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# ELECTRONIC COMMERCE: THE IMPACT OF THE INTERNET ON SALES PRACTICES IN THE CAR INDUSTRY

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## Abstract

*E-commerce and Internet technologies are fundamentally changing the way companies do business. While much attention is paid to the profitability among the dot-coms and the viability of the new business models, there is much less focus on the impact of the Internet on the work practices of actual workers. As companies are developing new business models, existing work processes have to be adapted to the new environment in which communication is mediated by e-mail and the Internet. This new environment is marked by ubiquitous information access, asynchronous information exchange, and written communication. Depending on the extant information asymmetry and the degree and nature of the contact that workers need with their colleagues, customers, and trading partners, these attributes present both opportunities and challenges. In sales, for instance, a work context characterized by high equivocality, the increasing reliance on lean media like e-mail presents considerable challenges for sales people whose ability to “read” customers is curtailed.*

*In this paper, we report on a two part study that investigates (1) the impact of Internet technologies on the work practices of car sales associates and (2) the antecedents of Internet technology use and sales performance among car sales associates engaged in Internet sales. In the first part of the study, we interviewed car sales associates engaged in Internet sales and, based on their description of the changes in their work lives, we developed a model to predict the use of Internet technology for car sales and sales performance. Since the online sales environment offers sales associates less information about their customers, our central hypothesis is that the initial assumptions with which sales associates enter into a sales encounter play a very significant role in predicting the outcome of the Internet-mediated sales encounter. We test this and other hypotheses using data collected via a national survey of 155 randomly selected sales associates.*

We're assuming the sale; we're assuming you're acquiring the car, we're assuming we're at the right price, and if we do everything we need to do correctly, you'll buy it from us. And we don't do anything to deter from that assumption until you, the customer, puts us off that track. [QQ, 04/05/00]

## 1. INTRODUCTION

This quote comes from an interview with a sales associate engaged in Internet Sales at a luxury dealership in a large metropolitan area of the American Southwest. He was explaining a new and aggressive practice his dealership had developed to compete for Internet customers who were outside of the dealership's primary marketing area. The dealership referred to this new Internet sales practice as “hypermode.” It involved delivery to the customer's house within two or three hours of getting their commitment to purchase the car upon delivery. Because the paperwork (e.g., financing documents) would have to be prepared and the car would have to be “detailed” in a short period of time, this process required the different departments in the dealership to make a concerted effort to complete this work quickly.

As the above quote points out, one of the keys to the success of this sales approach is “assuming the sale.” According to Webster’s dictionary, “assuming” means (1) to take or appropriate, and (2) to take for granted or suppose as fact. Both meanings are captured in the quote, rendering it a succinct summary of our research into the impact of Internet technologies on the sales practices in car retailing. We are particularly interested in the beliefs and attitudes that predict sales associates’ use of Internet technologies and their subsequent sales performance.

Underlying our research model is the hypothesis that in the absence of information about customers, a condition that is exacerbated by the leanness of electronic communication media, the initial assumptions and stereotypes with which sales associates enter into a sales encounter play an increasingly significant role in predicting the outcome of the sales encounter. This hypothesis is motivated by attitude theories, e.g., Fishbein and Ajzen’s (1975) theory of reasoned action, information richness theory (Daft and Lengel 1985), as well as research in computer-mediated communication (e.g., Gutek 1995). To develop our model, we interviewed managers and car sales associates in luxury car dealerships in the Southwestern United States. To test our model, we surveyed car sales associates across the United States.

This paper proceeds as follows: To contextualize this research, we provide a short synopsis of car retailing in the United States. This is followed by a description of our research method. We then develop our model and our hypotheses, relying both on the qualitative data and prior research. Due to length constraints, we omit the discussion of our results and their implications from this report.

## **2. CAR RETAILING IN THE UNITED STATES**

For many consumers in the United States, buying a car is a rather stressful experience. Not only does it typically constitute a significant purchase because of product complexity and capital expenditure, but it also involves price negotiation, a process with which many consumers have limited experience. Furthermore, there are numerous negative stereotypes associated with car sales associates. They are often seen as pushy and dishonest, frequently relying on “bait and switch” advertising to attract customers to the dealership under false pretenses. Also, many car sales associates will not quote a definite price unless they have a clear commitment that the customer will purchase the car from them. Instead, they will speak in hypothetical terms (“If I could sell you the car at \$x, what would that do for you?”).

