

**THE HOTEL SALES PROFESSIONALS' PERCEPTIONS OF SALES
COMPUTERIZATION AND TECHNOLOGY TOOLS: A GAP ANALYSIS**

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ABSTRACT

The hotel salesperson of today has a great many technological innovations to work with that are intended to make the sales job easier and more effective, as well as produce more bottom line results for the hotel. This study reveals the gap between the importance of computerization and technology tools available to hotel sales personnel and the users' satisfaction level with those tools in performing their daily sales responsibilities. The findings indicated that the performance with almost all the tools was below the expectations. The gaps found also showed variations between the two sample groups: sales association members and salespersons of a major hotel chain. The largest gaps found across the samples were related to: property management systems, meeting room diagramming, and high-speed Internet connections. Practical implications and future research issues are discussed.

KEYWORDS: buyer-seller relationship; sales technology; importance-performance Analysis; hotel; HSMIAI

INTRODUCTION

The 2000 Executive THINK (Travel & Hospitality Innovation, Network, Knowledge) series, developed by the Hospitality Sales and Marketing Association International (HSMIAI), has identified technology as one major issue facing the global hospitality sales and marketing industry. The consensus was that in the near future, sales and marketing professionals would be at a disadvantage without tools such as e-mail, laptops, cell phones or personal digital assistants (PDAs) (Rach, 2001).

The hotel salesperson of today has a great many technological innovations to work with that are intended to make the sales job easier and more effective, as well as produce more bottom line results for the hotel. The question is whether all of these tools of technology are really as important as they are professed to be and whether or not they perform up to the expectations of the salesperson having to utilize them in daily selling activities. Hotels need to know where they should be investing their money in order to provide the most important technological tools to the salesperson and to be certain the tools and the users of the tools are accomplishing what they are intended to do. Some would have us believe that those properties that simply automate their sales offices will report dramatic savings in time, better sales staff performance, and increased profitability (Avery 1994). However, Orenstein and Leung (1997) point out, simply providing a computer and software is not going to miraculously increase sales volume or productivity. As they put it, "automation is not just an introduction of technology into the sales force, but a behavior modification to change what is important in the work process of the sales force" (p. 14). Rach (2001, p.36) also points out "Too often executives fail to recognize that in hospitality and tourism it is far more important to understand the technology needs of their guests and employees." Another crucial element to consider in the use of technology is the degree to which it is easy to use (i.e., "user friendly") (Good & Stone 2000). It would be anticipated that "user friendly" hotel sales

technology is also considered as performing above expectations. If not, there is cause to consider changing the application or the training for the application.

This study investigates where hotel sales professionals stand relative to computerization and technology and where they place the performance of the computerization and technology tools available to them. The question to be answered is what forms of computerization and automation work in the hotel sales operation and which ones do not seem to be meeting expectations. The answer might be found by revealing the gap between the importance of computerization and technology tools available to the salespeople and their satisfaction level with those tools in performing their sales responsibilities.

CATEGORIES OF SALES COMPUTERIZATION AND TECHNOLOGY TOOLS

As mentioned earlier, the hotel salesperson has a growing number of technology tools being made available. Those technology tools can best be categorized into several groups reflecting their usage by the hotel salesperson (McCarthy, 1999; Moncrief & Cravens, 1999; Sammons, 2000; Shoemaker, 2001).

Communication Tools

Technology provides several communication tools the salesperson might be using to improve interaction with the customer and with the hotel. Customer communication tools would include: e-mail, e-mail attachment capabilities, voice mail and cell phones. Additionally, the salesperson would use e-mail internally between departments within the hotel, as well as with sources of sales leads from regional sales offices, convention and visitors bureaus, etc.

Administrative Tools

In order to make the job more efficient, the salesperson relies on technology for administrative activities such as word processing and developing spreadsheets of sales results. It is also important that today's salesperson be able to access information from a variety of locations beyond the traditional office environment including working at home or when traveling. The technology tools available for administrative tasks in these contexts include laptop computers and PDAs or handheld computers. Of course, to be able to do all of the administrative functions, as well as customer research using technology, access to the Internet needs to be as quick as possible raising the issue of high speed Internet access capabilities.

