy perceptions. Two of the most powerful sources of efficacy are direct and vicarious experience. Thus, the provision of direct experience through organizational training programs related to informa-
tion management would be highly likely to enhance efficacy perceptions related to internet usage. In addition, directly observing others engaging in positive customer and company contact experience with internet usage would also prove beneficial in efficacy enhancement interventions.

Attitude toward usage was also a strong predictor of intentions. Thus, persuasive communication interventions (oral as well as written) by firms that aim at enhancing the perception of potential benefits and weakening perceptions of potential costs should prove useful in strengthening internet usage intentions. Potential benefits identified in the present research that could be addressed by the interventions would relate to improved ability to obtain, share, and respond to information. Potential costs identified in this research that could be addressed by the interventions include concerns related to security, costs (monetary and time), and personal relationships. Note that the use of persuasive communication interventions exclusively, while enhancing attitudes toward internet usage among salespersons, is not likely to contribute greatly to efficacy enhancement (Bandura, 1986).

Subjective norms were also strong predictors of information management intentions for both customer and company contact. Consequently, making explicit management and customer desires as well as addressing competitive pressure appear to be relevant for encouraging internet information management intentions.

In conclusion, understanding salesperson information technology-related motivation will continue to be a significant issue for the insurance industry. It is hoped that this theory-based approach related to information management intentions will contribute to future empirical efforts aimed at increasing our understanding of technology usage by insurance salespersons.

REFERENCES


### Appendix A. The Measures Used to Operationalize Exogenous & Endogenous Model Constructs

<table>
<thead>
<tr>
<th>Construct</th>
<th>Measure</th>
<th>Scale</th>
</tr>
</thead>
</table>
| **Attitude**              | **Customers** = .7732 
 & **Company** = .7728                                                   |                |
|                           | By the end of 2002, using the internet will:                           |                |
|                           | 1) significantly improve your ability to obtain information from your customers/company. |                |
|                           | 2) significantly improve your ability to share information with your customers/company. |                |
|                           | 3) significantly improve your ability to manage information from your customers/company. |                |
|                           | 4) significantly improve your ability to respond to requests for information from your customers/company. |                |
|                           | 5) significantly decrease the value of personal relationships with customers/individuals associated with work. |                |
|                          | 6) significantly increase your security concerns regarding the transfer of sensitive information between you and your customers/company. |                |
|                          | 7) significantly increase costs (e.g., money, time) associated with training requirements. |                |
| **Subjective norm (SN)**  | **=.8657**                                                              |                |
| **Self-efficacy (SE)**    | **Customers** = .8998 
 SE**Company** = .9198                                                      |                |
|                           | I would not have any difficulty using the internet for customer/company communications. |                |
|                           | I am very confident in my ability to use the internet to initiate customer/company communications. |                |
|                           | I am very confident in my ability to use the internet to respond to customer/company communications. |                |
| **Perceived control (PC)**| **Customers** = .8668 
 PC**Company** = .9198                                      |                |
|                           | It is completely my choice as to whether or not I use the internet for receiving customer/company communications. |                |
|                           | It is completely my choice as to whether or not I use the internet for responding to customer/company communications. |                |
| **Relational intentions (RI)** | **Customers** = .93 
 VE = .82 
 **Company** = .96 
 VE = .89 |                |
|                           | Between now and the end of 2002, to what extent do you intend to use the internet to: |                |
|                           | Obtain information from your customers/company? |                |
|                           | Share information with your customers/company? |                |
|                           | Manage information from your customers/company? |                |

*ar refers to the Pearson r correlation for this two-item measure. 
bVE refers to variance extracted.