The roots of these sales practices can be found in the origins of the vehicle distribution system, which was developed in the 1920s. At that time, since the car manufacturers were too small to sell their own cars across the nation and repair them after they were sold, they developed a dealer-franchise system, which authorized local businessmen to sell and service cars for a manufacturer. The manufacturers retained much power in this relationship. They sought exclusive franchisees, limited transferability of ownership, forced dealerships to accept vehicle inventory, defined the territory in which the dealership could market its products, and retained the right to grant franchises in a geographic area (Bell and Rangan 1997). Since cars were breakdown-prone in the early years, manufacturers located dealerships within a few miles of each other to ensure that customers had easy access to repair shops. With franchises located too close to each other and manufacturers forcing dealers to carry inventory levels in excess of local demand, cut-throat competition among the dealers emerged and, with that, aggressive—and at times abusive—sales tactics.

Even though vehicle manufacturers can no longer exercise the kind of power over dealerships they could in the 1920s, the negative stereotypes of “car guys” and their sneaky sales practices prevail. Given the historically adversarial relationships between consumers and car sales people, it is not surprising that many<sup>1</sup> anticipate that the Internet will significantly transform the car industry, its distribution system, and its business practices.

There are a number of reasons why the case of retail car sales is particularly suitable for research on the impact of the Internet on work practices. First, the car industry at the retail or dealership level has only recently begun to embrace information technology. This suggests that this research is timed to observe significant shifts. Second, because of the stigmatized nature of automotive retailing, the changes in car retailing practices are likely to be dramatic, making this an interesting case study of the Internet’s impact on work practice. The quote below provides some insight into this dramatic shift.

I guess through a lot of our training, any time you give them a price up front, it’s always going to be too much. You have to build the value of the product, let them know the benefits of doing business with [this dealership], and then you can work on, okay, once they understand all the benefits that they’re getting, at least most of them,

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<sup>1</sup>“Internet Takes the Bumps Out of Buying a Car,” *Stanford Business*, December 1998, p. 29; “Shifting Gears,” *Sales and Marketing Management*, December 1999, pp. 38-48; “Tire Clickers: Cars Direct.com’s One Stop Buying and Delivery Service Promises to Take the Agony out of Buying a Car,” *Business 2.0*, September 1999, pp. 159-164; “How to Buy a Car on the Internet...and Other New Ways to Make the Second Biggest Purchase of a Lifetime,” *Fortune* (133:4), March 4, 1996, pp. 164-168.

then they can start discussing the price. But, unfortunately a lot of people on the Internet just [say], “Okay, what’s your best price”....it seems like 100% of the time, when someone comes up [with] “Gimme your best price; okay, thank you; goodbye,” you never see ‘em again. [SU, 01/10/00]

### 3. RESEARCH METHOD

#### 3.1 Qualitative Data

One of the researchers conducted a total of 15 interviews with three managers and seven car sales associates engaged in both Internet sales (e-sales for short) and “traditional” sales.<sup>2</sup> These interviews typically lasted an hour. Some of the e-sales associates were interviewed twice, four months apart. Furthermore, the researcher also attended four e-sales meetings during the course of the study. These meetings were attended by most of the e-sales associates who participated in the qualitative data collection phase.

#### 3.2 Survey Data

Using the insights gained from the qualitative data collection phase and the literature on innovation diffusion and attitudes, we developed a survey. We pilot tested the survey on seven sales associates, most of whom were also participating in the qualitative portion of the research. Based on their feedback and responses, we reworded some questions and eliminated others. Appendix A lists the constructs and questions included in our final survey.

From a research organization that wishes to remain anonymous, we purchased a list of 250 randomly selected dealerships that subscribe to third party lead generating services such as AutoByTel or MSNCarPoint. We mailed surveys to 500 sales associates and 155 surveys were returned by the beginning of April 2000, for a response rate of 30%. Only 16 respondents were not engaged in e-sales, i.e., they did not receive leads off the Internet. Since our survey responses were not split more or less evenly between sales associates that were engaged in e-sales and those that were not, we eliminated the observations from the non-e-sales respondents. We rely on hierarchical regression analysis to test the hypotheses that arise from the model.