Customer Management Tools

An important function of technology in the hotel sales operations of today is the ability to keep customer data in databases that are easily accessible. The technology tools being utilized in this area are database management programs such as Goldmine, ACT and MS Outlook. Automated sales and catering systems such as Delphi and Daylight

have also become standard equipment in the hotel sales office to not only keep customer activities on file, but to generate contracts and internal communications regarding the customer's guest room and meeting needs. Additionally, property management systems (PMS) provide the hotel with the necessary automation to handle the entire rooms operation. These PMS systems are commonly linked to the automated sales and catering systems in one fashion or another. Hotels also depend on the global distribution systems (e.g., SABRE, Worldspan, Galileo) to handle reservations and provide access to customers for specially negotiated rates that the salespeople have contracted with the customer.

Selling and Marketing Tools

In order for the salesperson to be more effective in selling there are technology tools designed to assist with presentations, to do research on customers, and to make it easier for the customer to access information on the hotel. Presentations to customers today typically include PowerPoint presentations to the customer. The customer can also access more information on the hotel through the World Wide Web, which can also be a source of generating lead activity to the hotel through requests for proposals (RFPs). The Internet is used in the sales department for customer research and finding contact information for organizations the salesperson wishes to solicit for future business. Additionally, meeting planners are now expressing a desire to be able to use technology to plan meetings using diagramming software of meeting rooms such as Meeting Matrix, Optimum Settings and Room Viewer. Hotels need to recognize this and react accordingly to stay up with the technology usage of the customer.

All of the above tools form the basis for the hotel sales technology tools analysis in this study. As mentioned, the focus is on the salesperson's perception of how important each tool is in daily selling activity and whether it is performing as would be expected. Thus, we examined the gap between the importance of computerization and technology tools available to the sales force and their satisfaction level with those tools in performing their sales responsibilities.

METHODOLOGY

Sample

The sample for this study was drawn from two primary sources. The first source was a paper and pencil survey mailed to hotel sales members of the Hotel Sales and Marketing Association International (HSMAI). The HSMAI survey was sent with a business reply envelope to be returned to a university address. The second source enlisted the support of a major hotel company who requested anonymity. In this case, the same survey items were used, but as the second group completed a web survey. A senior level sales and marketing executive sent out an e-mail to all of their owned and franchised hotels through their corporate e-mail listserv to enlist participation in the survey. It should also be noted that only a limited number of the HSMAI membership, less than 5 percent, could have been possible participants in the major hotel company sample.

Survey Instrument

The survey instrument contained a list of 20 hotel sales technology tools and asked for ratings on a 5-point Likert-type scale of both the importance and performance of those items (See Table 1). It also gathered demographic information of the salesperson including gender, age, position level, years in the business, years in current position, primary market segment handled, base of operations (i.e., on-property, home office, regional office or other), and type of hotel (i.e., company owned/managed, franchise, independent or other). The technology tools items used included those taken from past research in the use of technology in hospitality sales and sales in general (Anderson; 1996; McCarthy, 1999; Moncrief & Cravens, 1999; Sammons, 2000; Shoemaker, 2001; Sisson, 2002) and practical knowledge of a former senior level sales and marketing executive in the hospitality industry.

The respondents were asked how important each item was to their sales responsibilities and how satisfied they are with the performance of each item in performing their sales responsibilities. The importance scale was 1=not at all important, 2=not so important, 3=neutral, 4=fairly important, and 5=very important while the satisfaction with performance scale was 1=very dissatisfied, 2=dissatisfied, 3=neither dissatisfied/satisfied, 4=satisfied, and 5=very satisfied. A “don’t know” option was also provided for both scales.

The two groups of participants completed the same survey items; however, as discussed above, one group, the HSMAI sample, responded to a paper survey received in the mail, while the other, from the major hotel company, took a web survey. It was expected that the paper survey would be more effective in getting responses from salespeople at any level of experience with sales technology from the general hotel sales population and not be biased to respondents who had a sophisticated knowledge of the Internet who would be comfortable responding to a web survey. On the other hand, the major hotel company required its sales force to be proficient in technology usage to communicate throughout the group and therefore, it was believed the web survey would be a familiar survey method for the salespersons from that company.

Data Collection Procedure and Response Rates

The first data resource from HSMAI provided a list of 1,301 North American hotel sales members. An initial mailing generated approximately 125 responses, so a second mailing was done to non-respondents two months later that resulted in a total response of 228 from HSMAI. This meant that the paper survey overall response rate was 17.5 percent.

The second data resource (from the major hotel company) estimated that 1,000 sales people from all owned and franchised hotels from the major brand of the chain were contacted through the internal e-mail listserv. Only one e-mail was sent with a link to the web survey URL and all of the responses were received within one week of the sending. The result was 281 web survey responses for a 28.1 percent response rate.

