CONTEMPORARY ISSUES IN DIGITAL MARKETING

Edited by **OUTI NIININEN**

Contemporary Issues in Digital Marketing

This book presents a comprehensive overview of the key topics, best practices, future opportunities and challenges in the Digital Marketing discourse. With contributions from world-renowned experts, the book covers:

- Big Data, Artificial Intelligence and Analytics in Digital Marketing
- Emerging technologies and how they can enhance User Experience
- How 'digital' is changing servicescapes
- Issues surrounding ethics and privacy
- Current and future issues surrounding Social Media
- Key considerations for the future of Digital Marketing
- Case studies and examples from real-life organisations

Unique in its rigorous, research-driven and accessible approach to the subject of Digital Marketing, this text is valuable supplementary reading for advanced undergraduate and postgraduate students studying Digital and Social Media Marketing, Customer Experience Management, Digital Analytics and Digital Transformation.

Outi Niininen teaches Digital Marketing at the University of Jyväskylä School of Business and Economics. Her research explores the use of digital technology across the Expanded Marketing Mix to understand how people interact with surrounding environment. Outi's research has been published in, for example, *Industrial Marketing Management*, *Journal of Business Research*, *Tourism Management*, *Tourism Analysis*, *Journal of Travel and Tourism Marketing* and *Journal of Services Marketing* and she is the Co-editor in Chief for Evolving Pedagogy. Outi won the Education Publishing Awards Australia (EPAA) in the category: Tertiary (Adaptations): Teaching and Learning Resource for her Marketing Principles book in 2015.

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Contents

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1   Introduction

Outi Niininen

Why is it important to study digital marketing?

Rapidly developing Digital Marketing (DM) technologies and practices are fuelling digital metamorphisms and revolutionising both consumer and industrial marketing: consumers no longer view branded brick-and-mortar stores as separate entity from an online branded presence. Key challenges for the industry include Artificial Intelligence (AI), the Internet of Things (IoT), Big Data, Voice Commerce, which are all taking place under the recent General Data Protection Regulation (GDPR)/privacy microscope (Dwivedi *et al.*, 2020; Herhausen *et al.*, 2020).

Herhausen *et al.* (2020) identified two marketing capabilities gaps that we aim to address in this book. The majority of this book focuses on the *knowledge gap*: the DM as an industry. The technology that is fuelling DM and ever-changing customer preferences for digital platforms, services and applications create an environment requiring continuously renewing research. This book also addresses the *practice gap* through applied research that is set in a specific company context. For an academic research publication, we are also in the unique position of having a practising Digital Marketer/Social Media (SM) Manager on our Author team. The chapters in this book are each based on an academic research project featuring a current or emerging issue in DM and Communication. Each chapter is a 'stand-alone' presentation of a well-framed research problem from theoretical conceptualisation to conclusions and recommendations for future research. Overall, this book presents a solid balance of theory and empirical work.

This book comprises five sections: **Data analytics and measurement** (three chapters), **Digital transformation and innovations in marketing** (three chapters), **Customer experience and servicescapes** (three chapters), **Ethics and privacy in digital marketing** (four chapters), and the final section, which combines our vision for the **Future for digital marketing communications** as well as overall **Conclusions**.

Section 1 begins with a thorough outline of one of the major changes currently driving DM development: Big Data (Chapter 2) highlights that Big Data is a complex issue for Marketers to conceptualise. This chapter offers value by examining the Big Data application challenges and opportunities across the Marketing decision-making/analysis structure of the Marketing Mix. By utilising the full 8Ps of the Expanded Marketing Mix of Product, Place, Promotion, Price, Process, Physical Evidence, Partnerships, and People, the full potential of Big Data applications is revealed across multiple levels of Marketing decision-making. There are many examples utilised in this chapter. For example, for New Product Development (NPD), the Big Data applications have enabled organisations like

Lenovo to refine their product features, and the dynamic pricing modelling example from a US-based major league baseball team's ticket pricing allows several daily checks for the ticket price that fans are willing to pay for each game. The location-based (Place) applications of Big Data have never been more important than today when precious COVID-19 vaccinations need to be securely transported to end-users with ultimate climate control. Big Data has also impacted Promotion with Programmatic Media Buying. For Physical evidence, the Big Data applications' most evident examples are Google Optimised Landing Pages and the Amazon Go store, with its 'Just Walk Out' technology. Through Big Data analysis, Walmart has improved its supply chain collaboration to optimise in-store stock in preparation for adverse weather effects. Big Data is also tracking how People, the human assets of an organisation, are managed.

The key challenge of Big Data is the volume of data (both structured and unstructured) available for decision-making. Hence, there is a need to develop advanced AI applications to help interpret the generated data into actionable insights.

Chapter 3 investigates the implementation of data-driven decision-making processes within an organisation as an essential success factor in today's competitive environment. Ten industry experts were interviewed to identify the potential barriers to implementing data-driven decision-making processes across an organisation. Three key barriers for data-driven marketing in Finnish organisations were identified: cultural barriers, structural barriers, and top management barriers. While these three barriers hindering the implementation of data-driven marketing practice were found to be interlinked and overlapping, based on a review of past research in this field, this finding was anticipated.

Chapter 4 highlights the future potential of Programmatic (online) Advertising, which relies on massive datasets, optimisation algorithms and intermediaries to deliver relevant advertisements to target audiences at scale. Programmatic Advertising can be divided into two distinct functions: Programmatic Buying that aspires to automate the process of buying and selling ads in real time and Programmatic Creative aims to optimise and generate personalised content in real time. With the development of Programmatic Advertising technology, a shift from Programmatic Buying to Programmatic Creative is to be anticipated. While research into Programmatic Advertising has been championed by computer scientists, this chapter places the topic under the marketing communication field via in-depth interviews with marketing executives working in this field in Vietnam.

The next two chapters begin Section 2 and focus on the design and technical features that organisations should utilise to ensure a positive online experience for their customers. Customers of today expect companies and brands to have a digital presence; thus, company-owned websites have long been viewed as a cornerstone of DM. Chapter 5 highlights the strategic role a company website plays when communicating with customers or during the actual sales process. This elevated role is a direct continuum of today's consumers actively searching for information about organisations and products online. Branded websites also contribute to customers' overall evaluation of the company behind the brand (Consumer Brand Experience), and positive online experiences can contribute to online expenditures. The findings are based on an analysis of 202 respondents.

Chapter 6 is based on a *case study*, thus recognising the significance of User Experience (UX) for the commercial success of websites. UX is about the user's perceptions of and responses to their interaction with a system, such as a website. UX focuses on the Human–Computer Interaction (HCI), and a positive UX is essential for a satisfactory

online customer journey on e-commerce websites. UX, in essence, focuses on humans interacting with technology, including their perception of the aesthetic and even the hedonic design features, affordances, functionality and responsiveness of the interaction. This case study focuses on a consumer electronics brand with a newly redesigned website. A Cognitive Walkthrough is followed by a User Experience Questionnaire (UEQ) to identify design features that need improvement for the customer journey.

Chapter 7 highlights the importance of AI applications in the merging of the Voice Commerce context. Voice Assistants (VA), such as Amazon Alexa and Google Home, are winning a place in our homes, yet little is known about the potential ways they can change established consumer journeys (and touchpoints). Are VAs an opportunity for Marketers to elaborate on their Augmented Product offering? To what extent can VAs influence the current balance of competition, especially for low perceived risk, repeatedly purchased items? This chapter reports on a substantial qualitative research project with almost 100 participants.

Section 3 starts with two chapters exploring the role that digital transaction places hold in customers' minds. Chapter 8 views servicescapes as a multilevel construct, with physical, digital and social realms. This chapter analyses the servicescape concept through the social capital prism to demonstrate that social capital plays an integral part in the customer service experience by satisfying a social need. The social aspect of service encounters has also been exasperated by the COVID-19 pandemic due to restrictions in individuals' free movement. Through digital channels (omnichannel retailing), customers now have a wider spectrum of touchpoints available, including customer-to-customer communication and technology-facilitated co-creation of value, for their interactions.

Chapter 9 investigates the blending of physical and digital servicescapes as well as the relationships consumers develop with brands or stores. This is done via a quantitative survey of Finnish consumers in which the respondents focus their replies on one of four well-known branded retailers. This chapter aims to establish whether the introduction of 'digital' has blurred the boundaries between actors in the marketplace and how the blending of physical and digital servicescapes affects consumers and the relationships they develop with brands and stores.

Chapter 10 focuses on SM and how it can empower consumers. From the marketing perspective, the emergence of SM has created significant changes: today's consumers can influence organisations and brands, create content that is followed by peers globally and influence how other consumers view brands or organisations (please see also Chapter 15). SM is also highly integrated into smartphones and can be accessed, commented on or forwarded by consumers on the go. Chapter 10 also discusses how the volume of these SM-empowered communications can create or destroy value for organisations.

Section 4 includes four chapters on privacy practices across different sections of the DM landscape. Chapter 11 explores how consumers respond to a retailer's ethics across different distribution channels, such as brick-and-mortar stores, online shopping and multichannel shopping; this novel research design compares consumer responses to an identical survey across different channels with almost 700 respondents. Today's retailers are feeling pressured to offer a multichannel retail environment to gain overall improvements in customer service but are consumers who use brick-and-mortar, online and multichannel shopping channels a homogenous group?

Chapter 12 merges the privacy drive of the GDPR to the data-rich environment of AI. The use of AI is growing exponentially, and many organisations are benefiting from

being able to deal with phenomenally large datasets during a time when IoT-enabled devices can generate volumes of relevant data for decision-making (see Chapter 2). Improvements in Cognitive Computing have made data processing more efficient and expedient: data can be more effectively converted into value for organisations as well as end-consumers. Yet, how do AI managers who enable data operations view the potentially restrictive GDPR conditions? This chapter reports on interviews with AI experts and managers from five different countries to gain an understanding of these potentially opposing trends (AI-enabled analysis of Big Data vs. the GDPR environment) impact on DM practices.

Chapter 13 explains how the GDPR impacts research in the marketing field. The introduction of the European Union's (EU) GDPR resulted in an avalanche of negative publicity, which focused on the potential fines that organisations might incur if they fail to protect the privacy of individuals. Research in marketing would not be excluded from these. How big is the leap from existing Institutional Review Board (IRB) requirements to GDPR-style secure data handling? Much of the GDPR guidance for academic research comes from medical research, which explains the need to highlight the situations in academic marketing research and how marketing academics running research projects can ensure that their data management aligns with current regulations: with reference to specific EU documentation, a seven-step process for GDPR-compliant academic research is explained.

Chapter 14 is based on a large-scale survey of a pilot project wherein a major retail chain developed an application based on a loyalty programme that allowed consumers access to their purchase history. The chapter's title accurately describes the variety of responses the pilot study participants had to this information. This is an interesting study because customer purchase history data are most commonly used by organisations to understand the behaviour and preferences of their customers. MyData are essentially Big Data that are made available to the end consumer – the person whose shopping behaviour is tracked by the loyalty programme. By sharing their data with customers, the retailer is hoping to increase trust and transparency as well as generate new opportunities for value co-generation.

The fifth section of this book explores the *future for digital marketing communication* and concludes this book. Chapter 15 touches on the key digital developments that we see causing change in the DM and Communication landscape in the near future: AI and automation (including Chat Bots); the role individuals as influencers will play in brand communications, possibly even to the extent of providing free digital labour; data surveillance, deepfakes and how Blockchain technology could offer a solution to many potential issues identified in marketing and business practices.

Each of these chapters resulted from a long-term study, from post-doc research to exceptionally well-crafted Master's thesis research. These research processes started before the emergence of the global COVID-19 pandemic (i.e. it is not possible to make changes to the data that were already collected). As the Editor, I would like to thank the Authors for their efforts to include COVID-19 implications in their chapters where possible. All chapters in this book have been through a double-blind review process to ensure high quality and relevance to the DM field. Special thanks go to all our colleagues, both domestic and overseas, who gave their expertise and time to the double-blind review process that we utilised in this book.

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Section 1

Data analytics and measurement

2 Understanding Big Data and its application in the digital marketing landscape

Stephen Singaraju and Outi Niininen

Introduction

The sheer volume of data on consumer behaviour and processes available to organisations is unprecedented. Computers and smart devices such as smartphones, smart cars, smart locks, smart refrigerators, smartwatches, smart speakers and other similar devices enabled by the Internet-of-Things (IoT) are emitting unstructured and structured data that enable organisations to generate consumer behavioural insights. These data can help in marketing strategy formulation while unlocking new market opportunities that were previously underexplored or unexploited (Erevelles, Fukawa, and Swayne, 2016).

Several leading global organisations have invested in using Big Data analytics to gain a competitive edge in the marketplace. For instance, online retail giant Amazon maintains data on its customers' names, addresses, payments and search histories in its data bank and uses its algorithms to improve customer relations for a seamless real-time customer experience across all online touchpoints (Liu *et al.*, 2020). American Express also uses Big Data to analyse and predict consumer behaviour. With access to Big Data, the predictive models enabled by Machine Learning (ML) capabilities allow for the superior application of both structured and unstructured data to better understand customer behaviour. Through sophisticated ML predictive models, organisations are able to apply Big Data in developing more personalised value propositions and warding off potential customer churn (Manglani, 2017). In the Business-to-Business (B2B) market, Rolls-Royce is using the data from IoT sensors on aircraft jet engines to provide a higher value proposition for their business customers by introducing the concept of Power by the Hour (PBH) or Engine-as-a-Service, meaning that value is derived via 'access to resources' rather than 'ownership of resources' (Shcherbakova, 2020). For a flat hourly rate per engine, Rolls Royce would handle installations, check-ups, maintenance and decommissioning. Preventative maintenance scheduling for these engines is automated based on the data received from the many sensors embedded in the engines. This pioneering approach to engine maintenance management forms the basis of the company's market leading CorporateCare® service. By adopting the PBH model, airlines transfer the engine maintenance responsibility to a vendor, which ensures that engine efficiency and safety remain at an optimal level. Airlines can then focus on their core competencies, which include customer service, route optimisation, pricing and marketing.

As Big Data becomes the new normal, organisations explore ways in which Big Data can be captured and used in marketing analytics to unleash new organisational capabilities and value propositions for customers. In this chapter, we explore the application of

Big Data through the lens of the Marketing Mix. We extend the work by Fan, Lau, and Zhao (2015) via the expansion of their 5Ps framework (Product, Place, Promotion, Price and Process) with Physical evidence, Partnerships and People for contemporary marketing practice in both the B2B and the Business-to-Consumer (B2C) markets. We begin by addressing the following questions that help explain Big Data and its application to marketing practice:

*   What does the term 'Big Data' mean, and how will the insights provided via Big Data analytics differ from what managers might generate from traditional analytics?
*   What new insights does this new genre of marketing analytics provide for marketing decision-making?

These questions about Big Data are examined in the following sections of this chapter.

What is Big Data?

Big Data is the embodiment of several disciplines, such as quantitative studies, data science and business intelligence (Comm and Mathaisel, 2018). Big Data essentially consists of extremely large datasets. These datasets are made up of structured and unstructured data[1] that can be processed and analysed to reveal patterns and trends (Hazen *et al.*, 2014). Big Data typically refers to incredible amounts of data, much of which is unstructured data, and new ways of using data (Gandomi and Haider, 2015). There is a torrent of digital data, and this is changing the nature of doing business in a very fundamental manner. Big Data is often associated with large volumes of structured (e.g. transactional or historical data) and unstructured (e.g. behavioural) data that are generated by digital processes, SM exchanges, business transactions or machine-based activity and can be used by organisations to generate new insights for business gains (Erevelles, Fukawa, and Swayne, 2016).

Big Data includes the systems and processes governing data generation, collation, management, control and usage. Big Data is often characterised by high-volume, high-velocity and high-variety data (Laney, 2001). The volume (the amount of collected and generated data) is indicative of the magnitude of data; the velocity (the speed at which data are generated and processed) refers to the speed of data-processing rate and is realised via the digital processes with which Big Data is generated and the variety (number of data types) refers to new formats and types of data (Gnizy, 2020). Big Data presents itself in varied formats, from structured and numeric to unstructured text documents, video, audio and email data.

Big Data is transmitted at a break-neck speed and must, therefore, be analysed and processed at a fast pace to realise the benefits of real-time data analytics. Organisations are now adopting applications such as Hadoop, a software solution created by the Apache Software Foundation (Jabbar, Akhtar, and Dani, 2019). Hadoop is utilised as a Big Data batch processing[2] tool to derive insight from large datasets such as historical weblogs, past transactional data and sales data to develop customer profiles for traditional marketing activities (Hashem *et al.*, 2015). While Big Data batch processing tools such as Hadoop are designed to cope with Big Datasets, which have been collected over a period of time, real-time processing[3] of Big Data is concerned with the capacity of information systems to accept continuously streams of datasets for instantaneous decision-making where data-processing speed and efficiency are of the essence (Casado and Younas, 2014; Kitchens

et al., 2018). Apache Storm, an open source Big Data software solution also developed by the Apache foundation, is one example of an applications available to marketers in their quest to operationalise the use of Big Data for real-time marketing decision-making (Jabbar, Akhtar, and Dani, 2019).

Big Data involves three analytical categories: descriptive (what happened), predictive (what is probably going to happen) and prescriptive (what should be done) (Tonidandel, King, and Cortina, 2018; Gnizy, 2020). These are increasingly seen as a set of critical skills needed to augment organisational capabilities and business strategy (Hayashi, 2014). For example, organisations such as Walmart have applied predictive analytics to process data via Big Data systems in anticipating the impact of business trends on their product line pricing and organisational revenues (Gnizy, 2020).

The high-volume datasets emanating from Big Data can fuel large-scale organisational data systems, enabling contemporary marketing decision-making that challenges conventional marketing practice. Big Data analytics brings new mindsets to marketing practice and encourages proactive behaviour towards customers and markets (Baesens *et al.*, 2016; Tonidandel, King, and Cortina, 2018). While traditional marketing organisations have been accustomed to using traditional non-Big Data methods in marketing decision-making, Big Data's unique characteristics and the sophisticated interrogative analytics that it lends itself to enable marketers to go beyond traditional business intelligence (Gnizy, 2020). Hence, as Gnizy (2020) argues, Big Data analytics enable risk management and discover hidden facets and associations. Big Data also broadens the conceptions of market and strategy to encompass various aspects of improved knowledge or ideas pertaining to markets (competitors, customers and value creation) that non-Big Data systems (typically represented by structured or historical data stored in corporate databases such as customer information like contact details and transaction history) cannot detect, acquire, manage and process for the benefit of dynamic organisational marketing decision-making (Gnizy, 2020; Engelseth and Wang, 2018; Erevelles, Fukawa, and Swayne, 2016; Ghasemaghaei, 2018; Yang *et al.*, 2019). Unstructured data captured from consumer usage of SM platforms, Internet search, smart devices and locations can be stored alongside structured data such as transactions and sales information (Hashem *et al.*, 2015). As Big Data typically constitutes 95% of unstructured data, it is pivotal that marketers exploit the insights that can be gleaned from Big Data analytics, particularly that offered by the unstructured component of Big Data, in their quest for competitive advantage (Gandomi and Haider, 2015).

Big Data and its fusion with marketing practice

In marketing, the primary motivation in adopting Big Data is its potential usefulness for marketing decision-making purposes. In this section, we expand on the framework adapted from Fan, Lau, and Zhao (2015) to explicate the ways marketing practice is evolving in its application of Big Data in the contemporary management of the Marketing Mix.[4] We adopt the Marketing Mix framework as a lens for the discussion of Big Data applications in marketing decision-making for the reason that it is a well-known framework that encapsulates the principal components of tactical and strategic marketing decisions and is a framework that is well understood by marketing academics and practitioners alike. In this chapter, we advance the contributions made by Fan, Lau, and Zhao (2015) through complimenting their 5Ps framework (*Product, Place, Promotion, Price and Process*) with *Physical Evidence, Partnerships and People*, leading to the full 8Ps to align with contemporary marketing practice.

Similar to Fan, Lau, and Zhao (2015), we begin the discussion in this section by identifying the types of data sources for marketers to use in obtaining Big Data to aid in marketing decision-making. We then explicate some of the methods that are currently being employed by marketers in the analysis of Big Data and, finally, provide an overview of application examples to give the reader an idea of the evolution caused by the adoption of Big Data in the practice of marketing management.

The Marketing Mix concept has endured through time due to its ability to identify the multitude of decision types marketing managers can use to better serve their clientele. As is typical for the Marketing Mix, Big Data examples can fall under multiple 8P categories, for example, sensors in vehicle engines can be used to manage product design (Product), distribution challenges (Place) and after-sales service (Process). Furthermore, we include User-Generated Content (UGC) and electronic Word-of-Mouth (eWOM) under the Promotion category because they offer a significant contribution to Big Data. Although eWOM and UGC are, strictly speaking, not directly under the control of an organisation, many companies aim to harness this valuable data for their purposes, for example, through social Customer Relationship Management (social CRM) as a Process with which to guide the People assets of the organisation. The discussion then concludes with explanations of Big Data applications for each of the 8P Marketing Mix categories.

Product

In the product decision-making realm of the Marketing Mix, Big Data is beginning to influence marketing decisions in areas as diverse as new product design and development, reputation or brand management, product lifecycle management and quality management. For example, in the consumer electronics industry, Big Data has been applied by major organisations, including Xiaomi and Lenovo, to accelerate the pace of NPD programs in responding to today's dynamic and evolving marketplace (Tan and Zhan, 2017). Big Data has allowed for product features and functions to be added to a product that customers are willing to pay for while eliminating otherwise undesirable product features (Sun and Huo, 2019; Urbinati *et al.*, 2019).

In the semiconductor industry, Intel monitors product quality attributes through Big Data interfaces, which enables the organisation to significantly reduce the validation time for testing before bringing the product to market. Intel fuses intelligence derived from Big Data with AI to significantly increase new product quality and reduce NPD time. In test execution, Big Data analytics coupled with AI allows Intel to locate faults more efficiently while eliminating redundant tests in their NPD programs. This approach reduces the number of tests performed by 70%, enabling complex semiconductor products to reach the market more quickly without compromising product quality (The Innovation and Enterprise, 2020 – see Further reading).

Using Big Data, brand marketing campaigns are able to more accurately analyse brand strength through a brand's reputation in the marketplace. Making the linear approach to collecting data redundant, the new approach to brand marketing is utilising circular data analysis via a variety of data touch points. Marketers are able to monitor the 'Likes' or 'Re-tweets' of potential customers, which allows the data analytics system to identify crucial metrics that set aside specific parameter results and aid in the marketer's understanding of the customer's preference for the brand.

Price

A greater understanding of the buying behaviour of our customers can help organisations find the optimal price that a customer is willing to pay at any given time, place or circumstance. Manual practices for setting prices are time-consuming and make it impossible for marketers to visualise dynamic pricing patterns for their products and thus optimise pricing and unlock value. Pricing decisions based on factors such as product costs, product margins, competitor prices and quantity discounts are simplistic and inadequate in the current reality of emerging marketing practices. At its core, a pricing decision is essentially a Big Data issue (Feng, Li and Zhang 2019; Gerlick and Liozu, 2020; Steinberg, 2020).

Hence, marketers are increasingly bringing themselves to adopt dynamic pricing approaches, a market-driven demand-based approach to pricing that engages a flexible pricing practice in which the actual price for a product is based on a complex analysis of current market conditions. Demand, seasonality and competitor actions are among the factors that moderate the actual price level of a product at any given time (Jiang and Li, 2020; Augustin and Liaw, 2020). In the United States, the practice of dynamic pricing among major league baseball teams demonstrates the robustness and the effectiveness of Big Data-driven dynamic pricing models that improve revenue management. Prices are set at multiple times of day, incorporating many Big Data variables, including weather, ongoing work around the ballpark that may be a cause of inconvenience for patrons, teams on the rise in the league, the potential for a record-setting event (hits, homeruns or plays), trending conversations about a game on SM, and what tickets are selling for in secondary marketplaces, such as StubHub and TicketMaster, the largest fan-to-fan ticket marketplaces (see Erevelles, Fukawa, and Swayne, 2016). Hence, Big Data allows organisations to manage their pricing to capture the willingness of fans to pay more for a special game while mitigating the tendency for parallel-market opportunistic organisations or individuals to exploit pricing discrimination practices that may otherwise exist and thus distort an organisation's pricing strategies.

Place

The 'place' or 'distribution' aspect of the Marketing Mix typically involves logistical considerations such as warehouse management, inventory management, packaging and order tracking. The ubiquitous use of Location-Based Services (LBSs) enabled by mobile technology provides marketers with location- and time-specific user information for its target markets. The location-based information of target customers is seen as having fundamental ramifications for the four leading logistics considerations, that is, inbound transport, outbound transport, inventory management and warehousing activities (Onstein *et al.*, 2020; Ashayeri and Rongen, 1997; Christopher, 2011). Innovations associated with the application of location-based information systems to enable the matching of supply and demand in marketplaces have been shown to significantly reduce the costs associated with the aforementioned logistical consideration that is fundamental for the movement of goods from production and warehousing facilities to the target market for consumption (Christopher, 2011). A demand-driven supply chain's ability to respond rapidly to demand variability based on the movement of its target market, which is aligned with supply, is even more pronounced in services-based industries (Onstein *et al.*, 2020). Balancing the supply and demand sides of a service industry is a critical success factor because this industry provides products that are more intangible, perishable, inseparable

and variable than physical goods. In this sense, the application of real-time location-based Big Data will result in lower working capital requirements and drive stronger sales and profit. For example, functions such as barcode reading, videos, pictures and messages are inherent capabilities of most smartphones today and optimise supply chain operations at very little cost. Location data captured by mobile phones makes it easy to track shipments with precision using devices' location capabilities linked to the central corporate system over the Internet. Drivers can map shorter or less congested routes to make timely delivery and this, in turn, significantly optimises fleet utilisation (asset utilisation) in the courier services such as UPS and Federal Express.