### 4. RESEARCH MODEL AND HYPOTHESES

The model in Figure 1 presents our central hypothesis that sales associates beliefs about Internet customers<sup>3</sup> (e-customers for short) and the Internet sales process (e-sales process, for short) predict their Internet technology use and sales performance. The model also takes into account self-efficacy (Compeau and Higgins 1995a) and usefulness (Davis 1989) in predicting technology use. Furthermore, the model incorporates the notion that selling is “a numbers game,” which implies that success in selling is contingent on the number of leads that a sales person receives. below, we briefly discuss each of these constructs in our model and we develop their respective hypotheses.

#### 4.1 Beliefs About E-customers

- (1) *E-customers are more knowledgeable than traditional customers:* Based on transaction cost theory (Williamson 1975), we would expect the primary effects of the Internet to disintermediate the relationship between buyers and sellers (e.g., Kambil and van Heck 1998; Wigand 1997). Because of the franchising laws in the U.S. auto industry, this disintermediation is limited to informational transactions, however, suggesting that the primary impact of the Internet is the removal of the information asymmetry that has traditionally strained the relationship between customers and car sales associates. Whereas before consumers were dependent on print publications (e.g., newspapers and car magazines, as well as visits to the library and car dealerships in order to get information about cars, prices, and the car-buying process, the Internet provides easy access to this information, thereby effectively reducing the cost of acquiring information. Consequently, we would expect e-customers to be more informed than traditional customers.

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<sup>2</sup>Our survey data revealed that only few e-sales associates deal exclusively with Internet customers, i.e., those who contacted the dealership via e-mail or through a web site.

<sup>3</sup>Since most car buyers are relying on the Internet to do research, we define e-customers as those who use e-mail or a web site to establish initial contact with a car sales associate.

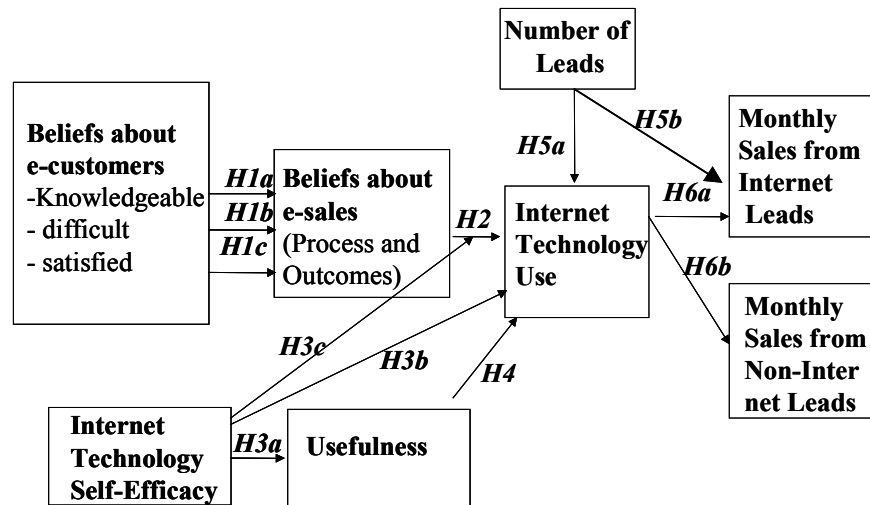


Figure 1. Research Model and Hypotheses

The interviews revealed, however, that the e-sales associates did not find e-customers more knowledgeable than traditional customers. Instead, they felt that the Internet exacerbated both “analytical” and “emotional” buying behavior. In other words, customers who tended to collect a lot of information would use the Internet to collect even more, and those prone to impulsive buying would be able to do it even more quickly. Furthermore, the e-sales associates divided e-customers into three evenly-sized groups:

You’ve got a third of them that are really viable customers that are working out the details for buying a car, the other two-thirds, there are some that are just looking around, seeing what’s out there, they are on the Internet and they hit a button or two and they’re not really that interested or serious of a buyer, and then the other third they are completely out there: they’re twelve years old or they are just doing it for grins, or they’re a competitor and they’re just messing with you, you know. [QQ, 01/21/00]

Customers who demonstrated their knowledge, were considered “serious” and “legitimate.”

This sounds like a legitimate buyer because they’ve got a lot of the particulars. [SU, 01/10/00]

- (2) *E-customers are more difficult than traditional customers:* With more knowledge, customers are in a better position to negotiate a purchase agreement favorable to them. In fact, the Internet seems to attract car buyers who are set on getting the lowest price. E-customers were regarded as price-sensitive.

