Advanced Technologies Management for Retailing: Frameworks and Cases

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Foreword .......................................................................................................................... xiii

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Section 1
Advances in Technologies Management for Retailing

*This section deepens our knowledge of the current developments for improving retailing and consumer in-store experiences. A selection of 6 chapters has been chosen to illustrate the changes in the point of sale caused by innovative technologies capable of totally modifying the stores layout, payment modalities, and information transfer from and to consumers.*

Chapter 1
Point-of-Sale Technologies at Retail Stores: What Will the Future be Like? ...................... 1
Richard Clodfelter, University of South Carolina, USA

*This chapter provides a detailed review of the current technologies available at the point of sale, by focusing barcode scanning, electronic shelf tags, shelf-checkouts, RFID tags, and fingerprint authentication. Furthermore, the chapter outlines possible future developments of these technologies and the emerging trends.*

Chapter 2
The Evolution Tornado Retail ......................................................................................... 26
Bernd Hallier, EHI Retail Institute, Germany

*The chapter investigates the changes in the retailing sector, due to the advances in technologies, by highlighting the evolution from the traditional point-of-sale (POS) to an innovative point-of-consumer (POC).*
Chapter 3
Modelling Shopper Responses to Retail Digital Signage.................................................. 41
Charles Dennis, University of Lincoln, UK
Andrew Newman, University of Salford, UK
Richard Michon, Ryerson University, Canada
J. Josko Brakus, Brunel University, UK
Len Tiu Wrigth, De Montfort University, UK

The authors focus on the consumer perception of in-store atmospheric stimulus, with emphasis on how
the introduction of digital signage might affect this process. In particular, they carry out qualitative and
quantitative results useful for improving business-to-consumer appeal to shoppers, as well as for the
business-to-business marketing of these systems to retailers.

Chapter 4
The Design of an Advanced Virtual Shopping Assistant for Improving Consumer Experience .......... 70
Vincenzo Corvello, University of Calabria, Italy
Eleonora Pantano, University of Calabria, Italy
Assunta Tavernise, University of Calabria, Italy

The authors propose an innovative shopping assistant system for improving consumer experience, by
supporting and influencing his/her in-store behaviour. The system has been designed by taking into
account the basic selling skills, the principles of knowledge management, and current advances in com-
puter graphics and human-computer interaction to develop a new virtual salesperson.

Chapter 5
Information and Communication Technologies in Marketing Channels: Product Considerations........... 87
Irene Gil Saura, University of Valencia, Spain
Marta Frasquet Deltoro, University of Valencia, Spain
Maria Eugenia Ruiz-Molina, University of Valencia, Spain

The authors analyze the Information and Communication Technology (ICT) introduced by retailers in
different distribution channels, as well as the consumer evaluation of the proposed technology, in order
to carry out important issues for researchers and practitioners.

Chapter 6
International Fashion Retailing from an Enterprise Architecture Perspective............................ 105
Torben Tarbo, Aarhus University, Denmark

This chapter focuses on the Enterprise Architecture for retailing, in order to underline its benefits for
innovating, improving, enriching, and increasing the interaction between business and technology. In
particular, the author analyses the case of a fashion firm.
Section 2
Digital Contents Management for Technology-Based Retailing

The main focus of this section is the analysis of digital contents management for a new technology-based retailing in terms of information representation, transferring, and searching. In particular, the selected chapters investigate how it is possible to collect, exploit, represent, and manage the information for achieving useful data for predicting and influencing consumer behavior.

Chapter 7
Frameworks for a Consumer’s Group Knowledge Representation ............................................. 122
Massimo Franco, University of Molise, Italy
Francesca Di Virgilio, University of Molise, Italy
Loredana Di Pietro, University of Molise, Italy
Angelo Camillo, Woodbury University, USA

The authors highlight an integrated conceptual representation of consumer group knowledge, which includes both the influence of collective variables on the decision making process and the investigation of scientific inquiries concerning the role of advanced technologies in relation to the conceptual representation.

Chapter 8
Internet Management for Communication-Distribution Interaction as a Means to Maximize
Customer Consumption Experience: The Volagratis Case ......................................................... 145
Claudia Cacia, University of Salerno, Italy
Lucia Aiello, Università Mercatorum, Italy
Pierpaolo Singer, University of Salerno, Italy
Antonella Ferri, Università Mercatorum, Italy

The chapter focuses on the use of Web 2.0 or social media as a powerful tool for customizing digital contents, supporting consumer decision making, and improving consumer consumption experience in the tourism sector by outlining how this technology can be successfully used for building consumer loyalty, and improving relationships with consumers, as well as for creating value for e-tailers.