The recent outbreak of the COVID-19 global health pandemic has brought to prominence the role of Big Data in tracing the movement of people to help contain the speared of infections amongst the population in a country, state, city or smaller geographic boundaries. Big Data has been pivotal in revealing the patterns and provide insights into the spread and control of this virus based on the movement of members of the society. Several modalities of digital data including patient location, proximity, patient-reported travel, co-morbidity, patient physiology and current symptoms made possible by the location capabilities inherent to smartphones can be digitised and used for generating actionable insights at both community and demography levels (Haleem *et al.*, 2020), resulting in the more efficient allocation of critical resources for better utilisation of public health services.

The use of location-based Big Data is not merely limited to the movement of humans but is also increasingly pertinent to the monitoring of the movement of 'things' in the age of the IoT. Modern vehicles are already equipped with a multitude of sensors and on-board computers that alert drivers to the imminent need for servicing. Hence, after-sales maintenance and the spare parts market for motor vehicles are probably the area where sensor based, product-in-use data can already produce the greatest strategic gains for organisations. Considering the fact that the same brand of vehicles can utilise differing design principles, it is no wonder that the vehicle after-sales maintenance and spare part manufacturers are struggling with the 'bullwhip'[5] effect. For example, variance in the demand for spare parts by vehicle end-users due to, for example, unanticipated changes in the conditions where the vehicles are used (e.g. long-term drought and dust causing problems with the engine) creates significant fluctuations in demand for spare parts manufacturers and vehicle servicing operators. These bullwhip effects could be reduced if on-board computers signalled a vehicle after-sales support network of these changed (long-term) location specific weather conditions and the impact they are having on specific engine parts. Moreover, a quick reaction (i.e. preventative maintenance) to engine sensor warnings could also result in localised repairs to stop the damage altogether, which is an example of superior customer service (Andersson and Jonsson, 2018; Giannakis and Louis, 2016).

However, the challenge that persists for location-based Big Data analytics is its currency in accurately predicting customers' locations. Both spatial and temporal data should be taken into consideration (temporal moving pattern mining for LBS) (Fan, Lau, and Zhao, 2015). A large volume of spatial and temporal data will need to be processed within a very short time period, practically in a matter of seconds, before customers move to new locations. Given the context-specific importance of location-based Big Data, this information will only be rendered valuable if the currency of the data can be guaranteed to enable context-relevant marketing decision-making. Thus, the 'velocity' issue regarding Big Data remains one of the most challenging aspects of location-based Big Data.

Promotion

As marketing information systems interface and integrate with consumer technologies such as SM Platforms, it is fair to argue that Promotion is the Marketing Mix element most impacted by the advent of Big Data and its application to marketing practice. The advent of Programmatic Marketing for targeted, real-time online display advertising can only be explained by the harnessing of Big Data in an information infrastructure which supports real-time processing frameworks that enable media buying on the 'fly' based on user web sessions and preferences (Jabbar, Akhtar, and Dani, 2019). Such integration provides solutions based on the analysis of information about consumers' preferences, opinions and needs. In other words, the scope of Big Data acquisition for marketing communications application permeates a wide range of marketing communication mix decision-making.

Big Data has become so fundamental to basic marketing communication decisions that it is beginning to influence programmatic media buying, granular audience segmentation and targeting and the execution of real-time trigger marketing campaigns (Chen *et al.*, 2019; Ford, 2019; Jabbar, Akhtar, and Dani, 2019). For example, marketers have increased consumers' awareness of their brands via the application of Big Data in recommender systems in the e-commerce context. Product marketing via online platforms such as Amazon and Ebay has targeted audiences using Online Consumer Reviews, where the sentiment mining of Big Data is applied for the efficient placement of digital advertisements in the e-commerce marketplace (Salehan and Kim, 2016; Chong *et al.*, 2017). Unfortunately, not all online reviews are accurate or truthful because some reviews are deliberately designed to either increase the popularity of a brand or discredit a competitor's brand – these fake reviews can distort a brand's reputation (Reyes-Menendez, Saura, and Martinez-Navalon, 2019). Sentiment analysis, a subfield of Natural Language Processing (NLP), can help automate the detection of fake reviews. By analysing the positive–neutral–negative meanings of the text and identifying content similarities between reviews, this review spam can be removed. Many e-commerce systems also link reviews to past purchases to identify fake reviews. Online sales and promotional platforms are dynamically managing their fake review detection systems in addressing the data distortions contributed by review spam (Chong *et al.*, 2017; Nair, Shetty, and Shetty, 2017).

Television ads can now be targeted at the household level via Programmatic Advertising as TV stations migrate their broadcast technologies from analogue to Internet-based technologies (Lee and Cho, 2020). This has resulted in real-time, automatic bidding for advertising opportunities online, accounting for two-thirds of the total digital video spend in the United States in 2019 (Malthouse, Maslowska, and Franks, 2018). However, due to the limitations of the current technologies used in Big Data analysis, the challenges posed by the very nature of Big Data (i.e. volume, variety, velocity and veracity) call for a dynamic and more scalable, multi-tiered, automated system for Big Data-enabled decision-making systems (Kumar, Shankar, and Alijohani, 2019).

Process

The most significant impact of Big Data is the automation of marketing processes. Real-time Big Data analytics involves the processing of a continuous stream of data inputs from a variety of sources for instantaneous marketing decision-making with low information latency (Kitchens *et al.*, 2018). The drive to automate marketing processes will mean that

typical marketing activities, including but not limited to website buying, ad-slot buying, online publishing, customer profiling, targeting, search engine optimisation and content generation, will experience significant disruption (Jabbar, Akhtar, and Dani, 2019). The confluence of real-time processing within programmatic marketing calls for marketers to re-examine their existing marketing processes and invest in cloud-based infrastructure for scalable, real-time marketing analytics and automated decision-making (Hazen *et al.*, 2014).

Recently, Programmatic Marketing for online display advertising has become an example of a marketing communication process that has been increasingly automated via the acquisition and use of real-time Big Data. Although in its infancy, Programmatic Marketing is likely to accelerate and refine the automation, algorithmic decision-making and developments in advertising technologies, leaving behind traditional media approaches that in comparison, are unprofitable and less efficient (Jabbar, Akhtar, and Dani, 2019; McGuigan, 2019). In customer service processes, the introduction of Chatbots and virtual assistants powered by NLP and AI can answer routine customer enquiries and release human employees for more complex tasks (Kietzmann, Paschen, and Treen, 2018; Reshmi and Balakrishnan, 2018; Urbinati *et al.*, 2019).

In an industrial setting, embedding sensors into manufacturing plants can help alert managers of possible manufacturing problems and service requirements. Furthermore, embedding sensors into machinery sold to monitor product performance can be offered as an additional service to the end-user to prevent expensive breakages and production downtime. Such predictive maintenance can form a cornerstone of loyal clientele during the crucial period after the end of warranty periods (Andersson and Jonsson, 2018; Urbinati *et al.*, 2019).

Physical evidence

In website design, the Physical evidence (everything the customers see when interacting with a business online including the virtual elements of the product or service and the layout or interior design of the virtual shops) incorporates the entire brand's visual representation online as well as the use of, for example, colours, images and fonts to reflect the brand values. Google Analytics can help web masters improve their website's Physical evidence by identifying bounce and conversion rates and overall engagement with the website content. Data from A/B testing (Google Optimize) can be used to refine the brand style in advertisements and Landing Pages (Kietzmann, Paschen, and Treen, 2018).

The introduction of the Amazon Go store in Seattle in 2018 provides an illustrative insight into the potential for Big Data in disrupting the retail industry. Amazon Go is a new prototype of a futuristic retail store based on the 'Just Walk Out' technology. With only a smartphone app linked to a credit card, a customer could enter the store, select merchandise from the aisles and just walk out – no lines, no waiting and no cashier. The entire customer shopping experience is facilitated by the stream of real-time Big Data enabled by technologies such as computer vision, data science, ML and sensor-based information technologies (Ives, Cossick, and Adams, 2019).

Partnerships

Partnerships, in a marketing context, typically explore the synergies that can be achieved by supply chain partners; for example, the effective and efficient use of Big Data can minimise the bullwhip effect in supply chains (Hofmann, 2017). A success story of a

firm that has harnessed the power of Big Data analytics into their supply chain partnership arrangements is Walmart (Sanders, 2016). Using batch processing Big Data analytics, Walmart has learned a great deal about customer preferences. For example, they learned that before a hurricane, consumers stock up on food items that do not require cooking or refrigeration. By collaborating with their supplier partners, Walmart is able to stock such items at their stores in advance of a hurricane. Such Big Data analytics enables Walmart to win pricing and distribution concessions from its suppliers, and this, in turn, gives the retailer and its partners a significant advantage over competing supply chain networks (Sanders, 2016; Anshari *et al.*, 2019).

People

Big Data analytics enables large-scale dataset integration, supporting people management decisions for the effective deployment of human talent in marketing operations. Talent analytics is now emerging as a methodology that allows for the identification of patterns in workforce activity data, allowing more efficient workforce management (Marler and Boudreau, 2017). The benefits derived from talent analytics in terms of value creation are clear, in particular (1) identifying a causal relationship between training expenditure and profitability and (2) justifying the need for an organisation to set up training in specific areas of human talent development that can improve organisational profitability (Nocker and Sena, 2019).

However, the human talent for data-driven marketing operations is dynamic, and new marketing careers, such as data scientists and data analysts, are likely to become common. Given the dynamism of Big Data and its emerging importance in marketing practice, Data Scientists will play an integral role in helping perform the greater statistical, querying, scripting, scraping, cleaning, warehousing and training activities needed in the data-heavy functions of marketing.

Conclusions and the future convergence of Big Data and AI

This chapter expands on the work of Fan, Lau, and Zhao (2015) by outlining major Big Data developments across the full suite of the eight Marketing Mix variables, where Big Data is already enabling improvements across all fundamental marketing decisions. As is typical for the Marketing Mix, some of the examples cited could serve as an example of multiple Marketing Mix variables; for example, the IoT trackers embedded in a corporate vehicle fleet could be classified as a Product feature or a Process feature. This chapter also tackled the difficult balance between considering 'People' as such and also as the object of Big Data collection and analysis.

In the future, a deeper relationship between Big Data and AI is to be expected. How else could marketeers make sense of the volume of Big Data? Some of our examples would not be possible without this. AI can support managers in automated decision-making at the operational and tactical levels, especially in stable business environments (Duan, Edwards, and Dwivedi, 2019). Overall, AI-empowered systems are becoming increasingly important for strategic management (Goul, Sidorova, and Satz, 2020), and the volume of AI-enabled decisions will increase because the datasets used for decision-making are growing exponentially and are often unstructured. This is where the cognitive features of the automatic processing of data, specifically ferreting sentiment insights from data with NLP and ML, are invaluable (D'Arco *et al.*, 2019). However, humans for now

are still better at 'thinking outside the box', dealing with unstructured strategic decisions and learning from challenges. Future research is aiming to replicate this through the development of Deep Learning (a subset of ML) (Duan, Edwards, and Dwivedi, 2019).

One of the greatest challenges to future AI-empowered automation is the human mind. Already, the GDPR[6] legislation bans the automated processing of person-identifiable data to the detriment of that individual, for example, for mortgage refusal (Article 22 of the GDPR). Moreover, the closer to our daily routines Big Data and AI come, for example, IoT, IoP or wearable technology, the greater the demand for ethical design principles will be (Kumar *et al.*, 2020). In other words, AI governance is gaining momentum; Google applies responsible AI technology developments with 'explainability, fairness appraisal, safety considerations, human–AI collaboration and liability frameworks' (Goul, Sidorova, and Saltz, 2020, p. 5255). Hence, an essential development aim for AI should be the ability to provide human-like justifications based on data for decision-making (Kumar *et al.*, 2020).

Key lessons for future research

- Big Data comes from varying sources, from IoT-embedded sensors to SM content
- Core marketing decision can be improved with the AI-assisted analysis of Big Data
- Big Data with AI enhances competitive strategy formulation
- Future AI development must incorporate ethical design principles

Further reading

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Notes

1 Unstructured data is either machine generated or human generated. For example, data emitted from IOT devices, social media applications, website metrics and search engines are classified as unstructured data.
2 **Batch processing** involves the processing of large volumes of data which has been collected over a significant period of time. It is a popular method for processing Big Data typically used in applications where data naturally fit in a specific time window (Casado and Younas, 2014).
3 **Real-time processing** is defined as an approach that requires a continuous stream of inputs for the processing and outputs of data (Casado and Younas, 2014).
4 The term 'marketing mix' is a foundation model for businesses, historically centered around product, price, place and promotion and had been extended to include people, physical evidence, partnerships and processes to cater for services marketing. The marketing mix has been defined as the 'set of marketing tools that the firm uses to pursue its marketing objectives in the target market'.
5 The bullwhip effect refers to distorted information from one end of a supply chain affecting another, leading to tremendous inefficiencies in the form of excessive inventory investment, poor customer service, lost revenues, misguided capacity plans, ineffective transportation and missed production schedules (Lee, Padmanabhan, and Whang, 1997).

6   The General Data Protection Regulation (GDPR) is a regulation in EU law on data protection and privacy in the European Union (EU) and the European Economic Area (EEA). It also addresses the transfer of personal data outside the EU and EEA. The GDPR's primary aim is to give control to individuals over their personal data and to simplify the regulatory environment for international business by unifying the regulation within the EU. GDPR. (2018). *General Data Protection Regulation.* Available at: https://gdpr-info.eu/ (accessed 5 October 2020).

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3 Data-driven marketing processes

Boundaries and how to overcome them

Heidi Länsipuro and Heikki Karjaluoto

Introduction

The enormous sets of data that are currently accessible for organisational use can both overwhelm and offer new opportunities to today's marketing professionals. Ever-developing web and technological advancements present marketers with better approaches to measuring, optimising and automating marketing processes; as a result, marketers are increasingly placing analytics and data analysis at the centre of organisations' marketing functions (Day and Moorman, 2016). Despite various advancements in data interfaces and services, drawing conclusions that could prompt feasible action are not yet used comprehensively to influence decision-making. Additionally, marketers are facing an expanding demand from top management to quantify the marketing professionals' performance (Järvinen, 2016). The level to which organisations collect data is high; however, strategic and practical data usage remains incredibly low (Chaffey and Patron, 2012).

Previous studies have focused on numerous themes that either overlap or surround data-driven marketing and marketing analytics practices (Chaffey and Patron, 2012; Hauser, 2007; Järvinen and Karjaluoto, 2015; Jobs, Aukers, and Gilfoil, 2015; Liu, Singh, and Srinivasan, 2016; Martens *et al.*, 2016; Netzer *et al.*, 2012; Verhoef, Kooge, and Walk, 2016; Viktor, Pena, and Paquet, 2012; Wedel and Kannan, 2016; Wilson, 2010). Studies have highlighted both the fundamental shortage of marketing data professionals and the lack of knowledge regarding how much companies are currently using data-driven decisions in marketing (Erevelles, Fukawa, and Swayne, 2016). These studies describe a need for knowledge of effective marketing analytics capabilities (Day and Moorman, 2016). Day and Moorman (2016) state the need for gaining practical knowledge by studying the factors that influence marketing measurement adoption and the process needed for the successful implementation of marketing analytics. Thus, both practice and scholarly research call for further investigation into barriers to the systematic usage of data–driven marketing, which is what this study aims to explore.

Against this backdrop, this study aims to advance the knowledge of barriers that hinder the implementation of data–driven marketing practices in organisations via a qualitative approach. The data and methodology that are used in this research include 10 marketing professionals' interviews as well as a thorough literature review to describe the study's theoretical framework and positioning. To gather insight into the research problem, the barriers mentioned by the interviewees were categorised through a qualitative analysis that was based on a framework from a previous literature review (e.g. Day and Moorman, 2016).

This section presents the background for this study, followed by the theoretical framework for categorisation of the barriers. The data selection, methodology and justification

for using a qualitative approach are detailed in the following section. This is followed by the results of the study. Finally, the findings and limitations of this study are discussed. Additionally, recommendations for future research are presented.

Theoretical framework and literature review

Most marketing professionals agree that 'data-driven marketing is crucial to success within a hypercompetitive global economy' according to Forbes Insights' online survey (see Further reading). Still, many organisations have yet to implement such processes in their marketing strategy. One of the main aims of this research is to determine the reasons for this lack of adaptation of data-driven marketing.

Marketing can be approached from varying perspectives, for example, as a strategic function or as an organisational-wide culture (Day and Moorman, 2016). Since this chapter dives into the concept of marketing capabilities, intertwining and overlapping themes that affect such capabilities need to be considered.

A literature review by Day and Moorman (2016), ranging from the 1990s to 2015, concluded the four elements of marketing organisations: (1) capabilities, meaning the collection of organisational information and skills that execute marketing activities and organisational changes, in response to its marketplace environment; (2) culture, meaning a set of beliefs and actions inside the organisation; (3) configuration, meaning the measurement systems, metrics used and the organisational structure and (4) the human capital, meaning leaders and employees that build, incorporate and assess the organisational performance and strategy (Day and Moorman, 2016, pp. 6–11).

However, per Chaffey and Patron (2012), challenges with people, structures and processes have surpassed challenges that are linked to data integration and technology when discussing data usage in marketing. Other researchers endorse this thinking (Branda, Lala, and Gopalakrishna 2018; Davenport and Harris, 2007; Germann, Lilien, and Rangaswamy, 2013; Gonzalez and Melo, 2017; Wedel and Kannan, 2016).

To understand such barriers in people, processes and structures, this research explores the overlying factor: organisational culture. Wedel and Kannan (2016) emphasise that the main obstacles to the utilisation of marketing data and analytical methods for organisations lie, firstly, to what extent organisational culture and structure enable data-driven decision-making and secondly in whether the organisation invests in the education and training of analytics professionals. An analytics supportive organisational culture is concentrated on gaining knowledge, continuous information sharing and cultivating a setting where people are urged to try different things with new arrangements by experimenting to help foster data-driven marketing development (Gonzalez and Melo, 2017; Mezias *et al.*, 2001). As stated previously, organisations' top management must become involved and foster such creative, experimental and open viewpoints (Mezias *et al.*, 2001).

Organisational culture is inextricably linked to leadership (Groysberg *et al.*, 2018; see Figure 3.1). Therefore, various studies that discuss cultural barriers cite top management as a possible issue for marketing analytics integration. Davenport and Harris (2007) argue that top management's support is necessary for the implementation of data utilisation in decision-making. Other studies discuss the importance of supportive top management for successful marketing analytics integration into organisational functions (Branda, Lala, and Gopalakrishna, 2018; Kiron *et al.*, 2011). Additionally, it is often the founders and influential managers that shift organisational cultures and instil thoughts and values in employees' minds that last for a considerable timeframe (Groysberg *et al.*, 2018). Implementing

Fluidity of organisation

Impacting thoughts and values

Organisational structure
- information barriers

Organisational culture
- adaptability to change

Top management
- involved strategically
- supportive

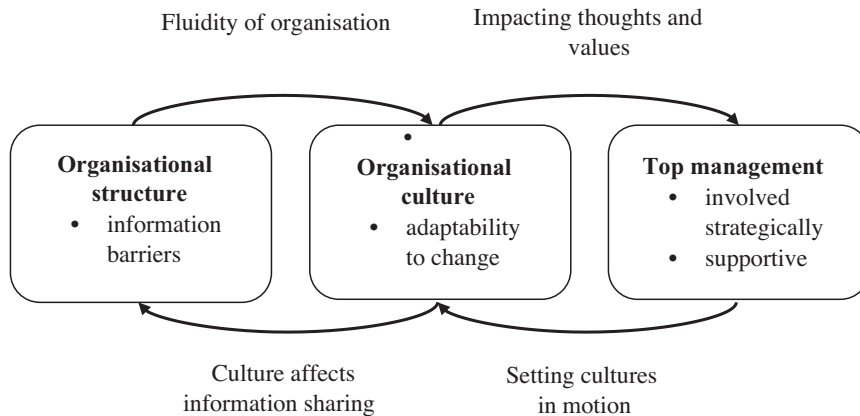Culture affects information sharing

Setting cultures in motion

Figure 3.1 The framework of 'Barriers of data-driven marketing' based on past research.

Source: Based on Day and Moorman (2016, pp. 6–35).

data-driven marketing predominantly requires some form of change (Levin and Gottlieb, 2009), and previous research has come to the unanimous conclusion that resistance to organisational change is significantly high (Rosenberg and Mosca, 2011). Mezias *et al.* (2001) argue that communities' past thinking is integrated into not only rules, routines and programmes but even human capital. Consequently, the mentioned cultural barriers of data-driven marketing are highly linked to management. Thus, this research investigates top management as one of the main barriers to successful data-driven processes (see Figure 3.1).

Organisational change, learning and adaptivity require a fluid organisational structure (Banerjee and Srivastava, 2017). Thus, another important barrier regarding culture is the structure of an organisation. Chaffey and Patron (2012) list company culture, conflicts of interest between departments and a siloed organisation as barriers to the integration of web analytics. Per Banerjee and Srivastava (2017), culture is fundamental in forming the structure of an organisation. Furthermore, organisational structure and culture are unpredictably related to how advancement and innovation are managed or executed in any association (Banerjee and Srivastava, 2017). Thus, organisational culture, organisational structure, top management characteristics and the factors within them that may present barriers to data-driven marketing deployment are visualised in Figure 3.1. Expert interviews are used to analyse the barriers to data-driven marketing deployment.

Methodologies

The study's data collection method was interviews, which is best suited for situations where the study is concentrating on the discovery of, for example, experiences, interpretations, attitudes and values that cannot be portrayed in a more systematic way (Carson, Gilmore, and Perry, 2001; Hirsjärvi, Remes, and Sajavaara, 2009). Semi-structured with mainly 'how' and 'what' questions were utilised to allow for more in-depth data (Koskinen, Alasuutari and Peltonen 2005).

Multiple steps were taken to ensure the strategic yet subjective selection of interview participants. This study utilised theoretical sampling, which is defined as the purposive

Table 3.1 Interview information

Interviewee	Duration	Date	Situation of interview	Industry
Company A	31:22	18.11.2019	Face-to-face	Projects
Company B	27:10	19.11.2019	Face-to-face	Grocery trade
Company C	19:46	22.11.2019	Via phone	Supply chain
Company D	35:08	11.12.2019	Face-to-face	Marketing
Company E	32:01	18.12.2019	Face-to-face	Chemicals
Company F	44:21	20.12.2019	Face-to-face	Logistics
Company G	25:30	23.12.2019	Via Skype	Manufacturing
Company H	20:51	27.12.2019	Face-to-face	Technology
Company I	17:42	13.01.2020	Via phone	Furniture
Company J	35:18	17.01.2020	Face-to-face	Marketing

selection of interviewees based on their relevance and the potential they offer for establishing new concepts by considering their characteristics and dimensions (Corbin and Strauss, 2008). During this research process, ten interviews were conducted. To ensure both a valid theoretical sampling basis and broad representation, specific criteria were established for the interviewees, including being a representative of a company that operates in the Finnish region and holding a position that enables them to execute marketing actions based on possible data analysis and insights. The final criteria sought to ensure that the interviewed experts would represent a wide variety of company sizes, company lifecycles and industries, adding diversity and depth to the data (see Table 3.1). All of the interviews were conducted in Finland.

The current research utilised interpretive techniques, such as thematisation, coding and in-depth analysis, to provide a solid theoretical basis despite its subjectivity. Nonetheless, this qualitative research attempts to provide a basis for data-driven marketing processes research through a more in-depth look into the topic instead of presenting generalisable results. Such conclusions might be unattainable for executing quantitative methods (Petrescu and Lauer, 2017). Carson, Gilmore, and Perry (2001) argue that a qualitative research method is applicable in circumstances where the research aims to develop a more in-depth understanding of a subject that has not previously been comprehensively studied. Hence, the philosophical approach of this research justifies the subjectivity of its means.

Results: data-driven marketing boundaries

Through the interview data, barriers to data-driven marketing in Finnish organisations were identified and categorised per a framework by Humphrey (1988). Despite the wide ranges in organisational size and various lifecycle stages, many similarities in perceived and experienced barriers emerged from the interviews. Based on previous research, the discovered barriers were categorised into three groups: cultural barriers, structural barriers and top management barriers. Almost all interviewees considered the barriers highly linked and even partly overlapping. Thus, some issues that are described in the different sections might have similarities. Nevertheless, distinguishing each problem was useful for this research because unique solutions were found for each category. Furthermore, these categorisations and their linked nature are supported by previous research (Banerjee and Srivastava, 2017; Branda, Lala, and Gopalakrishna, 2018; Chaffey and Patron, 2012;

Deshpandé and Webster, 1989; Germann, Lilien, and Rangaswamy, 2013; Kiron *et al.*, 2011; Mezias *et al.*, 2001).

Cultural barriers

Banerjee and Srivastava (2017) describe organisational culture as the shared values that establish a common ground and direction for the entire organisation. Schein (1992) defines organisational culture as a set of common hierarchical convictions and qualities that influence the organisation. Reflecting on these perspectives, the interviewees described multiple reasons for barriers relating to organisational culture. Seventy percent of the interviewees discussed the importance of a shared mindset as an enabler of data-driven decision-making in marketing. The interviewees explained that without commonly shared ideas and ambitions, moving forward with a few people or teams would likely involve setbacks and hindrances caused by clashing ideologies.

Challenges linked to change management, whether related to people, structure or processes, were common amongst the interviewees. This aligns with previous research (Branda, Lala, Gopalakrishna, 2018; Chaffey and Patron, 2012; Davenport and Harris, 2007; Germann, Lilien, and Rangaswamy, 2013; Gonzalez and Melo, 2017; Wedel and Kannan, 2016) that states that such obstacles have surpassed the complications faced by, for example, data implementation. Moreover, more than half the interviewees mentioned the demand for a common language as well as connected virtual environments that enable data sharing without boundaries, both of which are closely linked to organisational culture. Similarly, some interviewees raised concerns regarding silos, where, despite a common language, the disruption in data distribution caused different decision-makers to have different views on the same case or process. Even in cases where the data available were not being utilised productively, issues were found that traced back to an organisational culture where data-driven decision-making was not made a shared goal and priority.