Data Analysis

GLM (General Linear Modeling) Repeated Measures procedure was utilized to analyze the data. The importance and performance items were the “within-subject” factors while the sample type (HSMAI and Hotel Chain) was the “between-subject” factor. This made it possible to control the differences due to the sample type while investigating the differences between the importance and performance scores.

THE RESULTS

Demographics of the Samples

The HSMAI sample appears to be older (22.4 percent are 50 or older compared to only 6 percent of the major hotel company sample) and more experienced in the industry, as well as in their respective positions (75.7 percent of the HSMAI sample have more than 5 years experience and 27.8 percent have been in the same position for more than 5 years compared to 60.1 percent and 11.4 percent respectively for the major hotel company sample). As would have been expected, the HSMAI sample also has a high percentage of salespeople with independent hotels (39.8 percent). However, the position levels of the respondents are relatively the same with Director level position representing the majority of both samples (HSMAI = 55.0 percent and the major hotel company = 55.2 percent).

Repeated Measures Analysis

The multivariate tests (Pillai’s Trace, Wilk’s Lambda, Hotelling’s Trace, Roy’s Largest Root) of the within-subject effects (importance-performance) and the interaction effect ((importance-performance)*sample) were significant at 0.0001 probability level. The within-subject partial Eta-Squared was 0.45 while the interaction partial Eta-Squared was 0.20. For individual item tests, the bonferroni correction was used to adjust the critical alpha level to reduce the type I error (i.e. rejecting a true null hypothesis). The adjusted alpha level was determined by dividing 0.05 by the number of hypothesis test (items) ($0.005/20=0.0025$). The differences between importance and performance scores, the “within-subject” differences regardless of the sample type (HSMAI and major hotel company), were significant at 0.0025 for all items except for “Spreadsheet software (e.g., Excel, Lotus, etc.)” These results are summarized in Table 1. The probabilities in Table 1 represent the corrected F-value probabilities by Greenhouse-Geisser (the most conservative test). Interestingly, for all significant items, the satisfaction with performance scores were significantly lower than the importance scores, suggesting that sales professionals’ satisfaction levels all fall behind the importance attached to the computerization and technology tools included in this study. The magnitude of the Eta-squared values pointed out the largest gaps (effect sizes). The items for which the gap between importance and satisfaction scores were largest included Automated Sales and Catering Systems, High Speed Internet Connections, E-mail Attachment Capabilities, Property Management Systems, and Database Management Software.

Table 1
The Differences between Average Importance and Performance Scores for Sales Computerization and Technology Tools

Items	Importance mean	Performance mean	p-value	Partial Eta-Squared
1. <i>E-mail to/from customers</i>	4.7 (.63)	4.3 (.94)	0.000*	.14
2. E-mail to/from other internal departments in your hotel(s)	4.3 (1.1)	4.0 (1.1)	0.000*	.08
3. <i>E-mail to/from other sales lead sources (e.g., CVBs, Regional Offices, Representation Companies)</i>	4.5 (.79)	4.0 (1.0)	0.000*	.14
4. <i>E-mail attachment capabilities</i>	4.7 (.57)	4.0 (1.1)	0.000*	.21
5. Database Management Software (e.g., Goldmine, ACT, MS Outlook)	4.3 (.99)	3.6 (1.1)	0.000*	.18
6. World Wide Web	4.6 (.69)	4.2 (.91)	0.000*	.08
7. Automated Sales and Catering Systems (e.g., Delphi, Daylight, Breeze)	4.4 (1.1)	3.6 (1.3)	0.000*	.25
8. Presentation Software (e.g., PowerPoint)	3.6 (1.1)	3.4 (1.2)	0.000*	.05
9. Spreadsheet Software (e.g., Excel, Lotus)	4.1 (.99)	3.9 (.98)	0.07	.01
10. Internet for Customer Research	4.5 (.79)	4.1 (1.0)	0.000*	.07
11. Internet for Customer Contact	4.3 (.95)	3.9 (1.1)	0.000*	.05
12. Property Management Systems (e.g., Fidelio, Springer-Miller, HIS)	4.1 (1.2)	3.4 (1.2)	0.000*	.20
13. <i>Meeting room diagramming software (e.g., Meeting Matrix, Optimum Setting, Room Viewer)</i>	3.6 (1.3)	2.9 (1.2)	0.000*	.15
14. <i>Laptop Computer</i>	3.5 (1.3)	2.7 (1.4)	0.000*	.12
15. Global Distribution Systems (GDS) (e.g., Sabre, Apollo, Worldspan)	4.1 (1.2)	3.7 (1.2)	0.000*	.11
16. Voice Mail	4.7 (.66)	4.3 (.87)	0.000*	.11
17. <i>High Speed Internet Connections (e.g., DSL lines, T-1 lines, Ethernet connection)</i>	4.4 (.94)	3.4 (1.4)	0.000*	.22
18. <i>Word Processing Software (e.g., MS Word, WordPerfect)</i>	4.8 (.58)	4.3 (.86)	0.000*	.16
19. <i>Palmtop/Handheld Computer</i>	3.0 (1.3)	2.7 (1.4)	0.001*	.03
20. <i>Cell Phone</i>	4.0 (1.1)	3.5 (1.4)	0.000*	.07

