

# THE ADOPTION OF EC IN B2C ORDER-TAKING IN THE HOTEL INDUSTRY

Nomsa Mndzebele

#### **Abstract**

Despite the high expectation for the value of Business to Consumer (B2C) Electronic Commerce (EC) its adoption has not yet been fully understood. Many hotels have discovered that they have not yet reaped the expected benefits from their B2C EC investments. The main objective of this paper is to examine the relationship between relative advantage, compatibility, complexity, attitude, information intensity and competition as well as their impact on the realization of B2C EC benefits. A contribution of this paper is the development of the of a research framework to examine the factors that affecting B2C EC implementation in the hotel industry. A quantitative research design was used through a questionnaire to collect the data from a sample of 332 hotels in South Africa 2012.

#### Introduction

Information technology (IT) has become crucial in terms of influencing and shaping organisational strategy and success. It is therefore necessary for an organisation to successfully adopt technological innovations. The use of EC for business transactions is considered to be an important tool in conducting business. [1] state that Electronic commerce (EC) should be adopted, managed and operated at maximum effectiveness if one's business is to succeed in the global marketplace of the 21st century [2] state that EC can provide the opportunity to create new relationships between sellers and buyers, as well as provide opportunities for all kinds of business organisations to share information on a daily basis. The Internet provides a way for consumers to make better purchasing decisions as it offers consumers relatively more information about products as well as alternatives from which to choose. B2C is the most widely recognised form of EC, as it includes online purchasing and other relevant electronic transactions that reflect the direction of delivery from Business-to-Consumer (B2C) [3];[4]. With EC, customers can have direct contact with businesses to buy goods and services. In addition, businesses and customers can eliminate the costs involved in working through intermediaries.

Customers are more interested than before for productassociated information so that they can minimise their buying risks [5]. It was initially believed that one benefit of IT would enable the hotels to promote themselves directly to customers and thus sell their rooms more cheaply than if using expensive call centres. If hotels increase direct B2C transactions by offering online reservation, consumers can choose which hotel to go to by looking at the products being offered on the website. Hotels will be the ones to sell their rooms, thus increasing the hotels' profits and removing the commissions and other fees charged by intermediaries. Because of the increase in B2C transactions, there will be an increase in consumer loyalty and trust which means the hotels have to implement and invest in the most recent technologies for their websites so as to encourage user acceptance [6].

Today's guests are becoming more demanding than ever. Many hotels need to improve their operational efficiency, in order to stay in a competitive position in today's market, which can be done by upgrading and adapting to new technologies. [7 and [8] state that hotels that quickly adopt improved IT systems are less likely to lose potential customers to other hotels that offer better facilities. If a hotel wants to meet its guests' IT demands, it means that the hotel must take into consideration the trends of business travelers. Travelers, who have become dissatisfied with their usual choice and have not yet become loyal to a specific hotel, will switch from one hotel to another until they are satisfied [5].

The purpose of this study is to identify the unique conditions that may cause hotels to either accept or reject the new technology. Some of the main reasons include the complexity of the new technology, attitude of managers towards the technology, compatibility of new technology with the old technology used by the organisation and inadequate information about the technology. Based on literature review, it has been suggested that user's resistance could be the result of bad experiences from previous attempts to use new technology or its usefulness [9] and [10]. However, the resistance of using the new technology may drive away loyal customers from the hotel.

The South African tourism industry is a well-known online advertiser that specifically targets international clients. South Africans use overseas sites, such as Amazon.com, to buy products and services [11]. There are a growing number of online South African consumers purchasing products, over the Internet. In 2001 online sales in South Africa in the



ISSN:2319-7900

retail industry represented R162.6 million. In 2003, 35% of retailers in South Africa were using the Internet to trade online and the total amount spent on shopping online that year was R341 million. Online retail sales represented 0.14 per cent of the South African retail market in 2003 [12]. The reason for this rapid growth is that shoppers find that many products and services are not as expensive when bought through the web, because the process eliminates costly intermediaries [13] and [14]. In South Africa it was estimated that in 2008 online food purchasing would be US\$2.4 billion on grocery market [12].

### Methodology

The purpose of the study is to find out if there is a relationship between the independent variables and the dependent variables. In the present study the independent variables used are relative advantage, compatibility, complexity, attitude, information intensity and competition and the dependent variable is B2C order taking.

A quantitative research design has been used for the study. A correlation and descriptive survey has been used. The aim of the study is to develop a research framework to examine the factors affecting the realization of B2C order taking EC implementation for the hotel industry in South Africa. A pilot survey of IT managers of 8 hotels was conducted. The 374 questionnaire were self-administered and 332 were obtained giving an overall response rate of 83% including 26 that were received by email. Pearson's correlation analysis and Spearman's correlation were used to assess the relationship between each of the independent variables and the dependent variables [15].