As Germann, Lilien, and Rangaswamy (2013) argue, marketing analytics insights are sufficiently shared through a positive analytics culture, and the interviewees disclosed similar ideas. Some interviewees even mentioned actively working towards a data-driven culture across the organisation by sharing data proactively outside the marketing department. A strongly analytical and data-driven culture is focused on picking up information and consistent data sharing (Mezias *et al.*, 2001). Furthermore, almost half the interviewees wanted to develop a setting where individuals would be encouraged to attempt various things with lean ideology from an experimentation perspective to ensure the option to cultivate showcasing information-driven improvement, which was also described by Mezias *et Al.* (2001).

Nevertheless, opposition towards analytics usage in the data-driven marketing development process is an apparent barrier that is caused by conflicts between diverse organisational cultural ideologies. Whether it is resistance to adaption to changes, conflicting ideologies within the organisation or the lack of common ground and paths, all the interviewees cite organisational culture as one of the main barriers to advancing data-driven marketing processes, which verified the division displayed in Figure 3.1. Continuously encouraging individuals in the organisation to learn, advance and work across silos was seen to have a positive impact on data-driven process development by enabling shifts in the organisational culture. Most of the interviewees gave examples of situations where education and organisation-wide involvement had a constructive outcome for marketing

analytics utilisation. Wedel and Kannan (2016) highlight commonly accepted beliefs in the organisation as a central driver for data-driven marketing. Moreover, organisations that do not invest in the education of analytics experts face more difficulties in evolving their capabilities than those who do invest in it (Wedel and Kannan, 2016). Thus, barriers can and have been overcome in past cases through education and by examining silos from a cultural perspective.

Structural barriers

To gain consistency, enable learning and achieve acceptance towards change, the organisational structure needs to be fluid (Banerjee and Srivastava, 2017). Over half the interviewees named difficulties with data sharing as a recurring issue in the organisation. Part of these problems were related to the organisational culture to a greater extent, but a few of the interviewees cited the cause as a structural barrier. Moreover, half the interviewees emphasised the importance of common goals to prevent structure-related barriers.

Half the interviewed experts saw some cultural reluctance to changing the mindset of the personnel as a result of organisational silos. In addition, silos within the organisation were seen to influence the generation of different levels of expertise between functions. This is consistent with past research that lists organisational silos as barriers to development (Chaffey and Patron, 2012). Furthermore, organisational structure issues were seen to be more severe in larger organisations.

In total, eighty percent of the interviewees considered data linkage and the integration of datasets into a common database an issue created by an inflexible organisational structure. One-sided data were seen to affect reliability because the answers would not exhaustively describe the entire picture and provide certainty. A few interviewees saw steep hierarchies and uninvolved top management as barriers to data-driven marketing. They claimed that if senior management is structurally 'too high up', their involvement in these vital development processes will become difficult, as steep hierarchies often hinder the flow of information.

Managerial barriers

The top management-related barriers that were discovered in this research were manifold. The organisational management approach naturally influences all aspects of the business, including the culture of the organisation and its structure (Banerjee and Srivastava, 2017; Groysberg *et al.*, 2018). Furthermore, due to management's strong influence, their actions shape the culture and operating methods of the organisation in a lasting way (Groysberg *et al.*, 2018). Most of the interviewees were convinced that top management support is crucial for the successful implementation of data-driven processes. Davenport and Harris (2007) cite collateral ideas, arguing that a data-driven strategy requires top management support. Other studies also share this view (Branda, Lala, and Gopalakrishna, 2018; Kiron *et al.*, 2011). Furthermore, Kumar *et al.* (2016) state that data, technologies and analytics experts need managerial staff members to recognise the benefits of data-driven marketing to enhance data-driven processes and help them thrive across the organisation. The perspective of top management was of considerable importance to more than two-thirds of the interviewees. Moreover, a few of the interviewees highlighted the importance of coherent guidelines and objectives. The interviews revealed problems in communicating the objectives and possible contradictions between management and marketing goals.

The interviewees felt that the involvement of top management in the strategic development, shaping and monitoring of marketing is an important part of the success of data-driven processes. For example, 70% argued that if management is not involved with marketing or its related data, then marketing has neither the power nor the complete insight to drive change sustainably and profitably. Thus, a lack of data-driven thinking in the organisation's top management might cause a barrier to implementing data-driven processes.

Further perceived barriers to data-driven marketing

The challenges and obstacles that were identified during the interviews were also found outside the three-part categorisation of organisational culture, structural barriers and top management-related barriers (see Figure 3.1). Altogether, five individual interviewees noted three barriers to data orientation. Firstly, technological difficulties were cited relating to data reporting integration (Interviewee C) and technological restrictions (Interviewees A and I). However, as stated previously, such technological barriers have been surpassed by challenges with people, structures and processes when discussing data-driven decision-making in marketing (Branda, Lala, and Gopalakrishna, 2018; Chaffey and Patron, 2012; Davenport and Harris, 2007; Germann, Lilien, and Rangaswamy, 2013; Gonzalez and Melo, 2017; Wedel and Kannan, 2016). Additionally, two interviewees mentioned a lack of knowledge in data utilisation (Interviewees B and E). These instances fall into the original categorisation presented by Day and Moorman (2016), which distinguishes capabilities as an element itself. Thus, further research should be conducted before the categorisation presented by this study can be fully verified.

Discussion

The study findings provide both practical and theoretical contributions. The findings imply that, despite individual motivations towards a more data-driven marketing process, at least a partial organisational culture shift is needed to generate advancements in data-driven marketing and decision-making in the long term (see Figure 3.1). Thus, multiple functions within an organisation must recognise the benefits of marketing analytics and strive towards analytical thinking methods to achieve progress. If this is not the case, developing data-driven marketing will not last because the urgency that is seen as more important in the daily life of an organisation quickly displaces marketing resources elsewhere. Additionally, organisational silos and individual employees often return to routine habits because alternatives seem too risky. If benefits of data-driven marketing and decision-making can be concretely recognised within the organisation, resources spent on developing marketing analytics are no longer seen as a negative input–output ratio. A reasonable beginning stage is to audit how applying marketing analytics adds to a business's competitive advantage, followed by contrasting this with the current capacities and worth created. According to the findings of this study, positive outcomes from these processes enable further investments in data-driven marketing, which enable a cycle of repetency.

In accordance with the findings of this study, whilst data-driven marketing processes require organisational change, the process requires consistency and repetency in the short term to evolve beyond the initial challenges of data-driven marketing. Data-based marketing does not mean measuring everything, especially in the early stages. It is difficult to move from minimal or nonexistent data utilisation to the collection of data for each

singular marketing process without causing data fatigue. Creating a shared foundation and expectation for data utilisation throughout the organisation is the initial step towards sustainable data-driven marketing processes.

The interview data suggests that building an advanced marketing strategy in the digital sphere that expands the commitment to data for organisations requires cautious thought regarding the goals of the marketing department. Objectives in the organisation need to be exhaustingly conceptualised, defined in collaboration with managers and should preferably include other functions besides marketing. Furthermore, these objectives must be clearly communicated to the entire organisation to clarify the role of marketing amongst other functions. This will help the development of a common culture and language in terms of data-driven marketing, which will help eliminate silos in the organisation. The organisational top management involvement in the data-driven marketing process is crucial and allows the marketing department to sufficiently report on the results of data-driven marketing processes. Thus, the benefits and the goals of the data-driven marketing process must be commonly understood and valued. Furthermore, the free flow of data that is enabled by a positive combination of sharing organisational culture and a structure that enables such is needed.

The findings of this study support findings from previous research, which cite organisational culture as the main driver of data-driven marketing change in organisations. However, organisations are complex entities where multiple actions and functions affect one another. Thus, even though organisational culture emerged as the most important and powerful barrier to data-driven marketing, considering the roles of organisational structure and top management are central when identifying barriers for data-driven marketing processes.

Limitations of the study and future research directions

Study credibility must be recognised when conducting and evaluating research. This can be especially ambiguous in the case of interview research due to its subjective nature. However, this qualitative research aimed to describe the real-life phenomenon of data-driven marketing processes and its concepts as accurately as possible. The depth and intimacy of the interview process enabled a conversational setting and thus a thorough analysis of the results. Qualitative interviews offer rich data, which helps in understanding complex and contemporary phenomena. Additionally, since the study is limited to interviewees from Finland, it cannot be applied linearly to a different environment. However, the study offers insight into development of data-driven marketing in Finland.

The described barriers to data-driven marketing are based on specific categorisation (see Figure 3.1). Thus, if this framework was either expanded or replaced, additional or even contradicting barriers might be discovered. However, this research tried to actively reduce the impact of such changes on results by ensuring high-quality documentation and conducting an exhaustive literature review.

A more hands-on approach towards this subject might prompt a more straightforward approach to the transition from research to practice. Thus, future research aimed to provide more concrete examples of how to become a data-driven marketing professional might influence and accelerate data-driven process adaptation. In the future, all marketers will likely have to adapt data and insights into their work. Cukier and Mayer-Schoenberger (2013) highlight that the human components of intuition, risk-taking, mishaps and probable blunder will increasingly affect data-driven marketing in the future.

Thus, further studies on the importance (or lack thereof) of the human factor could be a potential research area. Conceptualising the role and influence of the human factor in data-driven decision-making is an essential research topic given that sophisticated and automated modelling is continually evolving.

Key lessons for future research

- Most of the noted barriers to data-driven marketing were related to organisational structure, organisational culture and top management involvement.
- The discovered barriers are highly linked and even overlapping, but they require varying solutions to advance data-driven marketing.
- Future research should aim to provide more concrete examples of how to become a data-driven marketing professional to facilitate practical implementation.

Disclaimer

The research presented in this chapter was collected for my thesis, Heidi Länsipuro, the University of Jyväskylä Master's thesis *Capability Maturity Model for Data-driven Marketing* (2020). The copyright for this JYU thesis belongs to me as the Author. Research presented here has not been otherwise previously published.

Further reading

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4 The planning and implementation process of Programmatic Advertising campaigns in emerging markets

Thanh Tiet and Heikki Karjaluoto

Introduction

Boston Consulting Group (2018 – see Further reading) projects that Programmatic Buying ad spend will account for 63% of global display advertising spend by 2020, leaving a 37% ad spend share for direct buying (i.e. when advertisers and/or agencies manually choose individual ad placements and book them directly with publishers). The rapid advancement of Programmatic Advertising has gained the attention of both the advertising industry and the academic community and spurred many research papers on the topic. Several popular research areas under this topic include Real-Time Bidding (RTB) optimisation algorithms, RTB advertising revenue maximisation for publishers and the impact of Programmatic Advertising on consumer data privacy. The articles related to RTB date to 2014 or earlier, while the other topics were not researched until 2017.

Despite the rich literature on Programmatic Advertising, there is a disciplinary gap between the advertising industry and academic research due to the technical nature of the subject (Li, 2017; Yang *et al.*, 2017). The field has been led by technology companies and computer scientists rather than advertising academia (Yang *et al.*, 2017). This explains why most related articles were published in computer science journals or software engineering proceedings, which caused a 'research gap in the social science of the subject' (Li, 2017, p. 4). Qin and Jiang (2019) complement this view by arguing that existing studies overemphasise the technologies of Programmatic Advertising itself and lack discussion on how these technologies affect and transform traditional advertising processes and practices.

The potential of emerging markets

Statistics show that emerging markets (e.g. China, India, Indonesia, and Brazil) make significant contributions to the global advertising landscape in terms of ad spend volume and growth rate. According to Zenith's advertising forecast, seven of the top ten contributors to global ad spend growth from 2017 to 2020 were emerging markets (Zenith, 2018 – see Further reading). Additionally, digital ad spends in emerging markets, especially Southeast Asia, are in double-digit growth (Digiday, 2017 – see Further reading). However, there are limited studies about online advertising and its dynamics in these markets. Hence, this chapter focuses on studying the Programmatic Advertising process in Vietnam, which is one of these emerging markets.

Objective of this chapter

Based on the identified research gap regarding Programmatic Advertising and increased interest in digital advertising practices in emerging markets, namely Vietnam, this chapter will explore how Programmatic Advertising is planned and implemented in this market. The main Research Question this chapter seeks to answer is to what extent Programmatic Advertising is leveraged in online advertising campaigns in Vietnam? In addition, we look at the advantages/disadvantages of leveraging Programmatic Advertising. Our sub-research question is how Programmatic Advertising campaigns are planned and implemented. Programmatic Advertising involves automation and the integration of different technologies, which may require a different advertising process to ensure effectiveness.

This study makes two main contributions to the research and the practice of online advertising. In terms of theoretical contributions, it fills the disciplinary gap because it studies the Programmatic Advertising phenomenon from the perspective of marketing communications. The study also presents the findings from the perspective of an emerging market (Vietnam), which is currently missing in academic research. In terms of managerial contributions, the study discovers two distinctive planning and implementation processes of Programmatic Advertising campaigns, depending on the campaign's objectives. It also pinpoints both good and bad practices in Programmatic Advertising processes. These findings will help advertisers effectively and efficiently manage their programmatic ad campaigns.

Theoretical background

Defining Programmatic Advertising

Programmatic Advertising comprises two components: Programmatic Buying and Programmatic Creative (Chen *et al.*, 2019; Sven and Owens, 2016, pp. 123–130). Programmatic Buying refers to a range of technologies that automate the real-time buying and selling of ads. Programmatic Creative includes a range of technologies for optimising and generating ad content in real time so that ads are relevant (i.e. personalised) to users. While the two components have different functions, both rely on massive amounts of data (e.g. consumer data and ad inventory data), optimisation algorithms and intermediaries so that relevant ads can be delivered to the optimal target audience at scale (Li, 2017).

Programmatic Buying uses data and technologies to automate and optimise the real-time buying and selling of ads. Nevertheless, it is not a fully automatic process because human intervention is still required to guide the system, and research indicates that data and technologies are equally important to the success of Programmatic Buying (Chen *et al.*, 2019; Choi *et al.*, 2019; IAB, 2020 – see Further reading; Li, 2017; Qin and Jiang, 2019). Without data, there is no input for technologies to process and optimise. Similarly, without the relevant technologies, the automatic ad procuring process is not feasible, and advertisers cannot leverage the potential of data because human beings are not capable of analysing such a significant amount of data in real time.

If Programmatic Buying aims to *find* the right audience and, finally, person, then Programmatic Creative aims to *show* that audience or person individual personalised ads. According to Kumar and Gupta (2016), consumers increasingly expect to see personalised ads that are relevant to them and address their needs. The most important benefits of

personalised ads are 'accelerating a consumer's decision-making process and increasing the likelihood of response and purchase' (Kumar and Gupta, 2016, p. 303). Chen *et al.* (2019) define Programmatic Creative as a set of technologies and data that aim to generate personalised and contextualised ads automatically in real time and at scale. Similar to programmatic buying, Programmatic Creative is not a fully automatic process; thus, human intervention is required to ensure the appropriateness of system-generated ads (Li, 2019).

Intermediary platforms in the programmatic ecosystem

Programmatic Buying includes four main intermediary platforms: the Demand-Side Platform (DSP), the Data Management Platform (DMP), the Supply-Side Platform (SSP) and Ad Exchange.

The DSP assists advertisers or their agencies who buy ad inventories with managing Programmatic Buying campaigns. Examples of DSPs include MediaMath, AOL, Google Display and Video 360. The DMP is an important intermediary because it is layered atop the DSP to provide data for the system (Chen, 2020, pp. 299–308). The DMP collects and integrates data from different sources, analyses it to build comprehensive audience profiles and feeds it to DSPs. Examples of DMPs include Lotame and Nielsen. The SSP serves suppliers of advertising inventories. Examples of SSPs include PubMatic, AppNexus, OpenX and Google's AdX. The SSP helps publishers manage ad inventories, optimise the prices of an ad impression and receive revenue (Chen, 2020, pp. 299–308; Choi *et al.*, 2019). Ad exchange is a centralised platform where DSPs (buyer) and SSPs (sellers) buy and sell ad inventories in real time. Examples of ad exchanges include Google DV360 and AppN.

Programmatic Creative includes three main intermediary platforms: Programmatic Advertisement Creation (PAC), Dynamic Creative Optimisation (DCO) and the Content Management Platform (CMP) (Chen *et al.*, 2019).

Both the PAC and DCO belong to the Programmatic Creation Platform (PCP), which generates mass personalised and contextualised ads in real time. PAC creates multiple ad versions, and DCO is responsible for testing different creative versions with different audiences in different contexts to see which version works with whom and in which context. DCO then feeds back the real-time performance of these ad versions to the PAC for adjustment of the ad content accordingly. To a certain extent, DCO is similar to traditional A/B testing, but better in that it executes the testing process automatically, and it can test different ad versions at the same time and at scale (Chen *et al.*, 2019). The CMP is a stock photography database that can automatically recognise individual objects in a photo, decompose all the components and assign them tags. When the CMP is connected to the PCP, the PCP will rely on these tags to extract suitable components and create personalised ads automatically.

The online advertising planning and implementation process

Overall, the online advertising process comprises a series of eight steps: (1) setting campaign objectives and effectiveness metrics, (2) campaign insights discovery, (3) strategic advertising planning, (4) message strategy, (5) ad creation, (6) media planning, (7) media buying and (8) campaign optimisation and evaluation (Chaffey and Ellis-Chadwick, 2016, pp. 418–475; De Pelsmacker, Geuens, and Van den Bergh, 2017, pp. 125–199; Qin and Jiang, 2019). These steps comprise a linear online advertising process.

Empirical study

Methodology

This study uses case study research and abductive reasoning to answer the research questions (RQs). A case study is also suitable for answering 'how' and 'why' questions, especially when investigating contemporary phenomena that cannot be replicated in a lab environment (Yin, 2009, p. 18). Johnston, Leach, and Liu (1999) also argue for the strength of the case study approach to gather an in-depth understanding of the phenomenon of interest.

Case context: overview of the Vietnam market's Internet landscape

Vietnam's Internet penetration in January 2020 was 70% (the world average is 59%), and it is growing fast annually (WeAreSocial, 2020 – see Further reading). There was an increase of 10% in absolute Vietnamese Internet users compared to the same period in the previous year, making Vietnam one of the top ten markets with absolute growth in Internet users. Vietnamese Internet users spend an average of 6.5 hours per day on the Internet, which is on par with the worldwide average (WeAreSocial, 2020). Two-thirds of their total time spent is equally accounted for by social media activities and watching videos (WeAreSocial, 2020).

Google search, YouTube and Facebook are the three most visited websites in Vietnam (WeAreSocial, 2020). Facebook and YouTube are also the top two social media platforms, with penetration of 90% and 89%, respectively (WeAreSocial, 2020), making these platforms ideal for advertisers in this market. Therefore, both Google and Facebook position Vietnam as the most important market in Southeast Asia (The Information, 2019; Market Realist, 2019 – see Further reading).

Vietnam is also a mobile-centric market: 97% of Vietnamese Internet users access the Internet via a mobile device, and half of their daily Internet time is spent on a mobile device (WeAreSocial, 2020). Indeed, 70% of their YouTube watch time is from mobile phones (MMA, 2018 – see Further reading), and 79% of Internet users only access Facebook via a mobile device (WeAreSocial, 2020). Mobile-centric trends have fostered the growth of mobile advertising. While mobile advertising has many advantages, such as granular data and location-based targeting, it also faces several limitations, such as limited rich advertising formats, a high possibility of ad blockage and technological compatibility issues with different mobile operating systems (MMA, 2018).

According to WeAreSocial (2020), in terms of digital advertising spend, Vietnam's 2019 estimated expenditure was $306 million, which had increased by 9% compared to 2018. That digital spend was allocated for search ads, display ads (i.e. banners, videos and social ads) and classified ads at 38.5%, 44.2% and 17.3%, respectively. Display ads not only accounted for the highest digital spend but were also the only ad format with two-digit expenditure growth last year (WeAreSocial, 2020). The ad spend patterns of the Vietnamese market are also consistent with global ad spend.

Data collection

Interviews as a data collection method

Yin (2009, pp. 106–109) endorses interviews as the most important and essential source of data for a case study. Furthermore, interviews allow a researcher to interact with

the study subjects directly and ask open-ended questions to gain an understanding of a specific topic, especially when the topic is complex or sensitive (Hair *et al.*, 2016, pp. 200–208). Bloomberg and Volpe (2008, pp. 73–74) add that the interview is preferable to other methods when a researcher needs to obtain a person's experience or viewpoints. Semi-structured interviews were particularly suited to this study, which aimed to understand the digital specialists' perspective on Programmatic Advertising as well as their experience in utilising it in online advertising campaigns.

Recruiting study participants

The study participants were recruited using purposive sampling for their knowledge or relevant understanding of the topic of interest. In other words, participants should be recruited according to 'predefined criteria relevant to a particular research objective' (Guest, Bunce, and Johnson, 2006, p. 61). The respondents needed to satisfy the following criteria: (1) possess at least two to three years of experience in digital advertising for an adequate understanding of the online advertising process and (2) experience in planning and implementing programmatic ad campaigns within the past year. Because the digital advertising landscape keeps evolving, these criteria were used to ensure that participants' answers reflected the current market situation. This study aimed to complete 6–12 interviews to achieve theoretical saturation of 'the point at which no new information or themes are observed in the data' (Guest, Bunce, and Johnson, 2006, p. 59).

Conducting semi-structured interviews

The semi-structured interviews were conducted in the Vietnamese language in February and March 2020. The interview durations varied from 45 to 90 minutes. All interviews were conducted via Skype, audio recorded and transcribed. The interviewees were either from a client's in-house digital media team or from an agency's digital team. Seven of the eight people contacted participated in these interviews. The major themes emerged after five interviews, and no new significant themes appeared during the remaining interviews.

Data analysis

The study used thematic analysis due to its advantage of flexibility compared to other methods as well as its alignment with the abductive reasoning approach of the study. Braun and Clarke (2006) explain that thematic analysis includes six phases: (1) familiarisation with data; (2) generating initial codes; (3) searching for themes; (4) reviewing themes to ensure that they are meaningful, significant and not overlapping; (5) defining and naming themes and (6) producing a report. This study's data analysis process followed all six phases of thematic analysis. Initial codes were identified during the transcription process, while the others were generated after all transcriptions were completed. The coding process also involved the data reduction step to focus on the relevant data and make analysis feasible (Hair *et al.*, 2016, p. 303). Based on the codes, the main themes were identified, reviewed and defined. The coding process was also guided by the relevant literature. The codes were mapped and grouped into different themes to help answer the RQs. Finally, each theme was identified, and it was determined whether there were adequate supporting empirical data and whether the theme presented a critical contribution to the RQs.

Results and discussion

RQ1: How is Programmatic Advertising being used in online advertising campaigns in emerging markets?

Overall, programmatic ads are used in both long-term brand-building campaigns and short-term direct-response campaigns, even though the data suggest that Programmatic Advertising is being used more in long-term brand-building campaigns than it is in short-term direct-response campaigns. Different campaign objectives have distinctive effectiveness metrics. The effectiveness metrics of long-term brand-building campaigns are reach and frequency, while those of short-term direct-response campaigns are conversions. Different short-term direct-response campaigns would define conversions, such as website visits, form registrations or purchases, differently.

Programmatic Advertising offers several exclusive advantages, such as sophisticated and granular audience segmentation. This advantage stems from combining underlying programmatic technologies with holistic audience online profiles. Sophisticated audience segmentation implies that advertisers can segment the desired target audience into different subgroups and serve the relevant ad to each group. However, granular audience segmentation suggests that advertisers can layer various audience attributes to narrow the audience group and achieve precision targeting. Examples of audience attributes are demographics, location, interest, online behaviour, etc. The spectrum goes from broad demographic traits to specific online behaviours. Another advantage is lookalike audience targeting. When this option is employed in an online campaign, the DSP will automatically find a new audience with online profiles similar to those of the brand's existing target audience. This targeting technique not only extends the campaign's reach but also increases conversions for short-term direct-response campaigns. The final advantage is that Programmatic Buying can consolidate the performance of different channels and devices as well as report the Key Performance Indicators (KPIs) at the campaign level. This consolidation not only improves advertising efficiency (i.e. reduces the ad impression duplication across channels and devices) but also lets advertisers evaluate the campaign holistically (i.e. advertisers can evaluate advertising effectiveness at the campaign level instead of at the channel level).

Despite the obvious advantages, there are three challenges with Programmatic Advertising. The first is incurring additional fees, such as platform and data fees. Advertisers will be charged a platform fee when they implement programmatic ads via DSPs. Similarly, advertisers will be charged a data fee when they leverage the audience data in their targeting. The more the data layers involved, the higher the data fees. There were controversial opinions among the respondents regarding whether the incurred fees are reasonable (at least 10%–15% of the media budget). The next issue is that many advertisers do not understand the audience buying concept of Programmatic Advertising. Hence, they expect to see their own ads during the campaign period, and when they do not, they tend to conclude that Programmatic Advertising is ineffective. The third issue is related to ad inventories. The banner ad inventories that are available for Programmatic Buying are subject to limited sizes and formats (i.e. most programmatic banner ads are of Internactive Advertising Bureau (IAB) standard sizes); therefore, if a brand wants to convey its message through a rich format banner (e.g. an expandable non–IAB standard), there is a high chance that the brand can only deliver that message via direct buy. The next obstacle is that many local publishers who own premium ad inventories (i.e. ad

placements with high reach and high viewability) are reluctant to sell these ad impressions through programmatic channels. Instead, they prefer to sell through traditional direct contracts. If advertisers insist on buying these ad placements via programmatic buying, they can negotiate deals (e.g. programmatic guaranteed deals, preferred deals or private market deals), which are more expensive and time-consuming to implement. Nevertheless, the respondents shared that these deals are limited, and many premium ad placements are still inaccessible through programmatic buying. Lastly, ad inventories on YouTube and Facebook – the top two advertising platforms in Vietnam – are sold exclusively on two DSPs: Google DV360 and Facebook Ad Manager. This fragmentation deters the benefit of Programmatic Advertising consolidating ad performance across channels.