[Using the Internet is] easier...if they want to haggle and they’re gonna get in their car and go from dealership to dealership, it’s much more difficult to do that. If they want to haggle and bite at your heels and nip and all that, it’s much easier to do that over the Internet. [AV:04/18/2000]

Some e-customers seem to feel empowered by their knowledge and they write e-mail messages that sales associates find aggressive at times (Sproull and Kiesler’s [1991] research on flaming in e-mail communication provides some insight into this development).

By just typing it in there, and you make it capital letters and you put “I WANT YOUR BEST PRICE, period” and you send it and I’m like, “okay”...now, I am on the defensive because I’ve just been hammered with a question and I’ve got nothing else to say except for...It’s harder for me to sell service, the dealership, me....So it’s a lot different and again the customers are at a huge advantage on that end because they’re just typing whatever they want to and if I don’t respond the way they want to, they just won’t call me anymore, they won’t....They’ll just try the next guy and then go on down the line. [ZQ, 09/22/99]

- (3) *E-customers are more satisfied than traditional customers:* Given the stigmatized nature of the car retailing practices, customers who succeed in avoiding the traditional sales experience through the use of the Internet should be more satisfied with their purchase and the sales process. Also, feeling more empowered and more control over the sales encounter would

increase customers' satisfaction with the sales process. The interviewees suggested further that the novelty of the e-sales experience and its convenience lead to e-customers being more satisfied than traditional customers.

I think that it's kind of a romantic ideal that they have that it's something different. I mean, everything that we do on the Internet, we could basically do on the telephone....But they like the idea; they like to be able to tell friends and associates that they bought their car on the Internet....But they like to be able to say, "yeah, got on the Internet; bought that car and got the best deal, got the financing, and they delivered it right to my door," and their motivation is somewhat because it's fun; it's a little different. [QQ, 04/05/00]

More satisfied customers, the sales associated indicated, are likely to generate referrals and repeat business.

As the interview quotes above indicate, differences between the traditional and the Internet customer are perceived more or less favorably. We hypothesize that this is because the traits and dispositions of Internet customers impact the task of selling. We, therefore, propose the following three hypotheses:

- H1a:** The more e-sales people believe that e-customers are knowledgeable, the more positive their beliefs about the e-sales process and its outcome.
- H1b:** The more e-sales people believe that e-customers are difficult, the more negative their beliefs about the e-sales process and its outcome.
- H1c:** The more e-sales people believe that e-customers are satisfied, the more positive their beliefs about the e-sales process and its outcome.

## 4.2 Beliefs About E-sales

When anticipating the impact of the Internet on the task of selling cars, one needs to consider the expected changes in such key outcome variables as profit margins, monthly unit sales, and closing ratios, as well as the speed and simplicity of the new sales process. With respect to e-sales outcomes, the interviewees reported lower margins (e-customers know invoice price and haggle more), lower closing ratios (only a third of e-customers are serious), and higher unit sales (ability to sell to customers outside of the sales territory).

With respect to changes in the sales process, the interviewees indicated that the e-sales process was simpler and faster. Their observations, however, also implied that the e-sales process was more stressful. For instance they wanted to avoid verbiage and tactics that were associated with traditional car sales practices.

Oftentimes I think if the question [I ask in my e-mail]...if it's either obvious why I'm asking the question or if it's clear that it can help them get either a better deal or a more accurate deal, then they're more likely to want to respond to it. But if it's "Do you plan on buying today?" on the e-mail, I think a lot of those folks aren't going to respond. "Agh, whatever, every car salesman asks me that" or "What are you willing to pay." [ZN, 09/1999]

Furthermore, having a written record of their e-mail interactions with e-customer's meant that they were very concerned about getting the information right and getting the meaning of their message across correctly.

When you're putting numbers online, you had better be right because someone will print that page and say this is what you told me. Okay, you got me. So, if you screw up, it's proof. If you're talking to someone and throw a number out there, well, you can always defend...you can always get out of that because it's just hearsay. [ZQ, 09/22/99]

Also, the leanness of the communication medium, the lack of information about the e-customer and the e-customer's lack of response and feedback made it more difficult for the e-sales associates to sell online and learn from lost sales.