Note: The importance and performance scores were measured on 5-point scales. The standard deviations were reported in parentheses. The probabilities denoted with "*" are significant at 0.0025 probability level (0.05/20=0.0025). The *italicized* items are those for which the sample type interaction was significant; i.e. the significant differences were only found for the major hotel chain sample.

The results also showed that a significant interaction effect exists between the sample type and the importance-performance gap scores for 8 out of 20 items (Table 1). Therefore, for these items, their interaction effects, not the main effects, should be interpreted. These items were E-mail to/from customers, E-mail to/from other sales lead sources (e.g., CVBs, Regional Offices, Representation Companies), E-mail attachment capabilities, Meeting room diagramming software (e.g., Meeting Matrix, Optimum Setting, Room Viewer, etc.), Laptop Computer, High Speed Internet Connections (e.g., DSL lines, T-1 lines, Ethernet connection, etc), Word Processing Software (e.g., MS Word, WordPerfect, etc.), Palmtop/Handheld Computer, and Cell Phone.

The results indicate that the differences for E-mail to/and from customers, E-mail to/from other sales lead sources, and E-mail attachment capabilities were significant only for the major hotel chain sample, noting the fact that the importance of these items was the same for the both the HSMAI and major hotel sample. The meeting room diagramming software was more important for the major hotel sample than it was for the HSMAI sample whereas the opposite was true for the satisfaction score. Again, the significant differences between the importance and satisfaction gap for laptop computer, high speed internet connections, and word processing software were only true for the major hotel chain sample. For the HSMAI sample, the satisfaction with Palmtop/Handheld computer in performing daily sales operations was higher than its associated importance score whereas the opposite was true for the major hotel chain sample. Likewise, for the HSMAI sample, the importance and performance scores were much higher (4.1 each) than the hotel chain sample. Therefore, the within-subject significant performance gap was only due to the hotel chain sample.

DISCUSSION

The study found that, regardless of the different samples, hotel sales professionals' satisfaction with the following tools did not meet their expectations: E-mail to/from other internal departments in their hotel(s), Database Management Software (e.g., Goldmine, ACT, MS Outlook, etc.); World Wide Web, Automated Sales and Catering Systems (e.g., Delphi, Daylight, Breeze, etc.); Presentation Software (e.g., PowerPoint, etc.); Internet for Customer Research, Internet for Customer Contact, Property Management Systems (e.g., Fidelio, Springer-Miller, HIS, etc.); Global Distribution Systems (GDS) (e.g., Sabre, Apollo, Worldspan, etc.); and Voice Mail. Among those the largest gaps were Automated Sales and Catering Systems, Property Management Systems, and Database Management Software.

On the other hand, the differences for E-mail to/from customers and other sales lead sources, E-mail attachment capabilities, Meeting Room Diagramming software, Laptop Computer, High Speed Internet Connections, Word Processing Software, Palmtop/Handheld Computer, and Cell Phone were only significant for the hotel chain sample, indicating that they meet the expectations of the sales professionals in general (HSMAI sample). The largest gaps found across the sample were Property Management Systems, Meeting Room Diagramming, and High Speed Internet Connections.

