

Retail Futures

The ubiquitous presence of (mobile) technology has dramatically changed our daily lives and will continue to do so in the future. It has affected many domains of society. Retailing and shopping is no exception. Shifts in shopping behaviour and new technologically driven shopping experiences present new strategic and operational challenges for retail management. However, new technology also generates new opportunities for increasing profits and/or improving service delivery. The availability of person(al) information creates a new playing field for the interaction between retailers and their customers.

Despite the recent interest of academia in the potential and problems of new technology in retailing and shopping behaviour, current knowledge is still limited and highly fragmented. This book, with contributions from leading, mainly European, scholars on this topic is a timely and welcome addition to the literature which reduces the gap in our knowledge. Particularly interesting are the thought-provoking chapters on the future of retailing and new ethical issues that emerge.

I think this book is critical reading for everyone interested in retailing and technology. The balance between theory, empirical findings, showcases and reflection makes it a highly valuable source of information for academics and practitioners alike.

Professor Soora Rasouli, Co-editor Journal of Retailing and Consumer Services, Professor of Urban Planning, Technical University of Eindhoven

This book is a timely, invaluable resource for academic researchers, students and practitioners trying to come to terms with rapid changes in the retail technological landscape. Writing about future technology is notoriously difficult and material becomes dated very quickly, but this book navigates the reader confidently through the minefield with case studies and evidence-based evaluations of technological progress and consumer responses. This book is an excellent contribution to contemporary thinking and presents a coherent, convincing exposition of how technology is changing the world of retailing and shopper behaviour. It has an accessible style that makes it a good read for the general as well as the specialist reader. I strongly recommend this book to anyone interested in how technological changes will affect retailing and shopping.

Professor Charles Dennis, Professor of Consumer Behaviour, Departmental Research Leader, Middlesex University London

Retail Futures: The Good, the Bad and the Ugly of the Digital Transformation

EDITED BY

ELEONORA PANTANO

University of Bristol, UK



United Kingdom – North America – Japan – India – Malaysia – China

Emerald Publishing Limited
Howard House, Wagon Lane, Bingley BD16 1WA, UK

First edition 2020

Copyright © 2020 Emerald Publishing Limited

Reprints and permissions service

Contact: permissions@emeraldinsight.com

No part of this book may be reproduced, stored in a retrieval system, transmitted in any form or by any means electronic, mechanical, photocopying, recording or otherwise without either the prior written permission of the publisher or a licence permitting restricted copying issued in the UK by The Copyright Licensing Agency and in the USA by The Copyright Clearance Center. Any opinions expressed in the chapters are those of the authors. Whilst Emerald makes every effort to ensure the quality and accuracy of its content, Emerald makes no representation implied or otherwise, as to the chapters' suitability and application and disclaims any warranties, express or implied, to their use.

British Library Cataloguing in Publication Data

A catalogue record for this book is available from the British Library

ISBN: 978-1-83867-664-3 (Print)

ISBN: 978-1-83867-663-6 (Online)

ISBN: 978-1-83867-665-0 (Epub)



ISOQAR
REGISTERED

Certificate Number 1985
ISO 14001

ISOQAR certified
Management System,
awarded to Emerald
for adherence to
Environmental
standard
ISO 14001:2004.



INVESTOR IN PEOPLE

To Matteo

This page intentionally left blank

Table of Contents

List of Figures	<i>xi</i>
List of Tables	<i>xiii</i>
Preface	<i>xv</i>

Section 1: Theoretical and Technological Background

Chapter 1 How Innovative Technology Serves the Retailer: A Store Sales Cycle Model	3
<i>Tibert Verhagen and Jesse Weltevreden</i>	
Chapter 2 The Rise of Service Robots in Retailing: Literature Review on Success Factors and Pitfalls	15
<i>Laurens De Gauquier, Malaika Brengman and Kim Willems</i>	
Chapter 3 Technological Diversification in Retail Agglomerations: Case Studies Alongside the Digital Marketing Mix	37
<i>Amela Dizdarevic, Heiner Evanschitzky and Christof Backhaus</i>	

Section 2: Changes in Retail Management and Strategy

Chapter 4 Digital Signage in the Store Atmosphere: Balancing Gains and Pains	53
<i>Stephanie van de Sanden, Kim Willems, Ingrid Poncin and Malaika Brengman</i>	

Chapter 5 Technology-infused Organizational Frontlines: When (Not) to Use Chatbots in Retailing to Promote Customer Engagement	71
<i>Mathieu Lajante and Marzia Del Prete</i>	

Chapter 6 Dealing with Fake Online Reviews in Retailing	85
<i>Scott Dacko, Rainer Schmidt, Michael Möhring and Barbara Keller</i>	

Chapter 7 Towards Omnichannel Retail Management: Evidences from Practice	97
<i>Sandro Castaldo and Monica Grosso</i>	