So when you get rejected on the Internet, you feel like you've failed at something. And you really can't control it; that's what's funny. I mean, is it something that I did or didn't do?...Usually you can go and say, "Yeah, here's what I should have done better or different." But you don't do that [in e-sales]. [CD, 04/11/2000]

As these interview quotes indicate, the process and the outcomes of selling cars in an Internet-mediated environment have both positive and negative implications for the e-sales associate. We, therefore, hypothesize that:

**H2:** The stronger the sales associate's belief in the positive process and outcomes of the e-sales process, the greater his/her use of Internet technology to sell cars.

### **4.3 Internet Technology Self-Efficacy**

The concept of self-efficacy comes from social cognitive theory and it captures an individual's beliefs in his/her ability to perform a specific behavior (Bandura 1986). Self-efficacy has been incorporated into IS research on technology adoption and use (Compeau and Higgins 1995a, 1995b; Marakas et al. 1998; Staples et al. 1999). It has also made its way into the literature through the theory of planned behavior (Ajzen 1985), which considers perceived behavioral control and social norms as predictors of attitude (e.g., Mathieson 1991). This research has shown that self-efficacy is an antecedent of ease of use (Venkatesh and Davis 1996), usefulness (Taylor and Todd 1995), and use (Compeau et al. 1999).

Based on these findings, therefore, we hypothesize that:

- H3a:** The greater the sales associate's Internet technology self-efficacy, the greater his/her perceived usefulness of IT.
- H3b:** The greater the sales associate's Internet technology self-efficacy, the greater his/her use of the Internet to sell cars.
- H3c:** The greater the sales associate's Internet technology self-efficacy and the stronger his/her belief in the positive process and outcomes of e-sales, the greater his/her use of Internet technology to sell cars.

### **4.4 Usefulness**

The research predicting IT acceptance, frequently operationalized as IT use, has consistently shown support for Davis' (1989) technology acceptance model (TAM), which is based on Fishbein and Ajzen's (1975) theory of reasoned action. Two TAM constructs in particular, namely ease of use<sup>4</sup> and usefulness, have been found to be powerful predictors of IT use (e.g., Adams et al. 1992; Hendrickson et al. 1993; Igarria et al. 1997; Szajna 1994). Usefulness is "the degree to which a person believes that using a particular system would enhance his or her job performance" (Davis 1989, p. 320). Based on this prior research, we hypothesize that:

**H4:** The greater the perceived usefulness of Internet technology, the greater the sales associate's use of Internet technology to sell cars.

### **4.5 Number of Leads**

Since sales associates typically need to use either their e-mail or Internet browser to receive and respond to Internet leads, we hypothesize that:

**H5a:** The greater the number of Internet leads directed at a sales associate, the greater his/her use of Internet technology to sell cars.

During the interviews, e-sales associates were asked about their motivation for getting involved in Internet sales. Some responded that selling was a "numbers game" and that the Internet was a valuable source of sales leads.

A lot of sales is making sure that you have enough prospects and it [the Internet] generates more prospects than sitting down there [on the dealership floor] waiting for the phone to ring or calling old customers asking for referrals or things of that sort. If I can get 15 or 20 people talking to me a day, one or two of those is probably

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<sup>4</sup>We incorporated Davis' (1989) "ease of use" items in our pilot survey. Since the participants in this pilot noted that the survey was very long and repetitive, we eliminated the "ease of use" items because of their overlap with our "self-efficacy" items. While this omission needs to be noted as a limitation in our research, it is noteworthy that most studies, with the exception of Venkatesh and Davis (1996) and Taylor and Todd (1995), incorporate either "ease of use" or "computer self-efficacy" (e.g., Venkatesh and Davis' [2000] work on TAM2 takes only ease of use into account).

going to be a serious prospect that wants to buy a car. Just filling the hopper full so that you can eventually get a sale. [AV, 1/25/2000]

We thus hypothesize a direct relationship between the number of Internet sales leads and the number of e-sales a sales associate closes a month.

**H5b:** The greater the number of Internet leads directed at a sales associate, the higher the number of e-sales he/she has a month.

#### 4.6 Internet Technology Use

We define Internet technology use in terms of the number of hours sales associates use it, the frequency with which they use it and the degree to which they use e-mail and the Internet throughout the phases of the sales process. We refer to the latter as e-sales practices. Based on the data collected during the interview-based portion of this research project, as well as Kambil and van Heck's (1998) list of generic exchange activities and Conger & Schultze's (1999) description of the sales process as a series of communicative acts, we define e-sales practices as the use of Internet technologies for such activities as obtaining leads, prospecting, staying in touch with customers, negotiating the price, and closing the sale.