RQ2: What are the planning and implementation processes for Programmatic Advertising campaigns?

In general, the new planning and implementation process for Programmatic Advertising also includes eight steps: (1) setting campaign objectives and effectiveness metrics, (2) campaign insights discovery, (3) strategic advertising planning, (4) message strategy, (5) ad creation, (6) media planning, (7) media buying and (8) campaign optimisation and evaluation. However, there are three important points of discussion to consider.

1. **The Programmatic Advertising process is non-linear.** This is especially true for short-term direct-response campaigns. More than one step can happen simultaneously, thanks to the underlying programmatic technologies. The DSP can create ads with a personalised message and match the size of the ad placement simultaneously in real time, allowing ad creation and media buying steps to happen concurrently. The campaign evaluation step is then iterated periodically during the campaign period rather than post-campaign, which forms a constant loop from steps 2 to 6 throughout the campaign. At the tactical level, the DSPs evaluate the effectiveness of each ad version and ad placement based on the target audience's feedback on the ad. The systems then make necessary changes to improve the campaign's performance. At the planning level, digital specialists monitor the campaign's performance. If new learning or insights emerge from the evaluation process, the digital specialists will make necessary changes to the creative message, audience segmentation and budget allocation among audience subgroups, ad groups and media channels. From this perspective, the advertising process of short-term direct-response campaigns appears to be more flexible and adaptive than that of long-term brand-building campaigns because the planning and implementation steps interlace throughout the campaign. However, the planning and implementation stages of long-term brand-building campaigns are separate. It can be inferred from the interviews that the planning phase of brand-building campaigns happens before the campaigns begin and remains unchanged during the campaign period. The implementation phase of long-term brand-building campaigns is otherwise similar to that of short-term direct-response campaigns. Figures 4.1 and 4.2 outline the new advertising process for both campaign types.
2. **The Programmatic Advertising process is data driven.** All optimisation decisions that are made by the DSP are data driven. For example, Google DV360 and Facebook Ad Manager rely on either their built-in audience data or third-party data sources (e.g. DMPs and data provided by e-Commerce platforms) to decide
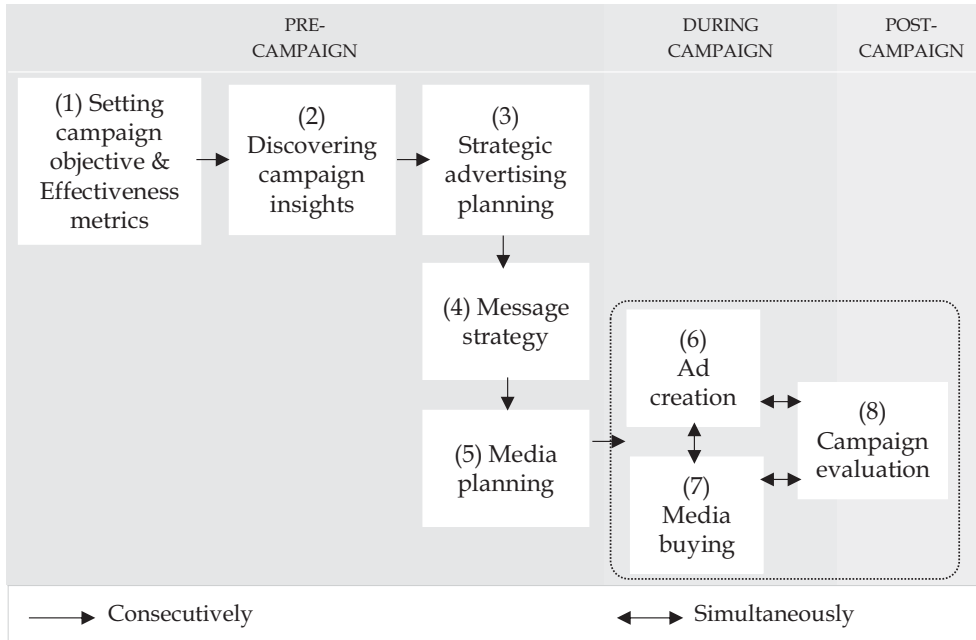
Figure 4.1 Programmatic Advertising process of long-term brand building campaign.
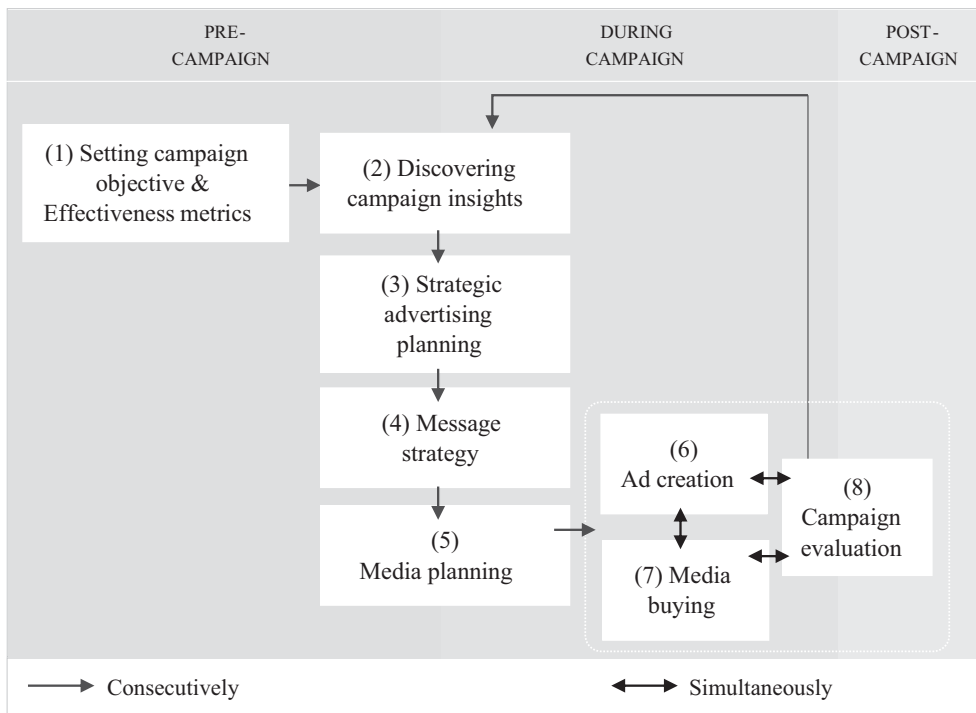Source: Thanh Tiet (2020).

Figure 4.2 Programmatic Advertising process of short-term direct response campaign.
Source: Thanh Tiet (2020).

whether to show an ad to a specific audience, which ad message to utilise, etc. The systems rely on the audience's responses to the ad to evaluate whether that optimisation decision was effective. The DSPs also offer reporting dashboards (e.g. predictive metrics and historical data) so that digital specialists can quickly access the campaign's performance and make necessary interventions in the systems' optimisation processes. The data-driven approach reduces a significant amount of guesswork in the advertising process. Additionally, the post-campaign data goes beyond traditional digital metrics, such as impressions or clicks. Rather, the systems can track and report more comprehensive data, such as attribution reports and the campaign's audience data, which are valuable for deeper analysis of the campaign's performance.

3. **Programmatic Advertising has introduced automation into the advertising process**. Automation happens mostly during the optimisation steps (i.e. creative optimisation, bid optimisation and ad placement optimisation). Hence, the digital specialists' role during the implementation steps is to supervise the systems. Yet, the respondents shared that their intervention was still required; the systems were not yet perfect. Nevertheless, the role of digital specialists during an advertising campaign's planning phase remains significant and irreplaceable. Lastly, while Programmatic Advertising offers automation for several tasks, it also creates new tasks for the digital specialist. For instance, the specialists need to create more creative elements to feed the DSP systems so that the systems have more ad combination options for optimisation. Furthermore, because the programmatic ad buying ecosystem involves more parties than the traditional direct buy, the specialists need to spend time communicating with different parties and addressing the technical issues that emerge from initiating programmatic campaigns.

Discussion

Theoretical implications

The study findings support the model of Programmatic Advertising by Chen *et al.* (2019), which states that Programmatic Advertising has two components: Programmatic Buying and Programmatic Creative. While the former is fully developed, the latter is still under development. The development stage of the two components was reflected through the experience of the study participants. All participants had experience in implementing Programmatic Buying campaigns, but only a few had experience with Programmatic Creative. Furthermore, the discussion on Programmatic Buying was more thorough and in-depth than that on Programmatic Creative. For instance, Programmatic Buying was employed extensively in both long-term brand-building and short-term direct-response campaigns. The advanced deployment of Programmatic Buying was also manifested through sophisticated customer segmentation and utilisation of lookalike audience targeting to extend the campaign's reach and conversions while addressing the issues of brand safety and viewability.

By contrast, Programmatic Creative in the local market is still under development for two reasons: compared to Programmatic Buying, there are fewer campaigns implementing Programmatic Creative, and in terms of the platform infrastructure, Chen *et al.* (2019) state that creative programmatic platforms include PCP and CMP. While PCP was mentioned and discussed by the study participants, CMP was not mentioned at all.

This implies that CMP was not used in the market at the time of this study and likely was not available; all respondents implementing Programmatic Creative in their online campaigns had to manually design and upload the creative templates and components into the system. While the lack of CMP can indicate that the local market has not reached the technology's state-of-the-art stage, it seems that the model of Programmatic Advertising by Chen *et al.* (2019) needs modification to strengthen its explanatory power.

Managerial implications

The study identifies two different planning and implementation processes for Programmatic Advertising, depending on the campaign objectives. For campaigns aiming at long-term brand building, the advertising process is more straightforward because the planning and implementation phases are separate. That is, the campaign's overall strategies, including customer segments, targeting strategy, creative strategy and media mix, remain unchanged throughout the campaign. All decisions that are made during the implementation stage follow predefined strategies. By contrast, the processes for short-term direct-response campaigns are more adaptive in the sense that the planning and implementation phases are integrated. Furthermore, the study findings suggest that the strategies, especially customer groups, targeting and even the creative message, are subject to change during the campaign's implementation phase.

Regarding changes in the target groups, the study findings imply that advertisers want to prioritise ad spend on those who are more likely to make a conversion (e.g. make a purchase and register a form) soon to achieve the campaign's KPIs. Acknowledging the two processes helps advertisers manage the campaigns more effectively in terms of allocating reasonable time and resources at different stages of the processes. For instance, the process for long-term brand-building campaigns can require more time and effort during the planning phase than in the implementation phase. Moreover, short-term direct-response campaigns require continuous time and effort during both phases.

The differences between the two processes can be explained by the nature of the two campaign types. Short-term direct-response campaigns are performance driven and demand immediate results, while long-term brand-building campaigns aim for long-term impacts, such as changing consumers' perception or behaviour towards the brand. Therefore, even though Programmatic Advertising technologies have changed the advertising process, they are likely not the sole contributor. Advertisers also play a significant role in shaping the processes. For instance, the programmatic mechanism works the same in both processes; the audience and campaign performance data are also collected and available in real time in both processes. However, digital specialists must decide how to leverage the mechanism to meet the campaign's objective. In that sense, Programmatic Advertising can enhance the advertising campaign's performance and the efficiency of its advertising spend. Yet, the enhancement level essentially depends on the in-depth understanding and expertise of the digital specialists. In other words, adopting Programmatic Advertising (i.e. shifting the budget from traditional direct buy to Programmatic Buying and leveraging dynamic ads) because it has a promising advantage (i.e. it delivers the right message to the right person at the right time) without a thorough understanding of the technologies and careful preparation could result in a great expectation gap.

The study findings indicate two main reasons for this expectation gap. First is the justification of additional fees (e.g. platform fee, data fee and tech fee) when executing

Programmatic Advertising. These fees are costly and vary depending on the depth of the targeting layers, different DMPs and the sophistication of the technologies involved when integrating different intermediates in the programmatic ecosystem; advertisers and agencies must be aware of these fees while planning their campaigns. Additionally, as the data fees keep increasing with added targeting layers, the digital specialists need to justify the optimal point between the cost and the benefits for each layer. Further-more, while the issue of non-transparency fees was not mentioned in the interviews, it was discussed in the research literature. Hence, advertisers and agencies should be aware of this issue. Secondly, programmatic technologies are complicated. The most common issue from the case study was incompatibility between platforms, which interrupted the delivery of ad impressions. Moreover, complicated technologies also require more time and technical expertise than simpler approaches when setting up programmatic campaigns. Thus, digital specialists must not only be skilful at operating the DSPs but must also have a systematic understanding of different platforms in the programmatic ecosystem and their working mechanisms so that they can execute their campaigns effectively and efficiently.

The study findings also point to a gap between practice and theory, which could potentially lead to ineffective implementation of Programmatic Advertising campaigns. Neumann, Tucker, and Whitfield (2019) and Sylvester and Spaeth (2019) highlight a potential problem in both the accuracy and the coverage of audience data: third-party audience data could lack accuracy and coverage due to self-reporting faults, data collection technique faults, etc. Additionally, the biased ad delivery and optimisation algorithms discussed by several researchers (i.e. Ali *et al.*, 2019; Gordon *et al.*, 2019; Lambrecht and Tucker, 2019; Lewis, Rao, and Reiley, 2015) are of concern. In one instance, the algorithms automatically prioritise showing information to one customer segment over others because of inherent algorithm biases. Those biased algorithms can cause misleading campaign results and evaluations. Moreover, the algorithms can display ads to buyers who would make a conversion regardless of whether they see the ads or not, which wastes the impressions because they do not earn additional advertiser conversions. However, the digital specialists in the market seem to be unaware of these issues, which is alarming because audience data and system algorithms are fundamental aspects of precision targeting of programmatic buying.

Hence, it is suggested that advertisers and agencies should first acknowledge these issues and take gradual actions to address them. Regarding the accuracy of audience data, advertisers and agencies should begin investigating the audience data collection and verification processes of data vendors. These insights will help them determine whether to pay data fees for new layers of audience data in their campaigns. Furthermore, systematic assessment of these third-party audience data sources should be conducted if possible. Regarding the biased algorithms, it seems that operating the algorithms is out of digital specialists' control, making it difficult for them to intervene in the systems and mitigate such biases. Despite that, digital specialists should still be mindful of the biased algorithms issue when interpreting the campaign's data, evaluating the campaign's performance and taking strategic actions based on those data. The respondents noted that the audience data results post-campaign could be used to redefine a brand's target audience, which underlines this suggestion.

Finally, the study findings suggest that even though Programmatic Advertising offers automation in the implementation steps (e.g. automatically chooses the right ad placement to serve ads and automatically generates personalised ads on a large scale), the

workload does not necessarily decrease. Digital specialists still need to supervise the system to intervene promptly, especially given that technologies are still developing and technical issues can occur during the campaign period. Nevertheless, too much human intervention is not encouraged. The literature and the case study findings imply that the algorithms of programmatic technology can operate and improve based on the feedback loop. Hence, the role of digital specialists should skew towards supervising and guiding the system instead of doing its job. Furthermore, there is an increase in workload concerns with generating the increased creative templates and components that are required in dynamic creative so that the systems have resources to create different combinations of ad templates and creative components. This is important because the core of Programmatic Creative is to create personalised ads at scale, implying that the system needs a significant amount of creative element input to customise ads that are relevant to different audiences in different contexts. In other words, the lack of creative component input hinders the strength of dynamic creative. In conclusion, the automation offered by programmatic technology should be viewed as an extension of digital specialists that helps them plan and implement online campaigns rather than replace them.

Key lessons for future research

- Programmatic Advertising research is still in its infancy; there are limited research papers on Programmatic Creatives, especially regarding the intermediaries and platforms of Programmatic Creatives and their working mechanisms. Further research on this component of Programmatic Advertising will aid in a holistic understanding of the topic.
- This research was conducted from the buy-side perspective as represented by digital specialists from advertisers and agencies; therefore, future research from the sell-side perspective (i.e. publishers) and intermediaries would give a more holistic understanding of the phenomenon.
- Due to its technically sophisticated nature, future Programmatic Advertising research should involve collaborations between marketing researchers and computer scientists for more meaningful results.

Disclaimer

The research presented in this chapter was collected for my thesis, Thanh Tiet, University of Jyväskylä Master's thesis *The planning and implementation process of programmatic advertising campaigns in emerging markets (2020)*. The copyright for this JYU thesis belongs to me as the Author. Research presented here has not been otherwise previously published.

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Section 2

Digital transformation and innovations in marketing

5 The antecedents and outcomes of online consumer brand experience

Joel Konttinen, Heikki Karjaluoto and Aijaz A. Shaikh

Introduction

Digital consumers are no longer dependent on brands for information to support their consumption and decision-making processes; they now proactively seek information using cyber channels to evaluate the suitability of services or products for their personal needs (Rowley, 2004). This phenomenon has shifted the profound nature of modern customers from passive to proactive. With brands recognising this shift, company websites have become a crucial channel for companies' marketing communication through which they can support and strengthen consumer experience.

Previous research related to consumer experiences has mainly focused on the utilitarian aspects of products and services, while experiences that are evoked and provided by brands have received relatively scant attention (Brakus, Schmitt, and Zarantonello, 2009). Brand experience is still lacking academic attention, and due to its 'practical relevance' (Khan and Rahman, 2015, p. 10), there have been calls for further research on the topic. Importantly, previous studies on Consumer Brand Experience have mostly considered offline settings, justifying the need to study this topic in an online context (Hamzah, Syed Alwi, and Othman, 2014).

Against this backdrop, this chapter aims to examine (a) how a website's appearance and technical quality dimensions evoke online Consumer Brand Experiences and (b) investigate how online Consumer Brand Experience develops consumer brand trust as well as motivates usage behaviour and eWOM. Next, we discuss Consumer Brand Experience and website quality. This is followed by the research model, hypothesis development and research methodology. Finally, the empirical findings are presented, and we conclude the chapter by discussing the implications, limitations and further research ideas.

Conceptual background

Brand experience is a multidimensional concept and is defined as 'sensations, feelings, cognitions, and behavioral responses evoked by brand-related stimuli that are part of a brand's design and identity, packaging, communications, and environments' (Brakus, Schmitt, and Zarantonello, 2009, p. 52). Brakus, Schmitt, and Zarantonello's (2009) examined Consumer Brand Experience in offline context; however, because the source of experiences does not significantly affect their nature, the model can be adopted for measuring the phenomenon in an online context (Cleff, Walter, and Jing, 2018, p. 11). Consumer Brand Experience in an online context, in turn, is defined as 'a holistic response to the stimuli within a website environment' (Morgan-Thomas and Veloutsou, 2013, p. 22).

Brand-related stimuli are recognised as the foundation of consumer responses, which are defined as brand experience (Brakus, Schmitt, and Zarantonello, 2009). These stimuli consist of visual and cognitive aspects of the brand's identity that can be observed and perceived by consumers when searching/shopping for and consuming a brand. In the online context, brands provide these brand-related stimuli via several interactive touchpoints and a wide range of channels, such as websites, SM and blogs (Cleff, Walter, and Jing, 2018).

Brakus, Schmitt, and Zarantonello (2009) constructed a four-factor model for the brand experience dimension scale, including the sensory, affective, intellectual and behavioural dimensions. These dimensions were validated within the product and service brand context (Nysveen, Pedersen, and Skard, 2013). *Sensory* brand experience relates to visual or other sensory experiences evoked by the brand and brand related stimuli. The *affective* dimension refers to the emotional experiences evoked by the brand. The *behavioural* dimension is linked to intentions, actions and bodily experiences. Lastly, the *intellectual* dimension is related to the cognitive experiences that a brand evokes and stimulates.

Positive online experiences are positively related to the consumption behaviour of online users, such as the intention to use the web again and the time consumers are willing to spend online (Novak, Hoffman, and Yung, 2000). Consumer brand experiences in the website context refer to 'a consumer's positive navigations and perceptions with a specific website' (Ha and Perks, 2005, p. 440), which affect brand trust and higher consumption of the website.

Aladwani and Palvia (2002) developed an instrument for measuring the concept of web quality that includes three dimensions: technical adequacy, web content (specific content and content quality) and web appearance. Technical adequacy refers to technical aspects, such as security, ease of navigation and search facilities, of the website (Al-Qeisi *et al.*, 2014). According to Aladwani (2006), the technical quality of a website has a major impact on user behaviour. Web content quality refers to how the website is perceived in terms of its usefulness, clarity and accuracy (Al-Qeisi *et al.*, 2014). Specific content quality refers to specific company-related information (i.e. contact information and the company's general information) and information concerning its offerings in more detail, such as product or service information (Al-Qeisi *et al.*, 2014). Web appearance includes the visual design of the website and how the visual elements and their usage in website design correlate with a customer's emotional and behavioural responses (Chang *et al.*, 2014). Appearance quality is one of the most influential web quality elements because it has a major impact on customer-related outcomes, such as satisfaction, perceived service quality (Wang, Hernandez, and Minor, 2010), intentions and purchasing behaviour (Chang *et al.*, 2014), activation of search (Wang, Hong, and Lou, 2010) and attitudes towards the website (Aladwani, 2006).

Research model and hypotheses

The proposed conceptual model (Figure 5.1) suggests that two central antecedents to Consumer Brand Experience exist: Website Technical Quality (TQ) and Website Appearance Quality (AQ). Moreover, the research model suggests that TQ and AQ are positively related to Consumer Brand Experience and its's outcomes, brand trust, eWOM intentions and behavioural intentions. The following subsections explain these linkages and propose hypotheses for testing these direct effects.
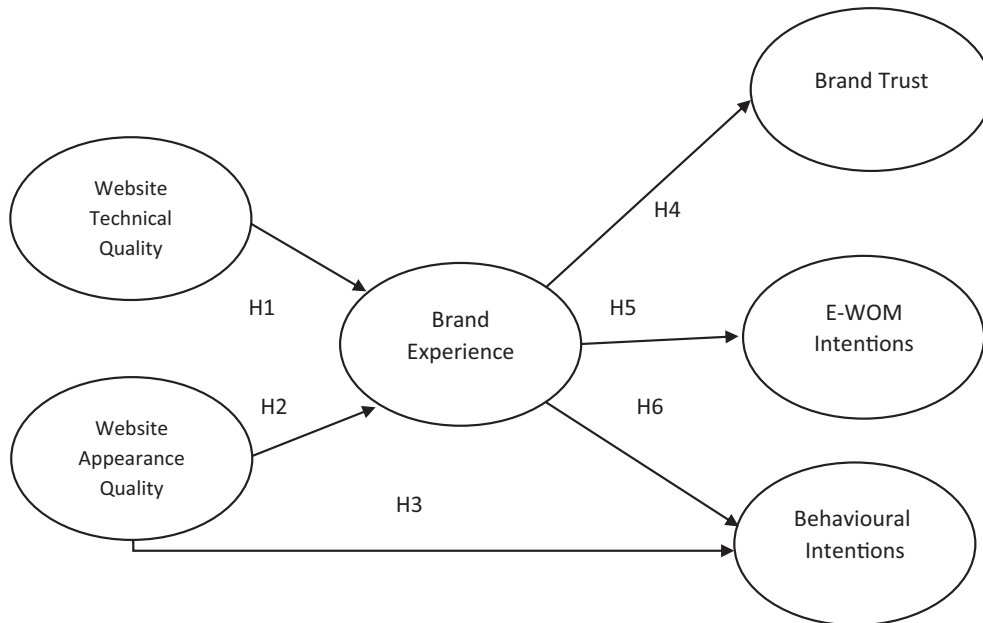
Figure 5.1 Structural model.

Antecedents of Consumer Brand Experience

The technical quality dimension refers to technical features of a website (such as ease of navigation and security). This dimension can be tied to the cognitive experiential state in the online context because it includes similar utilitarian aspects that affect cognitive information processing (Hamzah, Syed Alwi, and Othman, 2014). Chang (2014) suggested that the evoked experiences correlate to the user's perception of the product's ease of use and usefulness. Therefore, the following hypothesis is proposed:

H1: Website technical quality is positively related to consumer brand experience.

Brand-related websites include brand-related cues as aesthetic features of the website's design and often integrate several recognised brand-related stimuli, such as colour schemes, shapes, typefaces, designs and logos. The appearance quality dimension by Aladwani (2006) can be justified as part of the research model because it includes almost identical variables and characteristics as those of Brakus, Schmitt and Zarantonello's study (2009). They state that 'These brand-related stimuli appear as part of a brand's design and identity (e.g. name, logo and signage), packaging, and marketing communications (e.g. advertisements, brochures and Web sites)' (Brakus, Schmitt, and Zarantonello, 2009, p. 53). The criteria for brand-related stimuli are attractiveness, organisation, proper use of fonts, proper use of colours and proper use of multimedia (Aladwani, 2006).

A brand-related cue can evoke experiential states that are not constrained to only one dimension of the brand experience framework (Brakus, Schmitt, and Zarantonello, 2009) and can stimulate multiple experience dimensions. Wang, Hernandez and Minor (2010) suggested that a website's aesthetic qualities can also affect the consumer's informational processing route and produce positive emotional, experiential states. Whereas the appearance quality dimension can be argued to evoke consumer brand experiences with brand-related

stimuli and clues, it is recognised as an important part of the Marketing Communications Mix (Khan and Fatma, 2017). Brand websites can evoke brand experiential states (Morgan-Thomas and Veloutsou, 2013). Thus, we propose the following hypothesis:

H2: Website appearance quality is positively related to consumer brand experience.

According to Wang, Hong and Lou (2010), web aesthetics and their evoked affective and positive experiential states can enhance purchase intentions (p. 126). Wang, Hernandez and Minor (2010) argue that web aesthetics affect a user's perception of the web service's quality and satisfaction and consequently enhance brand-related behavioural outcomes. Lorenzo-Romero, Constantinides, and Alarcón-del-Amo (2013) argue that, in the online context, impulsive shopping results from experiential processing and emotions that web aesthetics and design elements create. Thus, the following hypothesis is proposed:

H3: Website appearance quality is positively related to behavioural intentions.