Section 3: Changes in Consumers' Experience, Behavior and Decision-making

Chapter 8 Dancing to the Algorithm, a Discussion of the Online Shopping Behaviour of Minors	113
<i>Alun Epps</i>	

Chapter 9 Transforming the e-retailing Experience: Towards a Framework for the Socialisation of the Virtual Fitting Room	129
<i>Vanissa Wanick and Eirini Bazaki</i>	

Chapter 10 Smart Consumers and Decision-making Process in the Smart Retailing Context through Generation Z Eyes	147
<i>Constantinos-Vasilios Priporas</i>	

Section 4: Future Challenges

Chapter 11 The Dark Side of Artificial Intelligence in Retail Innovation	165
<i>Ali B. Mahmoud, Shehnaz Tehseen and Leonora Fuxman</i>	

Chapter 12 Retailing and the Ethical Challenges and Dilemmas Behind Artificial Intelligence	181
<i>Andreas Kaplan</i>	

Chapter 13 Do I Lose my Privacy for a Better Service? Investigating the Interplay between Big Data Analytics and Privacy Loss from Young Consumers' Perspective	193
<i>Virginia Vannucci and Eleonora Pantano</i>	
Acknowledgements	207
About the Authors	209
Index	217

This page intentionally left blank

List of Figures

Chapter 1

Figure 1.1. Store Sales Cycle Model. 9

Chapter 2

Figure 2.1. Humanoid Robot Pepper Entertaining Passers-by in a Chocolate Store. 17

Chapter 3

Figure 3.1. The Digital Marketing Mix. 40

Chapter 4

Figure 4.1. Welcome Kiosk at Carrefour. 56

Figure 4.2. Touchscreen Recipes. 57

Figure 4.3. Touchscreen with Recipes of Chocolate. 58

Figure 4.4. Book Recommendation System. 58

Figure 4.5. Beer Recommendation System. 59

Figure 4.6. Beaulieu's Interactive Product Catalogue. 60

Figure 4.7. Interactive Product Information Kiosk. 61

Figure 4.8. Touch and Go Application. 62

Chapter 5

Figure 5.1. Example of a Real Service Interaction between a Customer and a Chatbot for a Large Telecommunication Company in Europe. 74

Figure 5.2. Technical Process of a Chatbot with Emotional Awareness. 79

Figure 5.3. Emotional Awareness for Chatbot Troubleshooting. 80

Chapter 7

Figure 7.1.	Mapping the Touch points. <i>Note:</i> The colour of the cells corresponds to the number of companies that claim to use a touch point in a specific phase of the customer journey, i.e., in the different phases of interaction with customers (see the legend on the right for details).	103
-------------	---	-----

Chapter 9

Figure 9.1.	The Framework for the Socialisation of the Virtual Fitting Room.	135
Figure 9.2.	Employee–Consumer Interactions in the Virtual Fitting Room.	137
Figure 9.3.	Consumer–Consumer Interactions in the Virtual Fitting Room.	138
Figure 9.4.	Employee–Consumer–Consumer Interactions in the Virtual Fitting Room.	138
Figure 9.5.	Employee–Consumer Third Party Interactions in the Virtual Fitting Room.	139

Chapter 11

Figure 11.1.	AI Patent Applications of Leading Technology Companies from 1999 to 2017.	167
Figure 11.2.	Cortona: Microsoft’s Personal Assistant.	169
Figure 11.3.	Google Gmail’s AI-Powered Filter.	169

List of Tables

Chapter 2

Table 2.1.	Overview of Studies on Robots in Retail Studying the Impact on Customers.	19
------------	---	----

Chapter 3

Table 3.1.	Features of the Examined Retail Agglomerations.	39
Table 3.2.	Overview of Case Studies.	42

Chapter 8

Table 8.1.	The Practical, Physical and Psychological Benefits and Harm of Wi-Fi Infinity to Minors.	114
Table 8.2.	The Practical, Physical and Psychological Benefits and Harm of Wi-Fi Infinity to Minors (Detailed).	120

Chapter 10

Table 10.1.	Influence of Smart Technologies on Consumer Decision-making Process.	156
-------------	--	-----

This page intentionally left blank

Preface

For decades, we tried to imagine the future of retailing from different points-of-view. In 2001, for the movie *Minority Report*, Steven Spielberg (in cooperation with MIT) imagined a new store where the shopping assistants were only virtual on virtual assistants (replacing human employees with avatars). In which scenario, they recognized each consumer through the retina scanner and suggested new products to buy accordingly. More recently, in 2017 James Patterson hypothesized ‘The Store’ (The Store, Random House) as an online retail giant able to control the life of American consumers, by influencing not just their preferences as customers but also those in their private lives.