The hotels were drawn from the database of three major groups of hotels as suggested by the South African Tourism office [16]. The target population was hotel managers in South Africa because they make the final decisions on capital expenditure and they work directly with the information technology professionals. Systematic sampling was done from each of the groups so that they would all be represented.

In the literature reviewed, the researcher identified relative advantage, compatibility, complexity, information intensity and competition as the independent variable and the extent of EC adoption in B2C order taking as the dependent variable.

### **Findings**

Cronbach's alpha for the set of questions asked on B2C order taking is 0.650. This indicates a reasonable consisten-

cy to the responses. (The alpha value increases to 0.791 if the question on e-check-out is omitted from the set. However, the researcher has chosen to leave it in for the sake of completeness.) For the sake of analysis, the questions have thus been joined into a single measure of the extent of e-commerce with regard to B2C order taking.

Table 1: Correlation analysis of B2C order taking

Independent	Corr.	Sig.	Mean	S.D.
Relative advan-	.117	1.	3.97	0.71
tage				
Compatibility	.244**	.000	4.25	0.719
Complexity	.295**	.000	3.86	0.85
Attitude	.072	.190	3.01	1.09
Information In-	.358**	.000	4.21	0.76
tensity				
Competition	.421**	.000	3.29	1.22

<sup>\*</sup> Correlation is significant at the 0.05 level (2-tailed).

To examine the association between B2C order taking and the independent variables Pearson's correlation analysis was applied. Table 1, above, indicates the correlation analysis of EC adoption on B2C order taking. Except for relative advantage and attitude all the other independent variables show that they have an influence on the extent of adoption of EC on B2C order taking. The highest rated variables with the highest mean on B2C order taking are compatibility and information intensity.

Table 2: Multiple regression coefficients

	Standardisc cients	Sig.	
	Beta	Std. Error	Beta
Complexity	.521**	.042	.000
Information intensity	.171**	.041	.000
Competition	.371**	.042	.000
Compatibility	.144**	.041	.000

Dependent variable: order taking

Table 2, shows that relative advantage and managers' attitudes offer no significant contribution to this model. The beta coefficients give a measure of the contribution of each variable to the model. All the variables have a positive influence on the extent of adoption of EC on B2C outbound communication.

<sup>\*\*</sup> Correlation is significant at the 0.01 level (2-tailed).

<sup>\*</sup> Correlation is significant at the 0.05 level (2-tailed).

<sup>\*\*</sup> Correlation is significant at the 0.01 level (2-tailed).



ISSN:2319-7900

Complexity	0.52	The Extent of
Information intensity	0.17	EC adoption
Compatibility	0.14	on B2C
Competition	0.37	Order taking

Figure 1. The research framework.

From the above Figure 1 Compatibility contributes  $\beta$ = 0.52, Information Intensity contributes  $\beta$  = 0.17, Compatibility contributes  $\beta$  = 0.14 and competition contributes  $\beta$  =0.34of the frame work

Based on the questionnaire all but one question is not significant; the other questions show that there is an association between having an Internet connection and B2C order taking. Booking is done over the Internet and in that way the hotel is able to confirm its bookings with customers. Ninetyfive percent of the respondents reported that they use the Internet to make electronic bookings; customers can check and track their bookings by way of the Internet as well as do payments. Orders are taken by way of the Internet and the customer receives a response via the Internet. If it is an online booking then the customer receives booking information immediately as to whether or not there is a room available and when the room will be available. If the customer does not use online booking, he/she can book by way of email and then wait for an email response from the hotel. Such an action involves both the customer and the hotel using EC, and this is done through the hotel's website there by eliminating the middle person as suggested by [17].

The question on customers checking out electronically comes out as insignificant in that customers are expected to check out via the hotel reception counter. The same hotels accept electronic payments yet expect their customers to check out manually, even though it takes time and the customer may well have to stand in a queue.

E-checkout is a facility that is offered by some international hotels, but in South Africa 86% of the guests have to queue to check out manually of the hotel, with e-checkout facilities, a guest can check out electronically and then simply leave the room key at the reception desk. When guests wish to leave, they can make an electronic payment to the hotel and then leave, not having to go through the inconvenience of queuing at the reception desk. This is one area where hotels in South Africa still need to improve; a large percentage of South African hotels still expect their guests to queue in order to check out. It is presently difficult for travelers to switch from one hotel to the next considering that

86% of the hotels still do not have this facility. [7] and [8] state that hotels that do not adopt or improve their IT systems will lose potential customers.

#### Conclusion

Manager's perception of EC, regarding compatibility, complexity managers' attitude, information intensity and competition have a significantly positive relationship with the extent of adoption of EC in B2C order taking. Correlation analysis indicates that the four factors influence the extent of EC adoption in B2C order taking.