The results of this study seem to indicate that when a hotel or hotel company invests in any type of sales technology, whether it is as basic as providing e-mail access

or a more elaborate system such as meeting room diagramming software, they are generally perceived to be important tools. However, the salesperson's performance with these tools is very critical. Despite the significant gaps across the board, the performance factor is even more acute when the hotel company is already known to be a technology leader, such as the major hotel company in this study. It might also be said that virtually all forms of sales technology are being considered more and more important to the daily operation of the hotel sales department every year, especially in hotel companies where technology is emphasized. This could certainly explain why something as basic as e-mail to the customer, is considered so critically important, but yet a gap still exists for the major hotel company sales force in terms of performance. The apparent standard of "bigger, faster, better" is well established for the sales department.

One possible solution to this dilemma would be to implement more effective training and follow-up training on the technology being adapted. This is particularly evident in the more elaborate systems such as Automated Sales and Catering Systems, Property Management Systems, and Database Management Systems where the gap was found to be the greatest. In addition, the hotel sales and marketing executive should be aware that customer management tools need improvement. The property management systems (PMS), database management systems (e.g. Goldmine, ACT), and sales and catering automation systems (e.g. Delphi, Daylight) used by hotel salespeople to document and track sales activity, as well as generate contracts and other important internal communication tools, are certainly considered important, but they are performing below expectations. Additionally, the diagramming software programs being used more and more by the meeting planning profession (e.g. Meeting Matrix, Optimum Setting, Room Viewer) are perceived to be well below average on both importance and performance by the hotel salesperson.

Typically, when a hotel or hotel company invests in these more elaborate systems an initial training program is put into place, but the challenge is in the follow-up training. Hotel sales teams are well known for their turnover rates and it is not uncommon to find an entirely different sales team in place now than the one that went through the initial training. Therefore, companies need to consider investing the additional dollars in ongoing training.

Another solution would be to focus on the providers of the technology being implemented, whether they be from outside vendors or internal MIS staff. Presuming that many of the hotels in this study are using Automated Sales and Catering Systems, Property Management Systems, and even Database Management Systems designed specifically for the hotel industry, it is imperative that the providers of the technology recognize the need to constantly update and improve performance of the technology in place. It isn't enough to simply develop a system, put it in place, and then leave it for the hotels to determine how to continue to improve on its usage. There is definitely a mutually beneficial relationship in place here that requires constant monitoring and updating of the systems to improve upon the performance level.

The importance and the performance level of the World Wide Web as a customer prospecting and contact tool should be emphasized. Not only should this form of prospecting be encouraged, but the access to it should be at the highest performance level (e.g., DSL lines, Ethernet lines, T-1 and T-3 lines, etc). The hotel salesperson, however, is concerned that the high-speed Internet connection is not performing up to expectations.

Therefore, we would suggest the hotel sales and marketing executive give priority to giving the sales team the fastest and most efficient connection to the Internet possible.

It was surprising to find that administrative tools such as laptop computers and PDAs were not considered relatively important. This is an area that many hotels have invested a great deal of money with the objective of improving sales effectiveness. Perhaps, part of the reason for the lack of perceived importance relates to the lack of perceived performance. This could be the result of poor equipment choice or maybe even the lack of training of the sales force on the usage of this type of technology. It would be wise for hotel companies to take a good hard look at what is being spent in this area to be certain it will provide the return on investment necessary.

CONCLUSION

The hotel salesperson of today has a great many technological innovations to work with that are intended to make the job easier and more effective, as well as produce more bottom line results for the hotel. This study reveals the gap between the importance of computerization and technology tools available to the hotel salespeople and the satisfaction level with those tools in performing daily sales responsibilities. The findings also revealed the similarities and differences between sales professionals in general and sales professionals of a specific hotel chain. The study demonstrated that assessments of individual performance and training on the sales technology tools are as important as the investment in these tools

There are some limitations of the study. Some differences might be due to demographic differences between the two samples that were not controlled in this study. The findings are also limited to the attributes included in this study. The findings may not be generalized over wider populations because of lack of non-response bias check and possible self selection bias. There is no doubt that the technology available to the hotel salesperson is changing rapidly. Therefore, it is difficult for any survey done at a point in time to capture all of the latest technological innovations on the market. For example, this study did not address the area of wireless communication that has been growing at an astounding pace. In fact, the growth of wireless technology could also affect the importance and performance levels of other sales technology such as laptop computers that might now be viewed as more important. As technological innovations continue to grow, this type of importance-performance gap analysis needs to be constantly updated. It would be wise for all major hotel groups, in particular, to regularly survey their sales force to be sure the company is investing wisely in its new and existing technology in order to provide a return on investment that reflects technology that is both important to the sales operation and performing up to its expectations.

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