Outcomes of Consumer Brand Experience

The outcomes of Consumer Brand Experience have been widely studied, with the most recognised including brand-related concepts, such as brand trust, brand credibility, brand attitude, satisfaction (Ha and Perks, 2005; Khan and Fatma, 2018) and behavioural intentions (Khan and Rahman, 2015; Morgan-Thomas and Veloutsou, 2013; Zarantonello and Schmitt, 2010). Here, the studied outcomes of Consumer Brand Experience include brand trust, eWOM intentions and behavioural intentions.

Brand trust, a behavioural outcome related to brand experience (Khan and Fatma, 2017; Khan and Rahman, 2015; Ha and Perks, 2005), has a particularly strong relationship with evoked sensory brand experiences (Huang, 2017). Ha and Perks (2005) defined brand trust as 'a feeling of security held by the consumer in his/her interaction with the brand, such that it is based on the perceptions that the brand is reliable and responsible for the interests and welfare of the consumer' (p. 443).

Brand trust is a vital link between the consumer and a brand's success because consumers tend to purchase from companies with which they have formed a trusting relationship; this is vital in the online environment (Ha, 2004). From a company perspective, brand trust is a crucial element in building a competitive advantage, and according to Ha and Perks (2005), positive experiences that generate brand trust have a major influence on online purchasing behaviour. By generating brand trust, the Consumer Brand Experience can be suggested as an antecedent for building brand trust between a company and a consumer. Thus, the following hypothesis is proposed:

H4: Consumer Brand Experience has a positive influence on brand trust.

In the context of this study, we examine Word-of-Mouth (WOM) in the online context (eWOM). Chen *et al.* (2014, p. 582) define WOM as 'informal communication relating to the characteristics of a business or product occurring between consumers'. Consumers' brand experiences are easily reflected in their messages about those brands in various digital channels (i.e. SM and product reviews and recommendations) (Serra-Cantallops, Ramon-Cardona, and Salvi, 2018). Customers' online experiences are highly related to their behaviour and intentions, and eWOM and WOM are identified outcomes of online customer experience (Bilgihan, Kandampully, and Zhang, 2016). WOM as a behavioural

construct is affected by the emotions and motives of the customer, thus emphasising the importance of customer satisfaction; satisfied customers are likely to produce favourable WOM related to brand offerings (Chen *et al.*, 2014). Positive Consumer Brand Experiences can produce eWOM and eWOM intentions (i.e. in the form of referrals) (Serra-Cantallops, Ramon-Cardona, and Salvi, 2018). On this basis, we propose the following:

H5: Consumer Brand Experience positively influences eWOM intentions.

Behavioural intentions, such as repurchase intention, willingness to pay (Risitano *et al.*, 2017) and eWOM intentions (Serra-Cantallops, Ramon-Cardona, and Salvi, 2018), are typical outcomes of Consumer Brand Experience (Moreira *et al.*, 2017; Serra-Cantallops, Ramon-Cardona, and Salvi, 2018). In addition, brand-related outcomes, such as brand satisfaction and loyalty (Khan, Rahman and Fatma, 2016; Serra-Cantallops, Ramon-Cardona, and Salvi, 2018), are often identified. Rahman and Mannan (2018) studied brand experiences' relationship to online purchase intentions and found that consumer brand experiences positively influence purchase intentions in the online context. Against this backdrop, the following hypothesis is proposed:

H6: Consumer Brand Experience positively influences behavioural intentions.

Methodology

This study used a quantitative research design, including an online survey, as the data collection tool. The study participants were randomly selected using a university newsletter where the study was advertised. Participants were asked to visit IKEA's website briefly before completing the questionnaire. IKEA is a furniture and home appliance producer from Sweden with a well-established and recognisable brand. Notably, this study was not conducted in cooperation with the brand; rather, the brand was chosen for data collection due to its brand recognition and familiarity. The survey was distributed to respondents via SM channels and email newsletters. In addition to SM and email, the questionnaire was distributed by a research company specialising in collecting research data online.

We used existing multi-item scales to measure the study constructs (see Table 5.1).

Table 5.1 Measurement items

Item	Adapted from
TECHNICAL QUALITY TQ1: Website looks secure for transactions. TQ2: Website is easy to use, understand and operate. TQ3: Website has proper search functions. TQ4: Website loads fast. TQ5: Website URL is clear and easy to remember.	Aladwani (2006); Hasan and Abuelrub (2011)
APPEARANCE QUALITY AQ1: Website looks attractive. AQ2: Website looks organised. AQ3: Website uses fonts and text properly. AQ4: Website uses colours properly. AQ5: Website uses images properly.	Aladwani (2006); Hasan and Abuelrub (2011)

(Continued)

Table 5.1 Continued

Item	Adapted from
BRAND EXPERIENCE SBE1: This brand makes a strong impression on my visual sense or other senses. SBE2: I find this brand interesting in a sensory way. SBE3: This brand does not appeal to my senses. ABE1: This brand induces feelings and sentiments. ABE2: I do not have strong emotions for this brand. ABE3: This brand is an emotional brand. IBE1: I engage in a lot of thinking when I encounter this brand. IBE2: This brand stimulates my curiosity and problem-solving. IBE3: This brand does not make me think. BBE1: I engage in physical actions and behaviour when I use this brand. BBE2: This brand results in bodily experiences. BBE3: This brand is not action oriented.	Brakus (2009)
E-WOM INTENTIONS EWOM1: I often tell others about this brand in my online networks. EWOM2: I am proud to say to others that I am this company's customer. EWOM3: I strongly recommend people buy products online from this company. EWOM4: I have spoken favourably of this company to others.	Hur, Ahn, and Kim (2011)
BEHAVIOURAL INTENTIONS BI1: I will continue to shop online at this retailer. BI2: I encourage others to shop online at this retailer. BI3: I will use this retailer website more often for online purchases.	Jiang, Yang and Jun (2013)
BRAND TRUST BT1: I am confident in brand's ability to perform well. BT2: I trust brand. BT3: I rely on brand. BT4: Brand is safe. BT5: I expect brand to deliver on its promise.	Koschate-Fischer and Gärtner (2015)

Results

In total, 202 usable responses were received. The demographic profile of the participants is shown in Table 5.2.

The respondents had significant online shopping experience; close to half (41%) reported having 6–10 years of experience, and around one-third (33%) reported having more than 10 years of experience.

Factor analysis

We first analyzed the data with exploratory factor analysis. The results indicated that the data were suitable for confirmatory factor analysis, which was run using partial least squares analysis.

Measurement model

The model included a multidimensional construct (Consumer Brand Experience); therefore, it presented the Consumer Brand Experience construct as a second-order factor

Table 5.2 Demographic profile of the respondents

Gender	N	%
Female (1)	136	67.3
Male (2)	66	32.7
Total	**202**	**100%**
Age		
15–25	41	20.3
26–35	119	58.9
36–45	28	13.9
46–55	13	6.4
56–65	1	0.5
Total	**202**	**100%**
Profession		
Student	65	32.2
Employee/Professional	111	55.0
Unemployed	14	6.9
Entrepreneur	10	5.0
Retired	2	1.0
Total	**202**	**100%**

Table 5.3 Discriminant validity

	AVE	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Appearance Quality (1)	0.649	**0.805**								
Technical Quality (2)	0.546	0.728	**0.739**							
Affective BE* (3)	0.664	0.295	0.256	**0.815**						
Sensory BE* (4)	0.791	0.552	0.468	0.547	**0.889**					
Behavioural BE* (5)	0.803	0.132	0.139	0.367	0.315	**0.821**				
Intellectual BE* 6)	0.660	0.284	0.285	0.584	0.529	0.486	**0.813**			
eWOM Intentions (7)	0.674	0.321	0.231	0.461	0.496	0.395	0.505	**0.821**		
Behavioural Intentions (8)	0.803	0.363	0.294	0.358	0.496	0.269	0.362	0.690	**0.896**	
Brand Trust (9)	0.687	0.422	0.466	0.428	0.545	0.342	0.403	0.536	0.473	**0.829**

*BE = Brand Experience.

(Duarte and Amaro, 2018) to study the individual effects of the dimensions on the main construct. As suggested by Duarte and Amaro (2018), using the same measurement metrics with first- and second-order constructs is valid, and the produced results include path coefficients, predictive relevance and explained variance (p. 295).

The measurement model was acceptable because the factor loadings, alphas and convergent and discriminant validity were well within the range of the suggested cut-off values (Hair *et al.*, 2017) (see Table 5.3).

Structural model assessment

We tested the hypotheses (Table 5.4) by running the structural model with 1,000 sub-samples, with a significance level of 0.05.

The strongest path coefficient was found between sensory brand experience → Consumer Brand Experience (β = 0.819, p < 0.01). All the path coefficients between Consumer Brand Experience and its dimensions were significant, with the lowest (β of 0.588, p < 0.01) between the behavioural dimension and consumer brand experience.

Table 5.4 Hypotheses testing

Hypothesis	β	f^2	t-value	Hypothesis support
H1: Technical Quality → Brand Experience	0.153 *ns*	0.014	1.628	No
H2: Appearance Quality → Brand Experience	0.368***	0.084	3.923	Yes
H3: Appearance Quality → Behavioural Intentions	0.046 *ns*	0.003	0.671	No
H4: Brand Experience → Brand Trust	0.626***	0.629	12.773	Yes
H5: Brand Experience → eWOM Intentions	0.683***	0.938	17.168	Yes
H6: Brand Experience → Behavioural Intentions	0.701***	0.787	11.821	Yes
	R^2			
Brand Trust	0.512			
Behavioural Intentions	0.533			
eWOM Intentions	0.388			

***: $p < 0.01$, ** $p < 0.05$, *ns* = not significant.

No support was found for the effects of technical quality on Consumer Brand Experience ($\beta = 0.152$, *ns*), thus rejecting H1. The effect of appearance quality on Consumer Brand Experience was supported ($\beta = 0.368$, $p < 0.01$), confirming H2. However, appearance quality had no effect on behavioural intentions ($\beta = 0.046$, *ns*); thus, we reject H3. We found strong support for H4–6, confirming that Consumer Brand Experience is strongly related to brand trust (H4), eWOM intentions (H5) and behavioural intentions (H6).

As Consumer Brand Experience was a second-order construct, the effects of the four dimensions of Consumer Brand Experience were also measured. The sensory brand experience dimension showed that Consumer Brand Experience was high, with an R^2 value of 0.670 (67%). The lowest value among the dimensions was found in behavioural brand experience, with an R^2 value of 0.345 (35%). The intellectual and affective brand experience dimensions explained 62% ($R^2 = 0.617$) and 55% ($R^2 = 0.549$) of the variance of consumer brand experience, respectively. The results of the structural model are shown in Figure 5.2.

Discussion

This chapter aimed to investigate the role of Consumer Brand Experience and its proposed outcomes within the online context and gain insights into the aesthetics and technical attributes of websites, including their relationship with evoking consumer brand experience.

This study presents three main implications:

1   This study contributes to the existing Consumer Brand Experience literature by examining web quality dimensions and Consumer Brand Experience with their related outcomes and by investigating which attributes evoke the most experiential processing related to consumer brand experience. Website aesthetics was the
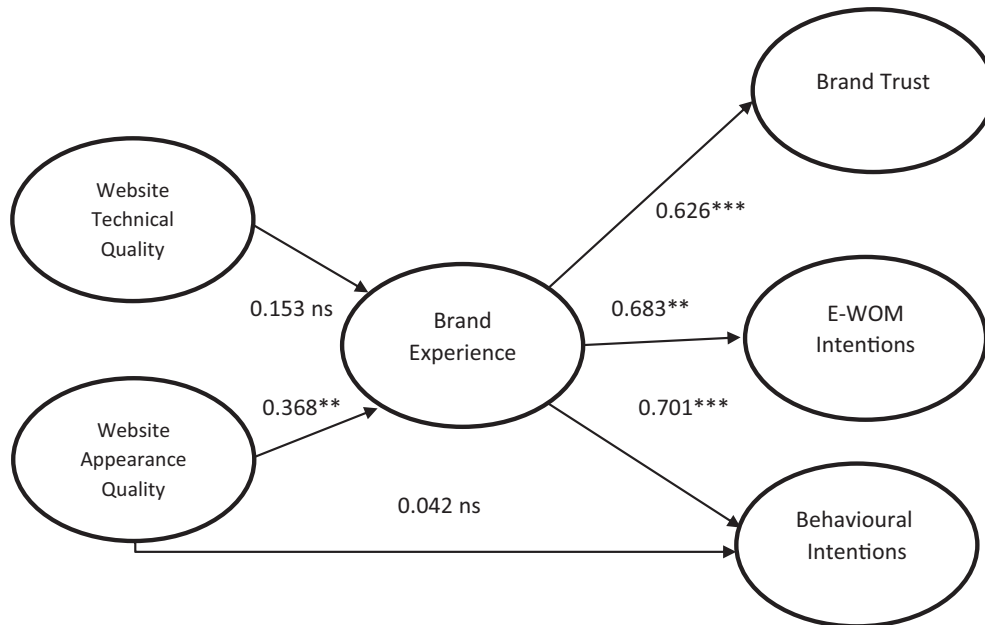
Figure 5.2 Structural model.

most influential factor regarding the outcomes of the research model presented here, which contrasts with previous studies, where website technical qualities and usability-related attributes outperformed aesthetic properties as a strong predictor of favourable outcomes (Wang, Hong and Lou 2010). Notably, aesthetics attributes have been strong predictors in attitudes related to websites in the past (Aladwani, 2006), but these studies mostly investigated the relationship between a website's attributes and certain outcomes, such as behavioural intentions. The results of the current study suggest that website aesthetics evoke brand-related experiential states, leading to favourable outcomes, whereas technical attributes have no significant effect on the outcomes.

2   The results of this study indicate that the studied technical qualities of websites do not translate to experiential and behavioural responses, whereas website appearance stimulates the experiential dimensions that lead to behavioural outcomes. The results indicate that the appearance qualities of a website evoke the most processing, which has a significant positive effect on brand trust, behavioural intentions and eWOM intentions.

3   This study proposes that the most favourable and reliable option for measuring Consumer Brand Experience is measuring it as a second-order construct.

The implications of this study for managers include emphasising the role of consumer brand experiences as a wider concept and its predictive capabilities on consumer behaviour in online settings. Our findings suggest that managers should consider website aesthetics attributes not for their direct effect on outcomes but as an enhancer of consumer brand experience. The effect of sensory brand experience should be considered an important aspect of web design for brands due to its strong and significant relationship with behavioural and eWOM intentions and brand trust. In the online context, the sensory brand

experience can be considered a major influencer of favourable outcomes. By enhancing the information processing routes stimulated by pleasurable consumer brand experiences and building technically solid websites with direct effects on behavioural intentions, companies may utilise the favourable relationships and their outcomes of these constructs. By evoking several of the Consumer Brand Experience dimensions, companies can enhance the probability of behavioural intentions and brand trust. Lastly, the effect of Consumer Brand Experience on eWOM intentions can be emphasised.

Limitations and future research directions

The main limitations of this work relate to the sample, which was obtained through convenience sampling and examined only two web quality dimensions and the brand used (IKEA) in the study. Thus, the results are not widely generalisable. Given that the conceptualisation of Consumer Brand Experience is still highly scattered, this study calls for further studies to identify and establish a unified conceptualisation of Consumer Brand Experience in online context studies. Further studies are suggested to incorporate other aspects of web quality dimensions, general content and specific content, with the research model to pursue a more holistic understanding of the effects of web quality in evoking consumer brand experiences.

Key lessons for future research

- Given that the conceptualisation of Consumer Brand Experience is still highly scattered, this study calls for further studies to identify and establish a unified conceptualisation of Consumer Brand Experience in online context studies.
- Further studies are suggested to incorporate the remaining aspects of web quality, general content and specific content dimensions with the research model.
- Further studies could also investigate other brand-related concepts, such as brand familiarity and brand reputation as predictors of perceived qualities of the website.

Disclaimer

The research presented in this chapter was collected for my University of Jyväskylä Master's thesis examining the antecedents and consequences of web brand experience (2019). The copyright for this JYU thesis belongs to Joel Konttinen as the Author. Research presented here has not been otherwise previously published.

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6 User experience of an e-commerce website

A case study

Saima Ritonummi and Outi Niininen

Introduction

User Experience (UX) consists of the user's perceptions and responses when interacting with a system, such as a website. UX research addresses Human–Computer Interaction (HCI) as a whole, including the user's feelings and thoughts about their experiences, whereas the preceding task-related 'usability paradigm' addressed the user's ability to use an interface, including the efficiency and effectiveness aspects of the interaction (Hassenzahl and Tractinsky, 2006). A positive UX is an essential component of a satisfactory online customer journey on e-commerce websites. Both UX development and customer journey planning aim to support users in working as effortlessly and efficiently as possible by helping them perform tasks to accomplish their goals. The essence of designing for UX and customer journeys is identifying successful and unsuccessful features and touchpoints that guide users towards their desired actions. Addressing both pragmatic and hedonic user needs with intentional UX design on e-commerce websites is necessary to help users optimise the interaction (Garrett, 2011). Identifying the duality of user needs stems from the holistic view of HCI and examining the emotional outcomes and the pragmatic usability aspects of the interaction (Falk, Hammerschmidt, and Schepers, 2009).

This chapter presents relevant academic research on UX and online customer journeys on e-commerce websites. The objective is to outline why thoughtful UX development and customer journey planning is an important, continuous process for e-commerce websites. The study contributes to UX research with a combination of qualitative and quantitative UX research methods, addressing both pragmatic and hedonic aspects of UX and the dual user needs.

What is UX?

Officially established in the 1990s, the concept of UX is largely based on Norman and Draper's work in the 1980s, which advanced the HCI research field significantly. UX is associated with many meanings and aspects of technology use, such as aesthetics, affordances, functionality, responsiveness and the hedonic aspects of interaction (Hassenzahl and Tractinsky, 2006), which include, for example, emotion, fun and flow experiences (Law, 2011). UX research is specifically interested in the user's physical and internal states because UX includes 'all the user's emotions, beliefs, preferences, perception, physical and psychological responses, behaviours and accomplishments that occur before, during and after use' (ISO, 2019, p. 3). Essentially, UX research examines how perception, action and cognition are related to one another and what role emotional user needs plays in UX

(Law, 2011). Per Roto, Joutsela, and Nuutinen (2016), focusing on emotions is important because poor UX and usability problems often cause negative affective reactions (such as frustration), and UX can be improved by reducing those problems.

Many researchers agree that UX consists of three factors: a *user* interacting with a *system* in a specific *context*. A system is defined by the characteristics of the system, including its functionalities and performance. A user is the person who is interacting with the product, and the context of use is where the interaction occurs (Hassenzahl and Tractinsky, 2006; Roto *et al.*, 2011). User-Centered Design (UCD) (also referred to as Human-Centered Design) examines particular people doing particular tasks in a particular context (Ritter, Baxter, and Churchill, 2014), which addresses the three facets of UX (user, system and context). UCD aims to help users work faster, make fewer mistakes and accomplish their goals with minimal effort (Garrett, 2011). Usable systems are more likely to be successful, both technically and commercially. Adopting the UCD approach improves UX and accessibility, including reduced stress and discomfort related to the interaction, which can provide a competitive advantage for the business (ISO, 2019).

Usability, UX and the duality of user needs

Usability is a significant aspect of UX because it measures a user's ability to use an interface in a specific context. Usability is the result of perceived *efficiency*, *effectiveness* and *satisfaction*. While UX addresses the interaction as a whole (including the user's thoughts and feelings about the interaction), usability addresses the extent to which the system can be used to achieve goals effectively, efficiently and satisfactorily (ISO, 2019). Hassenzahl and Tractinsky (2006) refer to the UX paradigm as *going beyond instrumental*, examining non-instrumental quality aspects of the interaction, such as need for surprise, meaningfulness, social setting and voluntariness of use – in addition to the cognitive and taks-oriented aspects. Usability goals are more objective and measure *ease-of-use*, whereas UX goals are more subjective and address the hedonic aspects of interaction, such as engagement and stimulation. The pragmatic and hedonic qualities of interaction are related to the different kinds of needs and goals that users have, and addressing both is important for facilitating positive UX (De Villiers and Van Biljon, 2012; Schmutz *et al.*, 2010).

Because usability and UX are interrelated but distinct concepts, they are measured with slightly different methods. Their research methods do overlap in general, but usability tests are more focused on task-related performance, while UX studies address the affective qualities of the interaction. UX measures usually measure the *outcome* of the interaction (e.g. level of fun), while usability measures can help identify the source of a problem (what users struggle with) and offer possible solutions (Law, 2011). In other words, usability studies measure the pragmatic quality of the interaction (what is happening), and UX studies measure the hedonic quality of the interaction (a user's subjective evaluation about what is happening) (De Villiers and Van Biljon, 2012).

Pragmatic and hedonic user needs can also be seen in the strategies on which users rely when navigating e-commerce websites. Per Harley (2018), the two most common strategies are *searching* and *browsing*. When users are searching, they are looking for a specific product or specific information. When users are browsing, they are experientially browsing to discover what products are available and if the available products suit their needs. Hence, it could be said that searching is related to pragmatic goals, whereas browsing is related to hedonic goals. Because users have different kinds of needs and they arrive at websites via different routes, UX must be positive on all relevant pages of a website. If

a user has a clear understanding of what the website is about, what they can find there and how to operate within it, conversion is much more likely (Harley, 2018). Likewise, Schmutz *et al.* (2010) argue that because user needs are two-fold and users toggle between searching and browsing strategies, it is important to support both goal-oriented and exploratory behaviour by clearly showing what tasks can be accomplished on the website.

The level of experience that a user has with a particular interface (in this case, a website) affects their needs and evaluation of the interaction. Per Falk, Hammerschmidt, and Schepers (2009), the less experienced a user is with the interface, the more important it is to present well-organised product information and content, such as guided tours. The more experienced a user is, the more hedonic needs and expectations they have, which could be addressed in various ways, such as by offering customisable content. Ariely (2000) states that a user's control over the information flow in the e-commerce context has been shown to have a positive effect on their decision-making. Hence, e-commerce websites should strive to meet pragmatic quality attributes for inexperienced users and hedonic quality attributes for experienced users (Falk, Hammerschmidt, and Schepers, 2009).

Context of the study: UX and online customer journeys

Customer journey is the sequence of contacts and experiences at various touchpoints between the consumer and the brand (Micheaux and Bosio, 2019). It is also sometimes termed either *customer decision journey* or *customer purchase journey* (Lemon and Verhoef, 2016). Customer journey mapping is a continuous, long-term tracking of customer interactions at different touchpoints. The focus of this study is UX on an e-commerce website, and the scope of the customer journey is the journey that happens at this single touchpoint (i.e. the website).

Similar to UX, the customer journey is also affected by the customer's previous experiences and their current experience, which will impact their future experiences (Lemon and Verhoef, 2016). Roto *et al.* (2011) state that the UX timespan comprises anticipated UX, which affects momentary UX, and ultimately cumulative UX. For e-commerce websites, journey analysis is important because it helps identify the choices and options that the customer encounters along the journey and, most importantly, the triggering moments that nudge them into a decision to either continue or discontinue the journey (Lemon and Verhoef, 2016). One way to approach journey analysis is by creating buyer personas and *jobs-to-be-done* for the personas. These jobs-to-be-done describe the circumstances in which the customer operates and what kind of tasks they have. Because the goal is to gather information about the customer's *experience*, jobs-to-be-done is also used in UX development and usability testing. However, the UX personas differ from buyer personas used in customer journey analysis. A buyer persona represents a typical customer and their demographic, behavioural and motivational features, forming a base for customer journey design (Micheaux and Bosio, 2019), whereas UX personas define the requirements for the design, such as what functionalities and what kind of content should be included (Garrett, 2011).

Customer journey analysis can help improve UX. By providing a smooth experience, an e-commerce website can help users find what they are looking for and support them in decision-making. Good design and UX are facilitators of positive customer experiences on e-commerce websites (Lemon and Verhoef, 2016). For example, the conversion rate is a widely used metric in measuring the effectiveness of both UX (Garrett, 2011) and e-commerce websites' performance.

Research method

This study used a combination of qualitative and quantitative methods. A cognitive walkthrough was used for usability testing, and a UX questionnaire was used for UX measurement. Although a cognitive walkthrough can give insights on UX, a separate UX questionnaire supplemented the task performance-oriented walkthrough to capture subjective evaluations of the participants' UX.

Cognitive walkthrough is a usability testing method for examining user interfaces. It is a theory-based evaluation method that has been adapted from many walkthrough techniques, such as Learning by Exploration and the Theory of Action. The idea is to create a realistic task scenario for the user and observe the ease with which they perform the given tasks with minimal or no instructions by using system cues. An important part of cognitive walkthrough evaluation is analysing the possible goal problems and action problems users might have encountered during the walkthrough. Goal problem refers to user *trying to do a wrong thing*, whereas action problem refers to user *having problems doing the right thing* (Polson *et al.*, 1992).

Adding UX evaluation to a usability test is a common practice because usability testing is often more focused on task performance and detecting usability issues than on the *subjective experience* of the user (Quiñones, Rusu, and Rusu, 2018). This study combined a cognitive walkthrough with a User Experience Questionnaire (UEQ). The UEQ by Schrepp, Hinderks, and Thomaschewski (2017) supplemented qualitative data from the walkthroughs and gave insights regarding the participants' subjective experiences. The UEQ measured UX on the pragmatic quality dimension (goal-directed behaviour), the hedonic quality dimension (non-goal-directed behaviour) and the attractiveness of the subject. UEQ includes 26 items, which are categorised into six scales: *attractiveness*, *perspicuity*, *efficiency*, *dependability*, *stimulation* and *novelty*. *Attractiveness* is a pure valence dimension and refers to the overall impression. Of the pragmatic quality scales, *perspicuity* refers to the ease with which the user can understand the website, *efficiency* is how fast and effortlessly a user can accomplish a task and dependability is the *predictability* of the interaction and the user's feeling of control. Regarding the hedonic quality scales, *stimulation* refers to motivation and excitement during use, while *novelty* is related to the creativity and innovativeness of the website (Schrepp, Hinderks, and Thomaschewski, 2017).