Managers are not sure about the direct benefits that can be derived from EC [18] and [19]. In a study by [20] South African firms were asked to state benefits of EC it was found that most of the firms were not aware of the advantages, that is why relative was not significant in the study. Manager's attitude was also not significant in the study managers showed that they did not perceive attitude to be a predictor of EC.

Compatibility, complexity, information intensity and competition have a positive relationship and the findings are consistent with other studies that have been done about these variables. Do not include headers, footers or page numbers other than as already found in this manuscript. Please note that the headers, footers or page numbers are different for the first page, and the rest of the even and odd pages. Actual page numbers and other running heads will be modified when the publications are assembled.

#### References

- [1] D. King, D. Viehland, and J. Lee, Electronic Commerce A Managerial Perspective 2006. NJ: Pearson Prentice-Hall, Upper Saddle River, 2006.
- [2] J. Tan, K. Tyler, and A. Manica, "Business to business adoption of eCommerce in China," Information and Management, 44, 332-351, 2007.
- [3] G. Schneider, Electronic Commerce. Boston: Thomson Learning, Inc. 2007.
- [4] H. F. Lin, and S. M. Lin, "Determinants of e-business diffussion", Technovation, vol. 28, no 3, pp. 135-145, 2008.
- [5] C. J. Liang, H. Chen, and W. H. Wang, "Does online relationship marketing enhance customer retention and cross-buying" The Service Industry Journal, vol. 28, no. 6, pp. 769-787, 2008.
- [6] N. M.Mndzebele, "Electronic Commerce Adoption in the Hotel Industry in South Africa" In: Proceedings of the Conference on Applied and Theoratical Informa-



ISSN:2319-7900

- tion Systems Research, Taipei, Taiwan, 2013, December 27-29.
- [7] T. Lam, V. Cho, and H. Qu, "A study of hotel employee behavioral intentions towards adoption of information technology, International Journal of Hospitality Management, vol. 26, no. 1, pp. 49-65, 2007.
- [8] G. Gazzoli, W.G. Kim, and R. Palakurthi, "Online distribution strategies and competition: are the global hotel companies getting it right," International Journal of Contemporary Hospitality Management, vol. 20, no.4, pp. 375-387, 2008.
- [9] D. H. Brown, and L. Kaewkitipong, "Relative size and complexity; e-business use in small and medium sized tourism enterprises in Thailand" Journal of Enterprise Information Management, vol. 22, no. 1/2, pp. 212-231, 2009.
- [10] H. Lee, and J. Kim, "Determinants of success for application service provider: an empirical test in small businesses" International Journal of Human-Computer Studies, vol. 65, no. 9, pp. 796-815, 2007
- [11] I. Brown, and R. Jayakody. "B2C E-commerce Success: A Test and Validation of a Revised Conceptual Model,"Electronic Journal of Information Systems Evaluation, vol.11, no. 3, pp. 167-184, 2008.
- [12] J. McClatchey, K. Cattell, and K. Mitchell, "The Impact of online retail grocery shopping on retail space: a Cape Town case study," Emerald, vol.25, no.3/4, pp. 115-126, 2007.
- [13] N. M.Mndzebele, "The Use of Information Communication Technologies in South African hotels-a self evaluation by hotel managers" Doctoral dissertation at University of KwazuluNatal 2012.
- [14] C. Lin, Y. Huang, and J. Burn, "Realising B2B e-commerce benefits: the link with IT maturity, evaluation practices, and B2B EC adoption readiness," European Journal of Information Systems, no. 16, pp. 806-819, 2007.
- [15] TGCSA, T. G. Listing of graded hotels by province [online] URL: www.tourismgrading.co.za Accessed 20 April 2009.
- [16] P. Leedy, and J. E. Ormrod, Practical Research (Planning and Design). New Jersey: Pearson Merrill Prentice Hall, pp.25-80, 2005.
- [17] S. P. Gounaris, "Trust and commitment influences on customer retention: insights from business-to-business services," Journal of Business Research, vol. 58, no. 2, pp. 126-140, 2005.
- [18] N. M. Mndzebele, "Attitudes of Hotel Managers Towards EC in South Africa" International Journal of Information and Education Technology, vol. 3, no. 1, pp.63-66, January, 2013.
- [19] S. Sahadev, and N. Islam, "Exploring the determinants of e-commerce usage in the hotel industry in

- Thailand; An empirical study" Information Technology and Tourism, no.7, pp. 171-180, 2005.
- [20] A. Molla, and R. Heeks, "Exploring E-Commerce Benefits for Businesses in a Developing Country" The Information Society, vol. 23, pp. 95-108, 2007.

### **Biographies**

NOMSA MNDZEBELE. Received bachelor of commerce, major in accounting 1989, university of Swaziland. MBA in California State Polytechnic University, Pomona, California USA and Ph.D. degree in Information Communication Systems in University of KwaZulu Natal, South Africa. 2012. has been teaching since 1992.