While it appears reasonable to expect a positive relationship between the use of Internet technologies and successful sales to e-customers, the relationship between the former and sales to non-e-customers is less clear. Some e-sales associates used the Internet during their negotiations with non-e-customers, but others noted that they spent so much time dealing with e-customers, that they had no time to attend to other sources of leads:

I am really frustrated. I am really frustrated. I could sell 20 cars without this [e-sales technology]. That's the sad part about this. Of last month, I lost four lease-turn-in deals that were my customers. You want to know how I lost them; I will be perfectly frank. I am spending all my time on this [computer]. I did not have time to call my lease-turn-in customers. [CD, 01/21/2000]

We, therefore, hypothesize that:

**H6a:** The greater the sales associates' use of Internet technology to sell cars, the higher the number of cars sold to e-customers.

**H6b:** The greater the sales associates' use of Internet technology to sell cars, the lower the number of cars sold to non-e-customers.

## 5. CONCLUSIONS

In this report, we have outlined the theoretical model that we will use to examine the impact of on the Internet on selling practices among car sales associates. We have collected survey data from 155 car sales associates working at car dealerships based in the United States that subscribe to third party Internet lead generators. We will use this data to test our model and the hypotheses that arise out of it. At ICIS 2000, we will present our research results, their implications and their limitations.

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## Appendix A. Survey Questions

### Beliefs About E-customers

#### More Knowledgeable ( $\alpha = .68$ )

Compared to "traditional" car buyers, customers who use the Internet to buy cars: (5 point Likert scale, "strongly disagree" to "strongly agree")

are more informed about cars

are more informed about the sales process

Know better what they want

**2. More Difficult** ( $\alpha = .73$ )

**Compared to “traditional” car buyers, customers who use the Internet to buy cars:** (5-point Likert scale, “strongly disagree” to “strongly agree”)  
are tougher to sell  
are more price-sensitive  
have more objections that need to be overcome  
haggle more

**3. More Satisfied** ( $\alpha = .73$ )

**Compared to “traditional” car buyers, customers who use the Internet to buy cars:**  
are more satisfied with their purchase  
are more satisfied with the sales process  
are less likely to be repeat customers (reverse coded)

**Beliefs About E-sales** ( $\alpha = .85$ )

**Compared to the “traditional” car sales process, using the Internet to sell cars:** (5-point Likert scale, “strongly disagree” to “strongly agree”)

results in lower sales margins (reverse coded)  
results in higher monthly unit sales  
leads to higher closing ratios  
simplifies the sales process  
speeds up the sales process  
makes selling more difficult (reverse coded)  
makes selling more stressful (reverse coded)

**Self-Efficacy** ( $\alpha = .88$ )

(5-point Likert scale, “strongly disagree” to “strongly agree”)

Learning to use Internet sales technology is/would be easy for me.  
I find/would find it easy to get Internet sales technology to do what I want it to do.  
I find/would find Internet sales technology to be flexible to interact with.  
It is/would be easy for me to become skillful at using Internet sales technology.  
I find/would find Internet sales technology easy to use.  
I am very certain about how to use the Internet effectively in selling cars.

**Usefulness** ( $\alpha = .94$ )

**Using Internet technology (i.e., e-mail and the Internet) in my job ...** (5-point Likert scale, “strongly disagree” to “strongly agree”)

enables/would enable me to accomplish tasks more quickly  
improves/would improve my job performance  
increases/would increase my productivity  
makes/would make it easier to do my job.  
I find/would find information technology useful in my job.

**Internet Technology Use** ( $\alpha = .93$ )

Each day, how much time do you spend on e-mail to do your job? \_\_\_\_\_ hours

Each day, how much time do you spend on the internet to do your job? \_\_\_\_\_ hours

How would you describe your use of e-mail to do your job? (5-point Likert scale, “not at all” to “very heavy”)

How would you describe your use of the Internet to do your job? (5-point Likert scale, “not at all” to “very heavy”)

Please characterize your use of e-mail to do your job: (7-point Likert scale, “several times a day” to “never”)

Please characterize your use of the Internet to do your job: (7-point Likert scale, “several times a day” to “never”)

I use information technology (e.g., e-mail and the Internet): (5-point Likert scale, “not at all” to “very much”)

to obtain sales leads  
for prospecting  
to stay in touch with customers  
to schedule appointments with customers  
to negotiate the purchase price with buyers  
to close sales