Data collection

The case company is a consumer electronics brand. Their website was redesigned in 2019 to improve its performance, including especially UX, conversion rate and sales revenue. The company also considers its website as an important platform for introducing its brand and products to new and existing customers. This study examined UX on the redesigned website via both a cognitive walkthrough and a UX questionnaire.

The procedure was established with three pilot respondents. Six respondents (n=6) participated in the study, as in UX and usability testing practice it is often suggested that about 85%–90% of usability problems can be discovered with six users (Goh *et al.*, 2013). To match the case company's target audience, all participants were aged 26–35 and had over 10 years' experience of online shopping. For the purpose of this study (i.e. to simulate a normal online shopping situation), respondents were observed interacting with the website on their own computer at their home.

In this study, the cognitive walkthrough consists of six main tasks: *go to the brand's website*, *evaluate the product's attributes*, *add the product to the shopping cart*, *proceed to the checkout*,
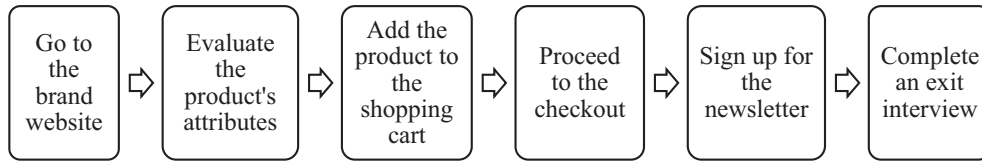
Figure 6.1 Cognitive walkthrough task flow.

sign up for the newsletter and *complete an exit interview*. The task flow is presented in Figure 6.1. Each main task includes sub-tasks, such as 'enter homepage', 'navigate to product pages' and 'examine product offering'.

The participants performed tasks on their computers and the walkthroughs were recorded as screen recordings with audio. Before starting the walkthrough, the participants were briefed about the procedure and informed that the usability of the website is what is being evaluated, not their IT skills. To capture first-time users' impressions, it was ensured that participants had not visited the website before. After the walkthrough, participants completed an exit interview, which included UEQ and demographic background questions.

Findings

The cognitive walkthrough findings are introduced to provide background information for UEQ results and insights on the participants' evaluation of their UX.

Cognitive walkthrough findings

The cognitive walkthrough task analysis was conducted using the 'Four Questions for Cognitive Walkthrough' (Interaction Design Foundation, 2018 – see Further reading), which are based on the original four questions for cognitive walkthrough (Wharton, Rieman, and Lewis, 1994). The questions examine whether the user tries to achieve the correct outcome, notices the actions that will help them achieve that outcome and understands whether they are progressing towards it.

The most common usability problem identified in this study was finding specific product information. Five out of six participants had problems locating compatibility information, which indicates the compatibility of the chosen product with their own device (smartphone). More specifically, four participants had an action problem trying to locate the information; one found it but concluded that the information was not specific enough for a purchase decision. For all other tasks, the completion rate was 100%, and participants had no problems completing them. Other identified minor problems included low contrast in buttons and links, small fonts and inconspicuous secondary navigation. Although these minor problems did not prevent the participants from accomplishing their goals (i.e. finishing the shopping process), they did affect the intuitiveness and ease of the experience. Conversely, the product comparison feature, overall clearness of the website and simple checkout process were praised by the participants.

User Experience Questionnaire findings

The UEQ was used to evaluate the pragmatic and hedonic qualities of the website. However, the sample size for the quantitative UEQ evaluation is only indicative because

Table 6.1 Website performance of the UEQ

Dimension	Scale	Mean	Variance
Pragmatic quality	Dependability	0.875	0.67
	Efficiency	0.792	1.21
	Perspicuity	0.750	1.05
Hedonic quality	Stimulation	0.375	2.64
	Novelty	−0.458	0.77
Pure valence	Attractiveness	0.444	3.66

the smaller the sample, the harder it is to draw indisputable conclusions about the data (Schrepp, Hinderks, and Thomaschewski, 2017).

In the UEQ, values over 0.8 represent a positive evaluation, values between −0.8 and 0.8 represent a neutral evaluation and values less than −0.8 represent a negative evaluation. The scale ranges between +3 (extremely good) and −3 (extremely bad), but because participants tend to avoid extreme answers on questionnaires, values in the UEQ normally range between +2 and −2 (Schrepp, 2019). On average, the pragmatic quality of the website was evaluated as positive by the participants, while both hedonic quality and attractiveness were considered neutral. The website scored the highest in pragmatic quality (0.81) and the lowest in hedonic quality (0.06–0.04), while attractiveness scored in the middle (0.44). On the pragmatic quality scales, the website scored highest in dependability, followed by efficiency and perspicuity. On the hedonic quality scales, the website scored better in stimulation than in novelty. The performance on each UEQ scale is presented in Table 6.1.

Based on their experience with the website, the participants evaluated the *dependability* of the website as its best quality (i.e. they felt in control of the interaction). Dependability also had the least variance in answers. *Novelty* – the website's innovativeness and ability to catch the user's interest – scored towards the lower end of neutral and had the highest variance in answers among the participants.

On the individual item level, the website scored highest in *easy to learn* (1.7), followed by *efficient* (1.5) and *predictable* (1.3). All three items measure pragmatic quality. Notably, on e-commerce websites, predictability can be a positive quality; websites can benefit from following conventions, such as commonly known navigation structures and iconography (Schrepp, 2019). The website scored lowest in *inventive* (−1.0), *leading edge*, (−0.5), *innovative* (−0.2) and *creative* (−0.2). Hence, the website was evaluated higher on the *conventional*, *usual*, *conservative* and *dull* items, which describe the design's novelty. The results per item are presented in Figure 6.2.

The UEQ findings suggest that the pragmatic quality of the website is good: it is easy to learn, efficient and predictable. However, hedonic quality (i.e. innovativeness and catching the user's interest) and attractiveness could be improved.

Implications

The findings of this study support UX research and identify both pragmatic and hedonic user needs. The participants accomplished most of the tasks in the cognitive walkthrough with ease and the website scored well in pragmatic quality. The customer journey on the
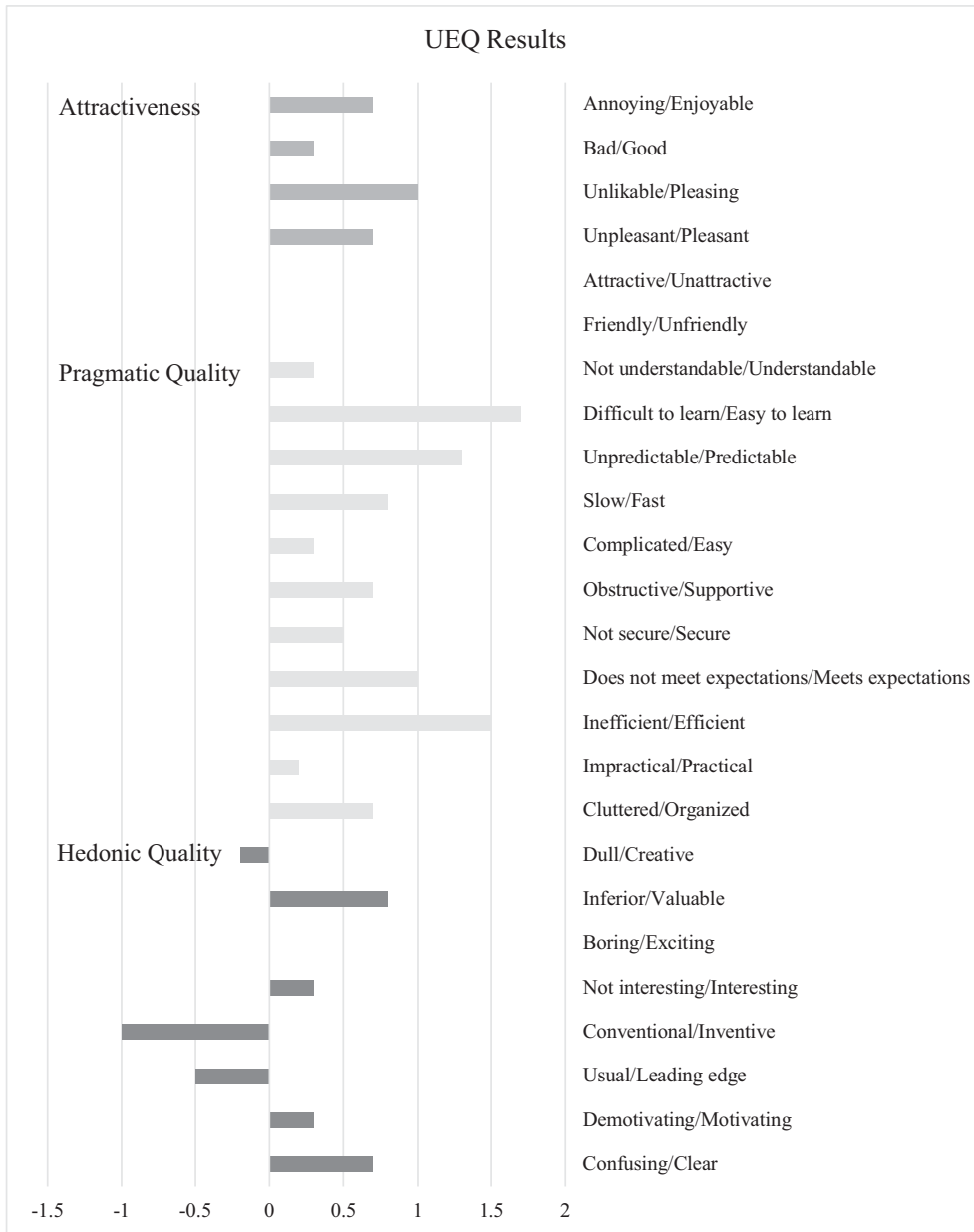
Figure 6.2 UEQ results.

website also seemed to please the participants. However, per the UEQ findings, hedonic quality could be improved.

User-friendly website design

Determining *which changes could improve UX* cannot be accomplished directly with quantitative UX measurement, but this measurement does provide insight regarding general areas of improvement (Schrepp, Hinderks, and Thomaschewski, 2017). The cognitive walkthrough task analysis helped identify usability problems that can be easily addressed when the website is redesigned. Although the participants evaluated the customer journey

and shopping process on the website as clear and easy, one usability problem was identified that might affect a customer's purchase intention in a normal setting: problems locating product information during the shopping process (i.e. ensuring that they choose a product that is compatible with their smartphone). Not finding the relevant product information could have immediate consequences (e.g. shopping cart abandonment) and/or establish more long-lasting beliefs about the retailer and their integrity (Hasan, 2016). Low contrast in buttons and links, small fonts and inconspicuous secondary navigation were identified as minor usability problems that were affecting more subjective UX, whereas trouble locating specific product information also affected the website's usability to an extent.

Two-fold user needs (pragmatic and hedonic) call for website design that supports both pragmatic and hedonic needs. Supporting both goal-oriented behaviour (searching) and exploratory behaviour (browsing) is extremely important for e-commerce websites because users have different needs, goals and strategies for accomplishing their objectives (De Villiers and Van Biljon, 2012; Schmutz *et al.*, 2010). The UEQ findings indicate that the pragmatic quality of the website is good. However, this might have resulted from the participants focusing on tasks they needed to accomplish and they were paying more attention to the pragmatic aspects of the interaction (Quiñones, Rusu, and Rusu, 2018). To gain insights on UX, the participants were also encouraged to explore the website and browse the product selection before evaluating their experience on the UEQ. Hence, the findings indicate either that, to improve UX, the website should support hedonic needs more or the participants happened to be more focused on accomplishing tasks and found it challenging to evaluate the *experience* itself.

Visual attractiveness also affects a user's evaluation of a website. It is a powerful tool for improving UX on e-commerce websites and increasing the fulfilment of hedonic needs (Djamasbi, Siegel, and Tullis, 2010). The studied website scored neutral on both attractiveness and hedonic quality. In the UEQ scale structure, attractiveness is a pure valence dimension (i.e. the user's like or dislike towards the subject). Participant feedback included comments about the website's clear appearance but also about its slightly conservative look and muted colour scheme. This could indicate that if the studied website scored better in attractiveness, it could score better in the hedonic quality of UX as well.

Satisfying online customer journeys

Good website design and good UX facilitate positive customer experiences (Lemon and Verhoef, 2016), which is why investing in UX design is an important consideration for e-commerce websites. A significant part of the customer journey on an e-commerce website is the path to products, (i.e. the *happy path*). The path should be thoughtfully designed and should indicate the hierarchy of content as well as how to navigate it (InVision, 2020 – see Further reading). The idea is to help the user locate sought products or what best suits their current needs. The findings of this study indicate that navigating the website (from the homepage to the online shop, between category pages and product pages and finally to the checkout) was easy for the participants, and they felt in control of the interaction. The simple, smooth checkout process was especially appreciated. To improve the customer journey on the website, the company could consider increasing the colour and contrast in the design and content (e.g. to the background and foreground colours, calls to action and text elements). This could also increase the website's accessibility.

Consistent UX design and development are essential throughout the design and redesign processes of a website. An informed UX design process includes understanding the user's needs and desires (Garrett, 2011), and it requires much more than usability testing alone. This study examined how well this particular e-commerce website facilitates positive UX and smooth online customer journeys. The findings will help the company continue UX development and customer journey mapping on its website with insights from the usability test and the UEQ.

Conclusions

This study examined UX as well as the pragmatic and hedonic user needs that drive users on their customer journey on an e-commerce website. Studying UX and customer journeys determined a common goal: UX research is conducted to identify successful and unsuccessful features from the user perspective, and customer journey mapping is conducted to identify successful and unsuccessful touchpoints. Essentially, both UX design and customer journey mapping are about helping users accomplish their goals more efficiently, effectively and satisfactorily. Good usability is a predictor of positive UX, and positive UX is a predictor of adoption. Positive UX can also predict a trusting customer–company relationship, which is more likely to result in purchase intention. Understanding that UX and the online customer journey are intertwined helps identify possible problems and pain points that users may encounter in the e-commerce context to help solve any problems that could prevent them from accomplishing their goals.

Future research could broaden the scope of UX from a single user interface to multiple-touchpoint customer experiences (Roto, Joutsela, and Nuutinen, 2016). Additionally, addressing both pragmatic and hedonic user needs is important for serving a wider range of users. For example, experienced and inexperienced users have different needs for browsing an e-commerce website: less experienced users need more well-organised content and product information, whereas experienced users have more emotional and experiential needs for the interaction (Falk, Hammerschmidt, and Schepers, 2009). This is why addressing usability and UX as well as the customer journey on an e-commerce website are extremely important. UX is always a result of the user, the system and the context of the interaction (ISO, 2019). However, 'a design is not usable or unusable per se'. On a pragmatic level, the most important interaction outcomes from the user perspective are that the interface becomes familiar quickly, it is easy to learn and it helps them accomplish their goals. Providing pragmatic, *useful content* for informed decision-making is important, but providing *desirable content* that fills hedonic, emotional user needs is equally important (Interaction Design Foundation, 2019 – see Further reading).

Key lessons for future research

- Thoughtful UX development and customer journey planning for an e-commerce website is a continuous process, and regular user research can reveal surprising findings on pain points, successful features and solutions.
- Combining qualitative and quantitative methods in UX studies is an effective way to address the dual user needs and the pragmatic and hedonic aspects of UX.
- UX research should broaden its scope from single-user interfaces to addressing multiple-touchpoint customer experiences because UX and online customer

journeys do not exist in a vacuum; they include all customer–company interaction before, during and after use.

Disclaimer

The research presented in this chapter was collected for my thesis; Saima Ritonummi, the University of Jyväskylä Master's thesis *User experience on an ecommerce website: a case study* (2020). The copyright for this JYU thesis belongs to me as the Author. Research presented here has not been otherwise previously published.

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7 AI-based voice assistants for digital marketing

Preparing for voice marketing and commerce

Alex Mari and René Algesheimer

Introduction

Shopping behaviour is undergoing a revolution that is primarily enabled by digital consumer technologies, which are being increasingly powered by Artificial Intelligence (AI). Among these technologies, in-home Voice Assistants (VAs), such as Amazon Alexa and Google Home, have witnessed unprecedented growth (Kaplan and Haenlein, 2019). The physical placement of these devices at the core of consumers' domestic life allows for repeated, ongoing interactions that fulfil functional and social needs (Ammari *et al.*, 2019; McLean and Osei-Frimpong, 2019). Defined as 'voice-based interfaces that can actively guide consumer decisions on the basis of artificial intelligence' (Dellaert *et al.*, 2020, p. 2), VAs can naturally converse with users, contextually elaborate requests and dynamically expand their knowledge while learning from mistakes (Mari, 2019a).

The physical distancing and stay-at-home policies that have been introduced due to COVID-19 are also requiring people to adopt and intensify their use of new shopping behaviours. Greater availability of products, higher shopping convenience and better value for the money are the key drivers of the adoption of new shopping methods (40% of US consumers), different brands (36%) and novel retailers and websites (33%) (McKinsey, 2020a – see Further reading). The penetration of digital services for grocery shopping in Europe has increased to 51% – a growth factor of 1.8 (McKinsey, 2020b – see Further reading). In the United States, e-commerce penetration has grown more during the pandemic than in the past ten years. Said differently, e-commerce has accelerated the shift away from physical stores to digital shopping by roughly five years (IBM Retail Index, 2020 – see Further reading).

These rapid societal and technological changes are remodelling consumer journeys in myriad of ways. The prolific environment for AI-based devices is expected to develop at exponential rates while altering consumer decision-making and posing new challenges for digital marketers (Davenport *et al.*, 2020).

This chapter discusses the adoption of VAs for marketing and commerce purposes, followed by exploring the unanticipated consequences of VAs on human behaviour in the context of voice shopping. We then highlight how these changes may affect Digital Marketing (DM) and e-commerce practices before closing with opportunities for future research.

The parallel rise of voice marketing and Voice Commerce

With the distinction between humans and machines becoming increasingly blurred, AI-based VAs are expected to substantially alter the decision-making process throughout the entire consumer journey, from product search to repurchase (e.g. Dawar and Bendle, 2018 – see Further reading; Mandelli, 2018). Two parallel forces are shaping the adoption of VAs: (a) faster market penetration due to more than 200 million in-home smart speakers being used globally within a few years and (b) the exponential growth of app marketplaces (e.g. 100,000+ voice 'skills' available on the Alexa Skills Store and 10,000+ 'actions' available on Google Home), which offer infinite interaction possibilities.

A combined push from consumers and companies for their respective objectives is also shaping the depth and breadth of VA usage. While the number of consumers seeking more sophisticated brand experiences through third-party apps or native capabilities is rapidly growing, even simple commands, such as playing music, providing weather information and setting alarms, are creating more immersive voice experiences from the marketing and sales perspectives.

DM is about delivering the appropriate communication to specific targets at the optimal time via the most productive channels. With the introduction of voice touchpoints, marketers can employ voice marketing activities to strengthen their relationship with strategic audiences. For example, managers can utilise a mix of push and pull communication mechanisms, which are often powered by AI, to offer better convenience, relevance and unique brand experiences (Mari, 2019b). Marketers can leverage voice channels using a combination of owned, earned and paid media actions in coordination with other digital and social media (SM) touchpoints to drive efficiencies and build intimate one-to-one relationships with consumers at scale.

Voice marketing

From a voice marketing perspective, VAs represent a novel form of interaction with consumers. As the adoption of VAs grows, it is strategic for brands to develop a strong voice presence that fulfils the needs of sophisticated consumers as well as those with disabilities. According to Abobe, about 20% of marketing organisations are using voice-activated services to improve UX and engagement, and 90% of those remaining are planning to introduce voice apps by 2021 (see Further reading). Companies have mainly launched voice marketing initiatives in the area of branded actions or skills. These voice applications are built around four main service objectives: utility (e.g. hailing an Uber), entertainment (e.g. coaching a player on *Call of Duty*), informational (e.g. obtaining stain removal tips from Tide) and educational (e.g. learning about Mars from NASA).

Some companies quickly capitalised on the voice trend and established a superior voice presence. For example, Diageo (a British alcohol beverage company) has consistently invested in voice marketing by launching several voice-based applications for its brands. Among its portfolio, Johnnie Walker was the first brand to build an Alexa skill to enrich the tasting experience. Beginning in 2016, Johnnie Walker consumers could listen to insights, suggestions and stories to create a unique whiskey-tasting experience. This skill provided an extra service that enhances the properties of a physical product and leads

to deeper emotional connections with the brand. Given the promising results, Diageo extended the format to the Scotch brand Talisker. The skill replicates a guided tasting that the brand offers in its distillery. The 'Talisker Tasting Experience' provides a step-by-step audio guide to help consumers enjoy and appreciate the award-winning whiskey. Because tasting experiences usually take place in a living room and during intimate conversations, the VA user can impress friends while interacting with the brand in a social context.

Voice Commerce

The concept of e-commerce has evolved to include not only the acts of buying and sell-ing products via the Internet but also making products easier to discover and purchase. As a consequence, the disciplines of DM and e-commerce have become increasingly inter-connected. Additionally, in the context of VAs, the terms 'Voice Commerce' and 'Voice Shopping' refer not only to the transactional act of placing an order directly or through marketplaces but also to the technical capabilities and communication activities that allow users to search for a product, listen to reviews, add items to a list, purchase goods or ser-vices, track an order, access customer service, etc.

From a Voice Commerce perspective, VAs have the potential to alter all the stages of the consumer journey substantially. Managers have come to realise that VAs already possess the technical capabilities to lead interactions with consumers, from activating passive users to automating product purchases. Adobe (see Further reading) suggests that almost half of all VA owners initiate product searches (47%), create shopping lists (43%) and make price comparisons (32%). However, AI-aware managers predict that product reordering (automation) will soon be the most used VA commercial feature (74%), fol-lowed by order tracking (71%), product search (68%) and product purchase (66%) (Mari, Mandelli, and Algesheimer, 2020).

Commercially, VAs offer three main revenue stream opportunities.

1   Marketers can deliver premium services as part of their voice experiences, such as interactive stories or exclusive features. Through In-Skill Purchasing (ISP), users can seamlessly shop for products using payment options that are associated with their account (e.g. Amazon Pay). For instance, Sony Pictures Television, which produces many TV shows, including *Jeopardy!* and *Who Wants to Be a Millionaire?*, has built a voice app portfolio that reaches millions of users every day. *Jeopardy!* was the first Alexa skill to offer ISP. For a payment of $1.99 per month, users can play more than one daily session and take part in previous episodes that they have missed.

2   Managers can develop Voice Commerce skills or actions to sell directly to consumers on their channel. For instance, Domino's Pizza developed one of the early custom skills for Amazon Alexa that directly involves a commercial transaction. With more than 60% of orders now placed digitally, Domino's predicts that a 100% digital business is possible. To achieve such an ambitious goal, Domino's created a voice strategy to tackle every available voice channel, from smart speakers to smartwatches. By saying 'Alexa, ask Domino's to feed me!', users can build a new pizza order and repurchase the most recent one or track each stage of the delivery process.

3   Marketers can convey and redirect prospects towards the standard shopping capa-bilities that are offered by the VA's manufacturers. Native shopping channels, such as Amazon Alexa and Google Shopping, are characterised by the ease of making

low-involvement purchases. Currently, 85% of voice purchases are for items below $100 according to a report by Voicebot AI (see Further reading). As such, the penetration of voice shopping features varies widely among product categories. The majority of purchases (21%) are digital products, such as music or movies, which do not require tactile evaluation (eMarketer, 2019 – see Further reading). However, an increasing number of people are shopping for physical products, such as household items (8%) and electronic parts (7%). Grocery shopping is particularly expected to grow via strategic partnerships with retail chains. In the United States, Alexa's users can order many different items, such as household products and fresh produce, from a local Whole Foods and receive delivery within two hours. Google has partnered with Walmart on voice-enabled grocery shopping in the United States and with Carrefour in France.

The consequences of voice shopping on consumer decision-making

To consumers, VAs promise fast, repeatable and low-cost decision-making combined with an increased level of personalisation. Voice agents can be conceptualised as 'partners in decision dialogue' (Dellaert *et al.*, 2020, p. 2) that generate personalised suggestions to match products to consumers' expressed preferences or implicit behaviours (Häubl and Trifts, 2000). Little is known about how consumer decisions are made in dynamic dialogues with an AI-based VA. However, researchers in many different fields, from Information Systems to Ethics, posit that interacting with VAs will alter the decision-making process (e.g. Candrian, Scherer and Algesheimer 2020; Dellaert *et al.*, 2020). Compared to traditional e-commerce, consumer decision-making processes in verbal dialogues present a unique customer experience. In particular, consumers may be subject to idiosyncratic decision biases that are introduced by the unique relationships that they can build with assistants with human-like characteristics or based on how options are presented to them.

In the context of voice shopping, businesses like Amazon and Alibaba organise the general context in which people make decisions. During a product search, the interaction flow with a VA changes based on whether the user wants to (a) purchase in a product category for the first time or (b) repurchase a product in the same category. For choice (a), the interaction flow begins with an active decision by the user to search for either a brand name (an exact match, e.g. Pantene) or a generic product category (a broad match, e.g. shampoo). Product-brokering VAs, such as Alexa, sequentially present a default option 'top search result' one at a time. The VA recommends new products only if the consumer answers 'No' to the assistant's question 'Do you want to order this?', and the purchasing process ends when a user either agrees to purchase the item or halts the process. For choice (b), when a user has already made a purchase using a VA, information that is stored in the system is retrieved to recommend a swift repurchase (an automated match).