Chapter 9
Customer Intelligence as the Powerful Means for Turning Information into Profit .................. 179
Sanda Renko, University of Zagreb, Croatia

The aim of the chapter is to outline how it is possible to exploit Customer Intelligence to achieve a wide amount of information on consumer’s needs, attitudes, and preferences towards a certain retailer, in order to enhance the consumer-retailer relationship and improve the business decision. The research has been carried out by focusing on the case of Croatian market.
Chapter 10
Give to Get: An Experimental Study to Explore Information Giving in New Technology-Based Retail
Katia Premazzi, Bocconi University and SDA Bocconi, Italy
Monica Grosso, Bocconi University and SDA Bocconi, Italy
Sandro Castaldo, Bocconi University and SDA Bocconi, Italy

This study provides useful ideas for retailers in collecting and managing a large amount of information on consumers. In particular, the results outline which variables are capable of major improvements in information sharing in online settings.

Chapter 11
You Never Get a Second Chance to Make a First Impression: Meet your Users’ Expectations Regarding Web Object Placement in Online Shops
Javier A. Bargas-Avila, University of Basel, Switzerland
Sandra P. Roth, University of Basel, Switzerland
Alexandre N. Tuch, University of Basel, Switzerland
Klaus Opwis, University of Basel, Switzerland

Authors propose a mental model for the development of efficient website interfaces, which can be used for the improving websites devoted to online shops.

Section 3
Impact of Advanced Technologies on Consumer Behaviour

The chapters included in this section aim to investigate the impact of advanced technologies on consumer behavior, in terms of consumer opinions, interaction modalities, and purchasing decision, in order to outline the characteristics capable of major influencing their behavior, as well as the directions for innovative and effective retailing strategies.

Chapter 12
Recommendations to Buy in Online Retailing and Their Acceptance
Daniel Baier, Brandenburgische Technische Universität Cottbus, Germany
Eva Stüber, Brandenburgische Technische Universität Cottbus, Germany

This chapter focuses on the analysis of consumer acceptance of the online recommendation systems, by exploiting the use of Technology Acceptance Model (TAM). The study outlines the strength of the link between the acceptance of these systems and the quality and shopping relevance of the provided recommendations.
Chapter 13
From User Cognition to User Interaction Modalities in Consumer Behaviour

Barry Davies, University of Gloucestershire, UK
Eleonora Bilotta, University of Calabria, Italy
Kevin Hapeshi, University of Gloucestershire, UK
Emanuela Salvia, University of Calabria, Italy
Rocco Servidio, University of Calabria, Italy

Authors underline the relationship between Human-Computer Interaction (HCI) and aspects of consumer behavior, by focusing on electronic retail context (e-tailing). The chapter highlights how the 3D interfaces become a key factor for the success of online retail environment.

Chapter 14
Mobile Purchase Decision Support Systems for In-Store Shopping Environments

Tobias Kowatsch, University of St. Gallen, Switzerland
Wolfgang Maass, University of St. Gallen, Switzerland & Hochschule Furtwangen

University, Germany

The authors focus on the mobile purchase decision support systems (MP-DSSs) in order to understand how these technologies increase the product value information in the point of sales. In particular, the chapter investigates the impact of a specific MP-DSS on consumer behavior, by focusing on the Theory of Planned Behavior, Innovation Diffusion Theory and Technology Acceptance Model.

Chapter 15
Customer Acceptance of a New Interactive Information Terminal in Grocery Retailing: Antecedents and Moderators

Stephan Zielke, Georg-August-Universität Göttingen, Germany
Waldemar Toporowski, Georg-August-Universität Göttingen, Germany
Björn Kniza, Georg-August-Universität Göttingen, Germany

This chapter analyzes the consumer acceptance of an innovative interactive information terminal in retailing, by exploiting the use of Technology Acceptance Model (TAM). The results outline a direct and indirect effect of perceived usefulness, ease of use, and enjoyment on the acceptance, in relation to both the individual experience with Information Technologies and the relevance of information content.

Chapter 16
Factors Affecting WiFi Use Intention: The Context of Cyprus

Despo Ktoridou, University of Nicosia, Cyprus
Hans-Ruediger Kaufmann, University of Nicosia, Cyprus
Christos Liassides, Columbia Management, Cyprus

The aim of this chapter is to investigate the impact of WiFi on consumer behavior toward this technology, by using the Technology Acceptance Model (TAM), which allows researchers to identify the determining factors for predicting the user intention.