More realistically, scholars predicted the future of retailing as the consequence of massive developments in technology (Grewal, Noble, Roggeveen, & Nordfalt, 2020; Inman & Nikolova, 2017; Pantano, Priporas, & Stylos, 2018), increasing usage of big data analytics (Bradlow et al., 2017), artificial intelligence (Davenport, Guha, Grewal, & Bressgott, 2020; Shankar, 2018) and changes in the retail services (Tezuka, Nada, Yamasaki, & Kuroda, 2019; Wirtz et al., 2018). Conversely, other authors tried to understand the extent to which we (as consumers) are willing to accept and use these technologies (Bertacchini et al., 2017; De Bellis & Johar, 2020; Evanschitzky, Iyer, Kenning, & Schutte, 2015), and the extent to which retailers are able to adopt them to create more pleasant and rewarding shopping experiences (Pantano & Vannucci, 2019; Van de Sanden, Willems, & Brengman, 2019).

However, studies only provide a fragmented understanding of the theory basis and practice for providing a comprehensive overview of the phenomenon. Thus, the following questions are still open:

- (1) *How will we shop in the future?*
- (2) *What are the challenges of competing in the new scenario?*
- (3) *What should we expect from consumers and retailers point of view?*

The aim of this book is to provide new approaches to retailing prompted by the increasing impact of technology and innovation. This is carried out in order to support scholars, students and practitioners to take advantages from the technology-based innovations through a more comprehensive perspective. To this end, this book provides a strong collection of theories, empirical evidence and

case study applications synthesizing the emerging studies on the innovation and technology management for retailing.

In particular, this book is organized in four main sections: (1) theoretical and technological background; (2) changes in retail management and strategies; (3) changes in consumer experience, behaviour and decision-making and (4) future challenges and direction. The first section includes three chapters investigating how technology supports retailers, the increasing adoption of robots for delivering retail services and the technology currently in use in retailing agglomerations. The second section comprises four chapters on how the technology changes retail management and strategy by focussing on digital signage, frontlines' role, responses to fake reviews and on the shift towards the omnichannel retailing. The third section embraces three chapters on changes in consumer behaviour, by investigating the extent to which the new technologies changed the online shopping behaviour, the e-retail experiences and the decision-making process. Finally, the fourth section includes three chapters on the consequences of artificial intelligence adoption in retail services, with emphasis on the ethical challenges and privacy concerns.

This collection of chapters does not expect to be exhaustive. Instead, it provides a foundation for your critical reflection and investigation of the phenomenon. It also provides some useful tools to better understand the emerging complexity within the retail sector. Tools that hopefully help you begin to answer two broad questions. What will the future of retail look like? And more importantly, is it a future you are comfortable with?

Enjoy reading

Eleonora Pantano

References

- Davenport, T., Guha, A., Grewal, D., & Bressgott, T. (2020). How artificial intelligence will change the future of marketing. *Journal of the Academy of Marketing Science*, 48, 24–42.
- De Bellis, E., & Johar, G. V. (2020). Autonomous shopping systems: Identifying and overcoming barriers to consumer adoption. *Journal of Retailing*, 96(1), 74–87.
- Evanschitzky, H., Iyer, G. R., Kenning, P., & Schutte, R. (2015). Consumer trial, continuous use, and economic benefits of a retail service innovation: The case of the personal shopping assistant. *Journal of Product Innovation Management*, 31(3), 459–475.
- Grewal, D., Noble, S. M., Roggeveen, A. L., & Nordfalt, J. (2020). The future of in-store technology. *Journal of the Academy of Marketing Science*, 48, 96–113.
- Inman, J. J., & Nikolova, H. (2017). Shopper-facing retail technology: A retailer adoption decision framework incorporating shopper attitudes and privacy concerns. *Journal of Retailing*, 93(1), 7–28.
- Pantano, E., Priporas, C. V., & Stylos, N. (2018). Knowledge push curve (KPC) in retailing: Evidence from patented innovations analysis affecting retailers' competitiveness. *Journal of Retailing and Consumer Service*, 44, 150–160.

Pantano, E., & Vannucci, V. (2019). Who is innovating? An evaluation of the extent to which retailers are meeting the technology challenge. *Journal of Retailing and Consumer Services*, 49, 297–304.

Shankar, V. (2018). How artificial intelligence (AI) is reshaping retailing. *Journal of Retailing*, 94(4), vi–xi.

Tezuka, H., Nada, Y., Yamasaki, S., & Kuroda, M. (2019). New in-store biometric solutions are shaping the future of retail services. *NEC Technical Journal*, 13(2), 46–50.

Van de Sanden, S., Willems, K., & Brengman, M. (2019). In-store location-based marketing with beacons: From inflated expectations to smart use in retailing. *Journal of Marketing Management*, 35(15–16), 1514–1541.

Wirtz, J., Patterson, P. G., Kunz, W.-H., Gruber, T., Lu, V. N., Paluch, S., & Martins, A. (2018). Brave new world: Service robots in the frontline. *Journal of Service Management*, 29(5), 907–931.