Dellaert *et al.* (2020) provided an initial exploration of how consumer decision-making may change in the presence of AI-based VAs. In particular, these authors advanced that, compared to traditional online purchase environments, VAs will reduce the scope of options considered (set size) and amplify a brand lock-in effect (path dependence).

The tendency to process fewer recommendations while voice shopping might be explained by the presentation of a single item at a time. Sequentially searching for alternatives using voice commands demands higher working memory capacity than that of screen-based shopping (Muniz and Morwitz, 2019 – see Further reading). Consequently,

the VA may reduce the consumer visibility of product alternatives, which creates a 'filter bubble' (Colleoni, Rozza, and Arvidsson, 2014). For consumers, this means 'trading sovereignty over their preferences for guidance in selecting the best option' (Dellaert *et al.*, 2020, p. 2). Providing visibility of one option requires consumers to decide whether to maintain control over the choice set or delegate the decision to the VA. Such a scenario produces immediate effects for consumers because it excludes potentially more favoured options (Nedungadi, 1990). However, it can prevent users from making poor decisions by selecting average or irrelevant options (Diehl *et al.*, 2003), but only if the VA operates in the consumer's interest. In this context, product-ranking algorithms on VAs assume an even more critical role than they do in web or mobile applications.

When shopping with a broad match (i.e. when consumers do not have strong brand preferences), the way a choice is presented to the decision-maker (or 'choice framing' [Araujo, 2018]) can significantly affect the shopping decision. The authors conducted an individual session experiment in which, after reading a report that manipulates their trust towards VAs (high vs. low), the subjects (n = 180) were asked to purchase a utilitarian product (batteries) using a generic search term (broad match) on Alexa (Mari and Algesheimer, 2021). The findings show that trust towards Alexa has a positive direct effect on the consumer's satisfaction with the shopping decision. Therefore, VAs that are capable of building trust with consumers in terms of competence, benevolence and integrity (Mayer, Davis, and Schoorman, 1995) drive higher decision satisfaction. This effect is significant regardless of the average brand awareness and price of the presented options. Furthermore, the direct effect of condition on purchase satisfaction is mediated by the number of options that the VA presents (consideration set size). As the authors hypothesised, higher trust results in a lower number of options, which turns into higher satisfaction with the decision. In addition, trust was found to affect the likelihood that consumers would choose a default option recommended by Alexa. Overall, 60% of the respondents had purchased the first recommended brand, and 83% (n = 149) relied on the first three options provided by Alexa before finalising the purchase, which confirms consumer bias towards default choices.

Although choice-framing of a VA similar to a pre-checked box on Internet forms does not force the user to make a decision, it may produce several unanticipated effects. A simplified representation of the marketplace reduces the consumer visibility of alternative products and features. While a lower number of alternatives may lead to less regret over foregone options, it may reduce exploration while increasing brand polarisation.

Several researchers postulate that shopping-related VAs might contribute to the loss of autonomy during the decision process, which would have implications for assessment and decision-making (e.g. André *et al.*, 2018). After a user purchases a product using a VA, the recommendations in the same category will start from the purchased brand, whether the user had previously expressed a brand preference (exact match) or not (broad match). This initial step towards 'autonomous shopping' has the potential to significantly reduce (or even eliminate) the need for human decision-making, thereby 'challenging deep-rooted human–machine relationships' (De Bellis and Johar, 2020, p. 75). Behavioural consistency of prior consumption (or path dependence) activates an inertia mindset by prompting a psychological disposition to minimise thinking (Henderson *et al.*, 2020). That process produces a substantial risk for the filter bubble or echo chamber effect (Colleoni, Rozza, and Arvidsson, 2014). The mentioned biases and heuristics in consumer decision-making are likely to affect marketing practices and pose both challenges and opportunities for managers.

Defining a communication mix strategy for voice

The introduction of VAs has created new possibilities for digital marketers. However, the simultaneous growth of several voice ecosystems and the explosion of services from VA manufacturers and suppliers instils uncertainty. As such, organisations try to find a strategic approach to voice implementation that minimises commercial risks and maximises first-mover advantages.

Consultants and advisors in the field of new technologies are calling for a voice-first paradigm shift. Nevertheless, voice marketing and Voice Commerce strategies are more likely to be initially treated by companies as a stand-alone implementation. As Kris Zanuldin, Head of Product at Amazon Pay, says to Pymnts.com, there is a need to silo voice technologies and consider 'What is my voice strategy?' because 'Without really focusing on that question, companies will struggle' (see Further reading). There is a consensus among managers that voice will gradually move from a stand-alone strategy to a key aspect of the overall business strategy with strong integration into DM and e-commerce plans (e.g. Sterne, 2017). Therefore, it is strategically important to understand what voice can and cannot do for marketing and sales.

Successful definitions of DM and e-commerce plans require a mix of communication activities that are classifiable in terms of owned/paid/earned media and content. Marketers and e-commerce leaders can initiate similar initiatives, such as launching a branded skill, although with substantially different objectives – branding versus sales (Figure 7.1).

While voice marketing focuses on growing a brand with increased awareness and engagement, Voice Commerce closely supports consumer exploration and decisions about products or services. When organisationally separated, marketing and e-commerce especially benefit from the synergistic implementation of a plan. This combination of push and pull communication activities needs to be shaped around the unique bidirectional characteristics of AI-powered VAs. At the same time, interaction management (bottom) often happens across media and functional areas requiring the simultaneous management of campaigns, relationships and service. Whether an extension of the current marketing and sales channels or as a stand-alone execution, these communication activities represent an opportunity for companies to increase consumer intimacy. For instance, Starbucks has created a comprehensive voice-based service across voice platforms in which voice marketing and commerce activities are integrated. Long lines during peak times represent a key driver of consumer dissatisfaction with a direct negative effect on sales. This factor, when combined with the insight that 73% of users order the same Starbucks product every visit, led to the creation of an Alexa skill (RAIN, 2020 – see Further reading). Voice shoppers who reorder their favourite drinks and skip the queue have a monthly cart size that is 16% higher than those of non-voice users (RAIN, 2020). In China, Alibaba's Tmall Genie users can have their Starbucks order delivered to their location while paying with their Starbucks account and receiving loyalty rewards. However, beyond transactional convenience, the Starbucks voice application enables users to listen to the brand's well-known music playlists, which recreates the coffee shop experience in consumers' homes.

Figure 7.1 shows a sample of communication instruments in different functional areas of DM and e-commerce. These tools can be considered tactical or strategic depending on their implementation, and they could become more widespread and technically ready than others. With the exception of voice skills/actions development, which is incredibly advanced (as shown in the mentioned cases), other marketing and e-commerce drivers
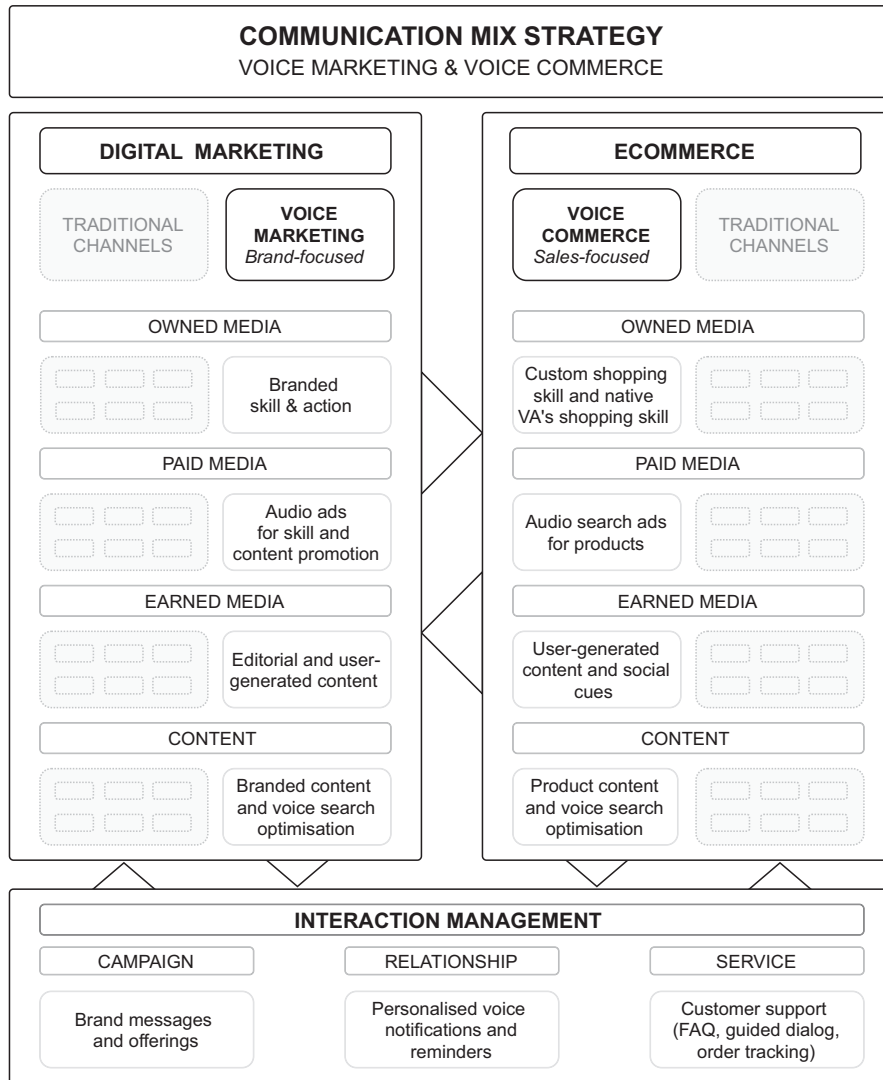
Figure 7.1 Communication mix strategy for voice marketing and Voice Commerce.

Source: own elaboration.

are still in their infancy. The algorithm that ranks the information on VAs represents a 'black box' (Voosen, 2017, p. 22) for managers who are unable to assess risks and an opportunity in the area of discoverability. Consequently, Voice Search Optimisation is underdeveloped, with only 3.8% of businesses offering information in voice searches, according to Uberall (see Further reading). Regarding paid media, audio advertising is limited to a few options. Among these, Spotify suggests buying tickets for the closest concert venue of the user's favourite artist. Amazon launched its audio ads platform, which allows advertisers to promote products on Amazon Music.

In summary, several common activities in traditional marketing and e-commerce, such as in the areas of campaigning or CRM, have not yet found a respective voice format. As Kris Zanuldin from Amazon states on Pymnts.com (see Further reading), 'Alexa is obviously based on technology, but customers do not view her as technology. She has a

personality; she is a friend [. . .] How do you integrate a friend into your commerce experiences? Think about it from that perspective as opposed to thinking about voice as a new piece of technology'. Within this continuous platform development, managers are called to decide whether to proactively implement solutions (act) or wait for a richer pool of best practices (react).

Strategy implications for managers and discussion

Swift changes in consumer behaviour and disruptive innovations in the voice technology ecosystem require managers to define if, how and when to implement solutions urgently. Although to different degrees, all companies will re-adapt their DM and e-commerce practices in response to the biases and heuristics introduced by VAs. Per our research involving international AI experts (n = 30) and AI-aware managers (n = 62), at least three discriminant factors influence managers' strategy definition. A company's level of dependency on AI-based VAs is driven by the likelihood that, in its product category, (a) an initial purchase is conducted using auditory cues only (i.e. mono-processing purchase [vs. multi]), (b) a repurchase is automated without requiring an additional consumer decision (e.g. shipping every month) and (c) a consumer searches by category (broad match) or brand (exact match).

Figure 7.2 shows that when companies sell products that consumers are likely to purchase using voice-only channels and repurchase automatically (top right area), their adoption of voice-based initiatives becomes 'mission-critical'. Consumer goods firms that produce low involvement and utilitarian products, such as toothbrush replacements, are required to act fast to grow or protect their sales (Voice Commerce). By contrast, companies that distribute high involvement and hedonic products, such as apparel, might look at the challenges and opportunities that are posed by VAs as 'optional'. As such, they may have a lower sense of urgency or employ almost solely brand-oriented activities (Voice Marketing).

In the upper area of the quadrant, we can distinguish between products with uncertain lifetimes (facing 'radical' change), such as batteries and light bulbs, and regular replacements ('mission-critical' change), such as razor blades and toothbrush heads. In the lower area of the quadrant, we can characterise products that, even within the same industry, are
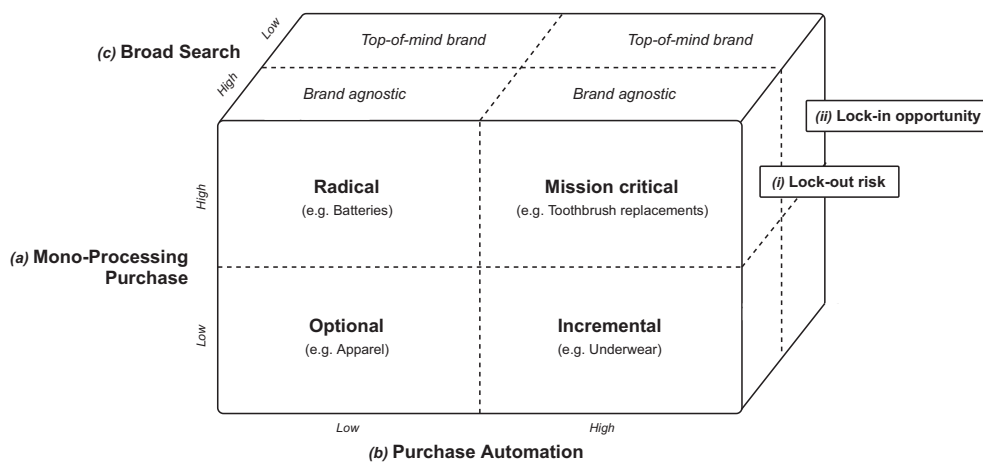
Figure 7.2 Voice technology disruptive potential across product categories.

Source: own elaboration.

likely to be repurchased in the same form and shape (facing 'incremental' change), such as underwear, and those like apparel, for which, repurchase of the same product is unlikely to happen ('optional' change).

Detrimental consequences for companies can be mitigated when users express strong brand preferences (i.e. search using an exact match) and the company offers a 'top-of-mind' brand. In this scenario, consumers automating the purchase of their preferred brand offer 'lock-in opportunities' for the company. By contrast, when consumers are 'brand agnostic' (i.e. search using a broad match) and set the VA to automatically repurchase the product, a company may experience 'lock-out risks'. As such, consumer search behaviour on VAs may affect sales results.

Building on extant literature, original studies and cases, we analysed the unexpected consequences of using in-home VAs on consumer decision-making. Furthermore, we discussed how these changes in consumer behaviour, together with voice technology advancements, are likely to impact DM practices. Future research on voice marketing and Voice Commerce should more closely explore the interconnected effects of machine behaviour (VA), consumer behaviour and brand behaviour per an innovation ecosystem perspective to fully capture the complexity and dynamics of this phenomenon.

Key lessons for future research

- AI-based VAs, which are developing at an exponential rate, are altering shopping behaviour and posing new challenges and opportunities for marketers.
- VAs introduce biases and heuristics in consumer decision-making that are likely to affect DM and e-commerce practices.
- Managers are urged to decide whether to proactively implement solutions (act) or wait for a richer pool of best practices (react).
- Marketers need to integrate voice-based marketing and sales initiatives into their current communication mix strategy.
- The company's level of dependence on VAs is subject to a consumer's likelihood of making a purchase using voice-only channels, automating purchases and searching using a broad match.

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Section 3

Customer experience and servicescapes

8 The role of social capital in digitalised retail servicescape

Jussi Nyrhinen, Mika Skippari and Terhi-Anna Wilska

Introduction

Regardless of the rapid digitalisation of the retail trade and the fast growth of online commerce (e-commerce), the majority (i.e. 88%) of all global retail of goods and services was still bought from physical stores (i.e. 'offline' or 'brick-and-mortar' stores) in places such as high streets or malls before the COVID-19 pandemic (Statista, 2019 – see Further reading). Pandemic's preventing measures, such as quarantines, social distancing and moving restrictions, have forced consumers to increasingly adopt digital channels and that has further accelerated the digitalisation of retail trade. However, according to the blog post by World Economic Forum, the consumers are already returning to physical stores in China, where the COVID-19 outbreak has started to ease (see e.g. Zhou and Goh, 2020 – see Further reading). A similar development can be expected in the other parts of the world when quarantines and other restrictions are removed because consumers still have many reasons to visit physical stores. Among these reasons are social needs, such as real-life human contacts with other customers and store personnel (Maruyama and Wu, 2014). These needs are linked to the demand for authenticity and human interaction in a digitalised consumer society, which means that consumers also seek experiences rather than solely focus on economic norms and pragmatic motives while shopping (see Novak, Hoffman, and Duhachek, 2003). Thus, retail stores are places for humans to interact and gather (Pan and Zinkhan, 2006) as well as to examine products and to feel the shop's atmosphere (Piotrowicz and Cuthbertson, 2014).

The need for experiences provides retail stores an opportunity to be more than just a channel of distribution (see Treadgold and Reynolds, 2016). These experiences are created across digital and physical environments because consumers are increasingly shopping across multiple channels at different stages of the purchase process, and different channels serve different purposes (Dholakia *et al.*, 2010). For instance, a consumer may use a digital channel (i.e. online/mobile store) for information searching, a physical store for viewing and examining the product, and return to a digital channel to make the purchase (Kumar and Venkatesan, 2005). Hence, digitalisation of the retail trade has not only created new types of retail businesses but also altered how 'traditional' retail services are consumed and experienced; customers now interact with retail shops through a wide spectrum of touchpoints over plethora of channels and media types (Lemon and Verhoef, 2016). Nevertheless, the role of social interaction has not lost its importance in digitalised retail environment: only, its role as a determinant for customer experience has changed. Therefore, there is a need for better understanding the standpoint of human factor in

digital retailing and how customer experience is formed in a retail space comprising multiple channels.

In this chapter, we aim to extend the understanding of the role of the social and experiential factors in explaining customer experience in digitalised retail environment. Firstly, we discuss how digitalisation has dispersed customer experience into 'omnichannel customer experience' where customers utilise both digital and physical channels, in a convergent manner and often simultaneously while interacting with brands. This process of customer's interaction with a brand, as well as customer's responses and impressions of it, is known as customer experience (Gentile, Spiller, and Noci, 2007). Secondly, we draw on the concept of servicescape, which comprises both tangible and intangible features which make up the service experience (Bitner, 1992, Tombs and McColl–Kennedy, 2003). Prior research on servicescape has mainly focused on digital and physical settings, while research on how these two settings related to the social element of retail is still rather scarce (Bolton *et al.*, 2018). Finally, recognising that the servicescape consists of physical, digital and social realms (Bolton *et al.*, 2018), we explore the role of social capital in determining the customer experience in digitalised retail servicescape. The theory of social capital is applied here because it captures the interactions, social relationships and social networks in terms of economic value (Bourdieu, 1980; Lin, 1999; Putnam, 2000; Coleman, 1988). We contribute to the theory of customer experience by offering an integrated view of social capital and servicescapes that explains how interpersonal relationships and social networks are formed in retail stores that comprise digital and physical channels.

Omnichannel customer experience

Customer experience, by definition, is a customer's overall internal and subjective responses to a series of interactions with an organisation (Gentile, Spiller, and Noci, 2007) or a process, where customers construct experiences by merging services with their own lives' processes (see e.g. McColl–Kennedy *et al.*, 2015). When consumers experience services in a digital–physical environment, consumers often switch across both online and offline channels as well as a desktop and mobile devices within a single transaction process, and therefore, consumers expect seamless interplay of the retailer's multiple channels (Piotrowicz and Cuthbertson, 2014; Verhoef, Kannan, and Inman, 2015). Thus, the interest of retailers and scholars has turned from measuring individual channel performance – multichannel retailing – towards the integration of offline and online channels, which is referred to as 'omnichannel retailing' (Herhausen *et al.*, 2015). In omnichannel retailing, retailers combine multiple online (digital) and offline (physical) channels in a convergent manner to provide a unified customer experience during the purchase process (see e.g. Herhausen *et al.*, 2015; Verhoef, Kannan, and Inman, 2015). In the omnichannel retail context, customer experience is constructed through interactions across myriad digital and physical touchpoints (Lemon and Verhoef, 2016; Verhoef *et al.*, 2009).

Prior studies have shown that a satisfying omnichannel experience may lead to increasing purchases and stronger customer loyalty due to increased interaction with customers (Verhoef, Kannan, and Inman, 2015). This integration may augment the retail offering and enable customers to achieve their shopping goals more efficiently and effortlessly (e.g. Kumar and Venkatesan, 2005; Verhoef, Kannan, and Inman, 2015). Yet, empirical evidence on the success of omnichannel retail is rather scarce because many firms have been unable to provide a seamless omnichannel experience (Herhausen *et al.*, 2015). The

challenge here is to map out customers' unique experience through digital and physical channels (cf. e.g. Lemon and Verhoef, 2016). Therefore, we focus on experience creation as an interactive process that takes place in the physical and digital spaces of the retailer. In service literature, these spaces and social interactions within the theme are defined as the servicescape (see e.g. Ballantyne and Nilsson, 2017; Bitner, 1992).

Digital–physical servicescape

The dispersion of consumer behaviour between online and offline store environments has led scholars to re-examine the concept of servicescape (Bitner, 1992, Tombs and McColl-Kennedy, 2003). The servicescape is initially defined as a setting for the customer experience, a build environment that affects both consumers and employees in service encounters (Bitner, 1992), such as store space. Later definitions have acknowledged human interactions between customers and service personnel as an integral part of the servicescape (e.g. Johnstone, 2012; Rosenbaum and Massiah, 2011, pp. 474–480).

Regardless of the intangible nature of the digital servicescape, many sensory attributes of the physical servicescape are metaphorically maintained when conceptualising digital retail environments and virtual interactions (Ballantyne and Nilsson, 2017). For example, a website's design will affect the atmosphere of an e-store similar to how the interior shapes the atmosphere of a physical store. Moreover, the customer experience in the digitalised servicescape has become more social by nature because SM platforms have increased customer-to-customer interactions (Lemon and Verhoef, 2016). Hence, customers may share their experiences as well as become influenced by peer customers during a service encounter (Lemon and Verhoef, 2016; Libai *et al.*, 2010). Besides the online peer-culture, mobile technology has also brought peer culture into the physical channel. Customers can now communicate about their service experiences with their social networks via portable devices in real time, in a physical store (Piotrowicz and Cuthbertson, 2014). Hereby, customer servicescape can be regarded as three-dimensional, consisting of digital, physical and social realms (Bolton *et al.*, 2018).

However, our understanding of the customer experience in the digital–physical servicescape is rather limited. Notably, the prior literature has focused on only one or two realms (Bolton *et al.*, 2018) at a time. Models that conceptualize customer experience were initially developed separately for either the offline context (e.g. Shilpa and Rajnish, 2013), the online context (e.g. Rose *et al.*, 2012) or to measure and compare the effects of individual channels separately (e.g. Wang, Jiang, and Chen, 2004). Understanding interconnections between digital, physical and social realms may help in creating sophisticated service systems that benefit consumers, organisations and society (Bolton *et al.*, 2018). Therefore, better knowledge of how the three realms of the servicescape could converge is needed to create a superior customer experience.

Customers' participation affects the essence of the service encounter because service experiences are co-created through interactions among customers and/or between customers and a retailer. Moreover, social interaction is among one of the motives for customers to visit retail stores (e.g. Skippari, Nyrhinen, and Karjaluoto, 2017). In addition, interpersonal relationships and social networks that are supported by digital and/or physical servicescapes may provide retailers with a competitive advantage because they are more difficult to replicate than product- or market-related factors. Although this social nature of the servicescape is widely recognised (e.g. McColl-Kennedy *et al.*, 2015; Rosenbaum and Massiah, 2011), the research on how customers and service personnel

create trust and reciprocal relationships through the physical, digital and social realms of the servicescape is scarce. To understand how these social factors can be capitalised, the concept of social capital is utilised to examine the servicescape.

Social capital in servicescape constitutes customer experience

This chapter examines interpersonal relationships, social networks and customers' involvement in relation to the customer experience. In literature, these kinds of phenomena are included in the concept of social capital (see Bourdieu, 1980; Lin, 1999; Putnam, 2000; Coleman, 1988). Social capital is defined as an investment in social relations with expected returns (see Lin, 1999) or further connections among individuals, including social networks and the norms of reciprocity and trustworthiness that arise from them (see Putnam, 2000). In the retailing context, social capital is examined as reciprocal actions between customers and retailers that represent both interpersonal and institutional levels of reciprocity (i.e. networks and relationships among customers as well as between customers and a retailer and its personnel) (Miller, 2001; Skippari, Nyrhinen, and Karjaluoto, 2017).

Studying customer experience in relation to social capital is crucial because it is important to understand how a customer's experience in the retail environment constitutes social ties between the customer and service personnel. These social ties may engender interpersonal relationships that could become a source of customer loyalty towards the retailer. Therefore, managing the specific servicescape factors that affect social capital can help retailers with multiple channels stand out from their competitors through developing stronger relationship with their customers.

The social dimensions of the retail environment have been studied from the perspective of customer satisfaction, buyer behaviour and purchase intentions, but not in relation to either retail patronage or the customer's social experience (Johnstone, 2012). Yet, how a customer identifies with the servicescape can be mutually consequential; customers may patronise a store if they perceive unity with either their peers, with other customers in general, or with the retail store itself, including its personnel (Johnstone, 2012; Sirgy, Grewal, and Mangleburg, 2000). Therefore, retail stores can also be seen as a *platform for non-commercial relationships*, such as those with family members, friends and acquaintances (Johnstone, 2012; Pan and Zinkhan, 2006). Moreover, for some consumers, the *need for human connection* is a central facet in retail shopping, hereby supporting the research that suggests that people become attached to places for the social connection (see Johnstone, 2012; Low and Altman, 1992). For instance, consumers visit retail stores because such environments enhance human contact and provide a sense of belonging (Johnstone, 2012; Shields, 1992). Moreover, the main foci of previous studies have been on product-relevant (i.e. product quality and price), market-relevant (i.e. convenience and service quality) and personal factors (i.e. demographics and attitude towards a store) (see Pan and Zinkhan, 2006) that explain retail patronage.

