

# Chapter 15

## Customer Acceptance of a New Interactive Information Terminal in Grocery Retailing: Antecedents and Moderators

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### ABSTRACT

*This chapter uses an extended version of the Technology Acceptance Model to analyze the customer acceptance of a new interactive information terminal for cooking recipes aimed at grocery shoppers. The results show that perceived usefulness, perceived ease of use, and perceived enjoyment influence the customer acceptance of the terminal via direct and indirect effects. Furthermore, the impact of these variables depends on individual differences in experience of Information Technology and the relevance of the information content. These findings carry several management and research implications.*

### INTRODUCTION

Information terminals receive an increasing amount of attention in retailing and new applications for such terminals are constantly being developed and introduced (de Moerloose, Antioco, Lindgreen, & Palmer 2005; Rowley

1995; Rowley & Slack 2003). Retailers can use information terminals to stimulate purchases, increase customer loyalty and support or replace sales personnel. Hence, information terminals can have a substantial impact on a retailer's profitability. Furthermore, information terminals enhance the retailers' customer insight by provid-

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ing information about the customers' search and decision processes.

However, these positive effects depend on the customers' acceptance and usage of an information terminal. Therefore, it is important for retailers to understand how their customers accept this technology. Whether the ease or enjoyment of using an information terminal influences the customers' acceptance more strongly has important strategic implications, for example. As retailers often serve different customer segments, it is also important to know, whether the impact of these variables differs between customer groups. The effects of the ease of use and enjoyment might differ between customers with strong and weak information technology experience. Also the relevance of the information content might influence the relative impact of the ease of use and enjoyment on customer acceptance. When retailers know which segments they serve and how these segments respond to variations in the ease of use and enjoyment, they can offer tailored information terminals to their customers. Therefore, retailers should investigate which variables influence the acceptance of information terminals and how the impact of these variables differs between customer segments.

As the literature on information terminals does not discuss these issues thoroughly, the present chapter aims to close this research gap. It analyzes the acceptance of a new interactive information terminal for cooking recipes based on an extended version of the technology acceptance model (Davis 1986, 1989; Davis, Bagozzi, & Warshaw 1989). The model assumes that usefulness, ease of use and enjoyment influence the acceptance of a technology (van der Heijden 2004). Furthermore, the chapter sheds light on how experience of information technology and the relevance of information content moderate the relationships in the proposed model.

The investigated terminal offers to search for cooking recipes for grocery customers and print them out at the point of sale. They can choose the number of people they want to cook for and print

out a shopping list with the respective quantities. Retailers can use this terminal to generate sales, promote brands and provide added value to their customers. The information terminal for cooking recipes was selected, as this type of terminal is used in grocery stores where customers with different levels of information technology experience and interest in the information content shop.

The results show that the perceived usefulness, ease of use and enjoyment influence the acceptance of the terminal directly and indirectly. However, the effects of these variables are moderated by the experience of information technology and the relevance of the information content (interest in cooking). While enjoyment is more important for customers with little information technology experience and little interest in cooking, ease of use is more important for those with a lot of information technology experience and a high interest in cooking.

The remainder of this chapter is organized as follows: Section 2 presents the theoretical background on information terminals and the customer acceptance of new technologies. Section 3 develops a framework of hypotheses based on the technology acceptance model. Section 4 describes the method used to test the research model and section 5 presents the results. A discussion follows in section 6. The chapter closes in section 7 with some limitations and future research directions.

## **THEORETICAL BACKGROUND**

### **Research on Information Terminals**

An information terminal or information kiosk is a self-service technology station with an interactive information processing capacity located in public concourse (Rowley & Slack 2007). The literature reports numerous applications for such terminals in different industries (de Moerloose et al. 2005; Slack & Rowley 2002a), particularly in retailing (Rowley 1995; Rowley & Slack 2003).

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