Regardless of the social motives for visiting retail stores in a physical setting, service is usually experienced in a socially detached manner or in 'social bubbles' where direct interaction is limited to their own entourage. Nevertheless, socially detached consumers in the physical servicescape may create a feeling of togetherness (see Rihova *et al.*, 2013). This means that a generally friendly and social atmosphere may exist, even though consumers do not directly interact with others outside their own entourage in a service encounter. However, SM (e.g. social networking services, messaging

applications and review platforms) have altered these dynamics because customers now directly discuss and review their experiences with their peers online who are often total strangers.

Customers may also influence each other through SM during the service encounter, and mobile technology has augmented this peer culture in the physical setting as well (Leeflang *et al.*, 2014; Lemon and Verhoef, 2016). In addition to the challenge of managing peer influence that is outside retailers' control, SM has brought an unforeseen sense of community within the customer base of some retail brands. For instance, endorsers of a certain brand may form an ongoing neo-tribe (cf. Maffesoli, 1996), which may gather in physical settings but importantly will congregate in an online platform (Rihova *et al.*, 2013). This community membership, which transcends the service's physical experience, can lay the foundation for social capital in various forms, such as reciprocity, social trust and well-being (Cova, 1997; Rihova *et al.*, 2013).

Due to the central role of human interaction in the service experience, the identity of a retail space is not limited to its physical characteristics; rather, it is also related to the social construction of place through the experiences of individuals and groups (see Bolton *et al.*, 2018; Rosenbaum and Massiah, 2011). This means that the physical and functional clues of the servicescape can facilitate the meanings of the place, which are initially formed and interpreted by people in the servicescape. Therefore, a place can be regarded as a social construction; the servicescape is shaped by the interactions between people within it and the retailer neither owns nor has complete control over its servicescape (Johnstone, 2012). The customers' reasons for becoming attached to a retail location, and repeatedly visiting it, may extend beyond the physical servicescape and product-related factors (Johnstone, 2012). In sum, these views support the notion that consumers may keep patronising shops that facilitate their social experiences with other customers or with the service personnel. Notably, a diminutive amount of prior research has examined how a place itself can constitute the creation and nurturing of consumers' non-commercial relationships with the retail environment or how customers' social relationships may mould the servicescape (Johnstone, 2012).

Prior literature (e.g. Rihova *et al.*, 2013) has shown that customers co-create their experiences in a service setting in social interactions with service personnel and other customers. Therefore, the value of service is reliant on how well a retailer is able to involve customers in the service experience (Prahalad and Ramaswamy, 2004). In that sense, the customer themselves can be a resource for the retailer as well as for other customers who seek human contacts from retail stores (cf. Coleman, 1988). This is due to the contextual and individual nature of the experience, which is affected by the customer's own processes (Prahalad and Ramaswamy, 2004).

In the retailing context, while customers have a central role in co-creating their own experiences, retailers reciprocally offer value propositions by providing suitable products and services and a retail setting with the aim of igniting the value co-creation processes through interactions and collaborations with customers (Mohd-Ramly and Omar, 2017). Prior studies have shown how value in the service experience is formed within insulating, bonding, communing and belonging practices, which illuminate the appeal of shared consumption experiences, particularly in physical contexts (Rihova *et al.*, 2013). However, there is a research gap regarding how social interaction in the physical context is positioned in relation to the interaction through SM platforms. For instance, service-oriented retailers can benefit from the importance of bringing customers together in a physical setting alongside the online community (Rihova *et al.*, 2013).

Social capital as an outcome of the customer experience

Besides constituting in experience formation, social capital can be seen as the outcome of customer experience. Coleman (1988) examines social capital through its outcomes: *trust* (insurance provided by close ties), *community* (social relations *per se*), *reciprocal relationships* (normative structures enable mutual reliance) and *access to resources* (the network of social exchange). Prior studies on customer relationships in online commerce have focused on how to fulfil customer expectations in online service encounters (see Bart *et al.*, 2005). Even though the principles for forming customer trust in the servicescape still apply in digitalised commerce, their form differs from that of offline commerce (Papadopoulou *et al.*, 2001). For example, in the online context, the mechanical factors of the servicescape are related to a website's design, while the functional factors consist of the user interface and payment arrangements (Harris and Goode, 2010). Prior studies have acknowledged the importance of both mechanical and functional servicescape cues as antecedents for trust formation (e.g. Mathwick, Malhotra, and Rigdon, 2001). These cues create a first impression of the service (Berry, Wall, and Carbone, 2006) and thus they also create a setting for social interaction in the servicescape. For instance, the servicescape's cues constitute a retail brand image that indicates what kinds of shoppers visit a certain store (Sirgy, Grewal, and Mangleburg, 2000).

In addition, the absence of face-to-face contact with store personnel and other customers cannot be easily replaced in the digital retail environment (Papadopoulou *et al.*, 2001). Therefore, previous studies have suggested that an online servicescape should facilitate online presence of other customers and service personnel with virtual advisors (e.g. customer service chat) and community features (e.g. embedded customer reviews and the company's SM profile). Some studies argue that a sense of social presence may also be provided by non-human entities, such as service robots (e.g. virtual assistants like Apple's Siri or Amazon's Alexa) (van Doorn *et al.*, 2017). In high-involvement or high-risk purchases, the advisory mechanism may notably decrease a consumer's concerns and increase his/her perceived trust towards the retailer (Bart *et al.*, 2005; Urban, Sultan, and Qualls, 2000). Online brand communities may also enhance information exchange and knowledge sharing as well as provide a supportive environment for customers, which will increase consumer trust towards the retailer (Bart *et al.*, 2005).

Due to a lack of familiarity or physical presence and the perceived uncertainty of online commerce, challenges in building customer trust are inherent to online commerce (see Papadopoulou *et al.*, 2001). Therefore, omnichannel retailers may have an advantage over pure online retailers (Brynjolfsson, Hu, and Rahman, 2013). This trust may be directed towards an entire retail brand because a positive impression of an omnichannel retailer that is based upon experiences with the prior channel of a retailer has been shown to reflect on consumers' evaluations of alternative channels of the same retailer (Kwon and Lennon, 2009).

Trust is also a mechanism for building a reciprocal relationship between the customer and the retailer. For example, in DM, customers' willingness to share information is a prerequisite for marketers to create desired personalised experiences (Schoenbachler and Gordon, 2002). Therefore, digital marketers seek to strengthen their information sources by forming trust through customer relationship-building practices (Schoenbachler and Gordon, 2002). In other words, a customer's consent to provide personal data for the efficiency of the retailer may afford them more personalised experiences in return. Loyal customers may feel affection and normative commitment towards a retailer (see Miller, 2001)

and consequently practice patronage behaviours and/or become endorsers of the retailer in return. Retail patronage behaviour involves trading off between economic costs and relationship benefits (see Baltas, Argouslidis, and Skarmeas, 2010) (i.e. consumers visit the retailer before its competitors or shop more frequently if they consider the relationship mutually beneficial). On a deeper level of customer loyalty, customers take pleasure in sharing their knowledge with peers and family (i.e. customers become vocal advocates for the product or service and constantly spread WOM with a positive valence) (see Griffin, 2002). Although prior literature acknowledges the ways how digitalisation has set challenges for forming trust and long-lasting customer loyalty, the evidence of how the elements of a blended servicescape affect these social capital outcomes is notably scarce.

Conclusion and implications

There is still scarce empirical evidence on how elements from the digital, physical and social realms of the servicescape can be combined to facilitate the customer experience (Bolton *et al.*, 2018). The COVID-19 pandemic has also emphasised the importance of understanding the interplay between online and offline stores as well as social and experiential aspects of retail shopping. Firstly, social distancing restrictions and quarantines have rapidly increased the adoption of digital channels but also re-evoked desire to buy locally sourced products and supporting community stores (Vujanic and Burns (2020) – see Further reading). Above all, those retailers that have been able to respond to the changing needs and behaviours of their customers using online and offline channels have been more resilient to the crisis. For instance, according to the blog posts by Retailing Info Systems and Adobe Analytics (see Further reading), buy-online-pickup-in-store orders surged 208% in spring 2020 compared to 2019 because they ensure a safe transaction and provide customers instant gratification (Abramovich, 2020; Seraphin, 2020). Also, omnichannel retailers have been able to enhance their customer experience by using a storefront as a mini fulfilment centre for safe staff and customer interaction (Seraphin, 2020).

As depicted in this chapter, most studies have either focused on examining customer experience formation on a single channel basis or emphasised the consistency of service elements. More research is thus needed on the connectivity across the digital, physical and social realms of the servicescape: how customers may participate in experience creation to attain their goals, and how interaction in the servicescape can be linked to the outcomes which indicate sustainable customer relationships. This chapter suggests applying the theory of social capital to conceptualise how human relationships and social networks can act as a resource in experience formation. The chapter also links the elements of the servicescape to the outcomes of social capital, such as trust and mutual reciprocity between a customer and a retailer, which are prerequisites for lasting customer relationships.

Key lessons for future research

• To further explain how the elements from the digital, social and physical realms of the servicescape facilitate social capital in retail, there is a call for empirical studies on how social interaction in the physical context is positioned in relation to interaction through SM platforms.

- In more detail, how servicescape elements such as atmospherics (scents, visuals, etc.) nurture non-commercial relationships among customers in omnichannel retailing?
- There is a call for more empirical research on how the customer experience in a blended servicescape is associated with human contact, forming trust and developing a reciprocal relationship between the customer and the shop.

Disclaimer

The research presented in this chapter was collected for my University of Jyväskylä Doctoral Dissertation *Social Capital in the Digitised Servicescape* (2020). The copyright for this JYU thesis belongs to me, Jussi Nyrhinen, as the Author. Research presented here has not been otherwise previously published.

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9 From places to platforms

Examining the transformation of servicescapes

Julie Horáková and Outi Uusitalo

Introduction

Despite being one of the basic elements of the Marketing Mix and an important variable in creating consumers' shopping experiences, the importance and meanings of place as a multidimensional entity are often overlooked. While the potential and worth of places are acknowledged, emphasis on independence from both time and physical place that is brought by the digital era has shifted the status of place towards a background variable that merely complements the main product or service provided. Increasing attention towards the digitalisation of shopping has shifted researchers' focus towards the functions and usability of interfaces, and the role of place as a multidimensional entity is often over-looked. However, research shows that places can hold important meanings for consumers, and they strongly contribute to the creation of customer value (Brocato, Baker, and Voorhees, 2015; Johnson *et al.*, 2015; Rosenbaum *et al.*, 2020). Therefore, the notion of retail place as a focal marketing issue is not likely to become irrelevant, even though digital technology increasingly mediates shopping and changes the shopping environment.

The DM literature has paved the way for the versatility of research of digitalisation in the context of marketplaces (Dwivedi *et al.*, 2020; Kannan and Li, 2017; Lamberton and Stephen, 2016). While the research of online retailing is proliferating, many studies have focused on the functionality of exchanges (Hagberg, Sundstrom, and Egels-Zandén, 2016). Few studies have tackled the notion of the transforming shopping environment and the special features of online shopping locations as places. One reason may be that, although online shopping and digital services have seen constant growth in recent years, the disappearance of brick-and-mortar stores in the foreseeable future seemed unimaginable. However, the COVID-19 pandemic that hit commerce worldwide has shown that what seems unthinkable can become reality in a matter of days. Strict restrictions and quarantine orders forced also the consumers preferring to shop in physical stores to switch from offline shopping to the online environment as retail shops and service premises were closed. Given the importance and multidimensionality of place, there is a need for more thorough research into online shopping places and their role in creating customer experience and value.

This chapter focuses on the changing nature of commercial places from physical shopping locations to digital platforms. We provide a conceptual framework for understanding the significance and meaning of digital places to consumers and apply empirical survey data to illustrate the critical aspects on which marketers should focus when designing online places that matter to create value for consumers' everyday lives.

Conceptualisation of place in marketing

Although place is considered a foundation of marketing, the conceptualisation and deep analysis of commercial places in marketing literature are incoherent. What the Marketing Mix synthesises under the name 'place', which could evoke the notion of a static physical location, is a complex distribution channel that represents the flow of goods from the producer to the final consumer to deliver customer value (Kotler *et al.*, 2013). Research fields, such as geography and environmental psychology, have allocated extensive attention to the conceptualisation of place. In one of the most influential works on the topic, Relph (1976) conceptualises place as a multidimensional concept consisting of three main components: location, activities and meanings. He also emphasises the importance of place both functionally and existentially. Tuan (1977) makes a distinction between place and space. According to him, place embodies established values and represents concreteness, stability and belonging. Thus, place may be regarded as safe and stable, whereas space represents openness, change and abstractness and allows freedom and movement. Space includes a social character; it produces social relations and social relations produce space. However, this does not necessarily mean that physical places are always stationary (Cresswell, 2004). For instance, sales booths and pop-up stores are examples of places the location of which is constantly changing. As for online platforms as places, they tend to conform to the definition of space.

To distinguish between the important places in consumers' lives such as home (first place) and work (second place), some authors (Oldenburg, 2001; Rosenbaum and Smallwood, 2013) address commercial places as 'third places'. They highlight the social nature of a location and argue that these places act as informal settings of social life, and they encourage formation of social relationships and networks between different actors in the marketplace. Consumers often seek a social support in commercial places to escape isolation and loneliness that they may experience in first or second places (Rosenbaum and Smallwood, 2013). Moreover, certain commercial places can provide restorative (Korpela *et al.*, 2001) and therapeutic benefits (Rosenbaum *et al.*, 2020) and have, therefore, a major impact on consumers' well-being beyond the place.

Meanings of place

Meanings of place are created by the interaction of three components: environment, self and others (Gustafson, 2001). Consumers actively create and shape these meanings based on their personalities, social environments and lifestyle (Thompson and Arsel, 2004). Per Gustafson (2001), places can also hold meanings that are not dependent on the self or others but are rather constituted by a symbolic or historical context of the place. Researchers focusing on commercial places (Brocato, Baker, and Voorhees, 2015; Kyle, Mowen, and Tarrant, 2004) suggest that meanings are co-created and assigned to places when consumers are engaging in various activities and social relationships within a place. Meanings are then subjective and based on personal experiences and feelings with that place.

Relph (1976) indicates that activities that different actors engage in at a certain place are a vital component of that place. Places have long been viewed as the main facility of economic exchange (Bagozzi, 1975) that acts as a repository of potential resources for different market players (Rosenbaum *et al.*, 2020). However, in the contemporary marketplace, buyers and sellers are no longer isolated actors that engage in a simple buyer and seller transaction. Digitalisation constantly changes the marketplace in multiple ways

(Hagberg, Sundstrom, and Egels-Zandén, 2016). The roles are blending; boundaries are blurring and the exchange of money, goods, services and information are resulting from complex relationships between various actors in the marketplace. Consumers actively participate in value creation as they engage socially and emotionally with place settings as well as employees and other consumers (Debenedetti, Oppewal, and Arsel, 2013).

Servicescapes and atmospherics

In her seminal work on the physical surroundings of services, Bitner (1992) conceptualises the sites of consumption as servicescapes. She examines how different environmental dimensions, such as space, functions, signs and symbols, or various ambient conditions, such as temperature or noise, influence consumers' internal responses and, therefore, the behaviour that they exhibit. Various elements of the physical place not only influence the behaviour of individual consumers but also affect social interactions and socioeconomic exchanges in servicescapes (Aubert-Gamet and Cova, 1999). Importantly, distinct attributes of the physical environment are experienced by consumers through sensory perceptions (Bitner, 1992). These distinct elements, when combined, forge an overall atmosphere that can attract consumers' attention, arouse affection and trigger or influence consumer behaviour (Turley and Milliman, 2000).

The changing nature of places

Commercial places have undergone profound changes in the past two decades due to digitalisation, which is transforming what consumers perceive as a place as well as how they relate to commercial places. Detaching from brick-and-mortar stores and physical shopping locations in favour of virtual spaces that appear on our screens but do not exist in the tangible world will imply increasing consumer power due to decreasing information asymmetry, increasing transparency and new possibilities for quick, many-to-many social interaction. This dematerialisation has become a significant characteristic of contemporary society; people dissociate from physical possessions, and tangible materiality is replaced by virtual consumption and intangibility (Arcuri and Veludo-de-Oliveira, 2018). Previously, solid relationships with material possession and physical places are becoming unstable, and consumers adhere to values, such as flexibility, adaptability, fluidity, lightness, detachment and speed (Bardhi and Eckhardt, 2017). Online retail stores represent the idea of space that is characterised as intangible and open (Tuan, 1977). Various service platforms offering access-based services and sharing are becoming increasingly popular because they allow consumers to orient themselves towards these values.

The lack of a clear conceptualisation of digital places in the existing literature is striking. Most recent studies on consumers' meanings that focus on commercial places (see e.g. Brocato, Baker, and Voorhees, 2015; Johnson *et al.*, 2015; Rosenbaum *et al.*, 2020) still focus on the physical environments in offline places. Few studies (see e.g. Ballantyne and Nilsson, 2017; Di Masso *et al.*, 2019) have addressed the increasing intangibility of online places and digital platforms. In this chapter, we define online places as virtual shopping locations that possess the characteristics of the space concept (Tuan, 1977). Thus, their physical and social atmospheric elements consisting of exterior, interior, layout, displays and human variables are transformed into abstract, changing digital symbols. However, in line with traditional places, online places act as a repository of available resources (Rosenbaum *et al.*, 2020) which facilitate socioeconomic exchange (Aubert-Gamet and Cova,

1999; Bagozzi, 1975) and provide social value. A major distinction between physical and online places lies in the dematerialisation and absence of the physical elements that provide stimuli to all senses. Because of the power of these stimuli, servicescapes can affect customers' beliefs about the place (Bitner, 1992) and trigger various in-store activities as well as purchase decisions (Turley and Milliman, 2000). However, in the online environment, the atmosphere and physical evidence are replaced by virtual cues and symbols that are characterised by certain features, such as movement, change and abstractness. Consumers who shop online from home will have a different experience from those who shop in physical stores and malls and use public or private transport to reach the shopping place.

The ongoing digitalisation transforms the shopping places in multiple ways. Many retailers maintain simultaneously both traditional physical shopping places and online store platforms, resulting in multiple shopping channels of the same retailer available for consumers. Increasingly, the channels exist in consumers' personal mobile devices. Multichannel retailing implies the existence of separate channels, whereas omnichannel concept refers to providing consumers the opportunity to seamlessly move between the channels and thus perform an integrated shopping process while utilising various different channels of a retailer (Hagberg, Sundstrom, and Egels-Zandén, 2016).

This changing experience of place is next analysed by applying the place attachment concept that captures the relationship between a consumer and a place.

Attachment to online places

Sense of place is a focal element in the concept of place, but commercial places are often regarded as lacking in a sense of place due to their inauthenticity (Relph, 1976). For example, shopping malls are constructed by managers to facilitate business, and they are manipulated to serve an artificial public purpose. Some authors even address them as non-places (Aubert-Gamet and Cova, 1999; Lewicka, 2011). Relph (1976) calls this 'placelessness' and connects it to mass culture and mass communication, which are weakening the identity of places. Despite doubt whether commercial places ever trigger consumers' emotional responses or offer possibilities for consumers to establish any kind of relationship with such places (see Lewicka, 2011), several studies indicate that commercial places also have the potential to elicit emotional responses. Accordingly, consumers can establish a strong attachment to commercial places (Brocato, Baker, and Voorhees, 2015) and even act as advocates/ambassadors of these locations (Debenedetti, Oppewal, and Arsel, 2013). However, with their lack of physical evidence and sensory stimuli, we must consider whether virtual places can offer the same experience and relational value as physical places to consumers or if online places and digital platforms are more like non-places. It is still unknown whether virtual places arouse consumers' emotions, influence their behaviour or even trigger strong feelings, such as love or attachment.

The changing environment is challenging how we understand places in the world around us. Consumers can no longer rely on physical evidence and material clues. Instead, they need to find a way to navigate the world of virtual reality with its symbolism and overlapping perspectives (Ballantyne and Nilsson, 2017). Place attachment has been widely researched in the fields of geography (Altman and Low, 1992), environmental psychology (Hidalgo and Hernandez, 2001) and tourism (Kyle, Graefe, and Manning, 2005). Several studies have explored this theory in commercial settings as well (Brocato, Baker, and Voorhees, 2015; Debenedetti *et al.*, 2013; Johnson *et al.*, 2015). Di

Masso *et al.* (2019) examine place attachment in increasingly mobile environments, where places become dynamic and fluid instead of fixed and stable. However, to date, no study has examined place attachment in the digital environment.

We draw on an existing conceptualisation of place attachment as a multidimensional bond between consumers and a particular place (Brocato, Baker, and Voorhees, 2015; Johnson *et al.*, 2015). The bond is characterised by a positive attitude and a tendency to remain close to the place (Hidalgo and Hernandez, 2001), and it is based on the symbolic meanings that are associated with the place (Altman and Low, 1992). The bond consists of a personal dimension (i.e. *place identity*), a functional dimension (i.e. *place dependence*) and a social dimension that encompasses the various social bonds that consumers establish in the place (Brocato, Baker, and Voorhees, 2015).

Place identity

Place identity represents the personal dimension of the attachment bond. It is an extension of one's self-identity and encompasses feelings, emotions and experiences as well as more abstract beliefs and symbolic connections that an individual has with a particular place (Proshansky, Fabian, and Kaminoff, 1983; Williams *et al.*, 1992). For consumers to identify with a place and establish a strong relationship, such as attachment, their self-identity has to align with the place's identity. Establishing this strong bond makes it part of the individual's concept of self and a way of self-identification (Brocato *et al.*, 2015). Place identity comprises cognitions of the sensory stimuli that we perceive at the place and their accumulation in the form of memories and experiences with the place over time (Proshansky, Fabian, and Kaminoff, 1983). It is clear that physical evidence and different attributes of a place have a significant impact on the formation of place identity in consumers' minds. In the digital environment, sensory stimuli are limited because consumers are perceiving the atmospherics of the place through a digital medium instead of having a rich real-life experience. Nevertheless, new types of online places for shopping and consumption combining both material and imaginary elements have been launched (Hagberg, Sundstrom, and Egels-Zandén, 2016).

Place dependence

Place dependence is an integral part of attachment. It refers to how a place fulfils its function compared to other available places (Williams *et al.*, 1992), and it is considered a functional dimension of the attachment bond (Brocato *et al.*, 2015). In physical settings, consumers are constrained by spatial and time boundaries and limited options. It is not physically possible to visit ten different stores that are located in different parts of a town within a short period. However, the digital environment allows consumers to overcome these boundaries; a few clicks enable the browsing of different stores worldwide. Place dependence is essentially a functional element, and it has usually been the major focus of designing online stores as well as multichannel and omnichannel retail concepts.

Social bonds

Places act as facilitators of social relationships between different marketplace actors (Johnson *et al.*, 2015). These relationships can evolve between consumers and employees as

well as among other consumers (Brocato *et al.*, 2015). The social aspects of a place play a major role in establishing a strong relationship with the place. Moreover, they have positive benefits for consumers' well-being (Rosenbaum *et al.*, 2020). Digitalisation transforms the social bonds through incorporating digital technologies in the interactions between retailers and customers as well as that among customers (Hagberg, Sundstrom, and Egels-Zandén, 2016). Face-to-face social interaction is replaced by parasocial relationships (Giles, 2002; Horton and Wohl, 1956). Interaction between different actors is mediated by a digital platform, where users are interacting with either the digital representation of other humans or AI in the form of a chatbot, which is often represented by an anthropomorphised avatar.

Empirical illustration

To illustrate the theoretical discussion and insights, we present findings from an empirical study among four Finnish retail stores. These retailers operate in the design and home décor market; therefore, their stores have atmospheres that will likely arouse consumers' emotions and feelings, which in the long term can develop into a strong relational bond, such as place attachment. Moreover, all four retailers provide a multichannel setting as they operate in both offline and online environments.

Method and data

The data for the study were obtained from a panel of Finnish respondents using an online survey. The respondents were allowed to choose one of the four retailers involved in the study and decide to answer regarding either the retailer's offline or online store. The questionnaire included measures of place dependence, place identity and place bonds measured with 17 items. All items were measured on a seven-point Likert scale, ranging from 1 (I strongly disagree) to 7 (I strongly agree). The data collection resulted in 1,169 valid responses (873 regarding the offline environment and 296 regarding the online environment). In the sample, 45.6% of the respondents were male and 54.4% were female. More than half the respondents (58%) were between 25 and 54 years old. The number of responses for each store reflected the store size; the largest store with the biggest consumer base accounted for 51.8% of our responses and another rather big and popular store in Finland 27%. By contrast, two small designer stores accounted for 12.4% and 8.8% of our responses.

Findings

We performed an independent sample t-test with store type (offline/online) as the independent variable. The dependent variable was place attachment, which was calculated as a mean of the three distinct dimensions: *place identity, place dependence* and *social bonds*. The results in Table 9.1 show no statistically significant differences in the strength of place attachment bond between the offline and online shopping environments. The results imply that consumers can establish an attachment to a place in brick and mortar stores and to a digital space in the online environment. This finding represents an important advancement in the understanding of the transformation of shopping places. Despite drastic changes in the retail environment, retail places can maintain the ability to arouse emotional responses and bonds between commercial places and consumers. The

Table 9.1 Mean comparison for different shopping environments

Factor	Retail environment	Mean	St. Dev.	t -value	p -value
Place Attachment	Offline	3.684	1.040	.131	.896
	Online	3.674	1.066		
Place Identity	Offline	4.034	1.500	.551	.581
	Online	3.979	1.473		
Place Dependence	Offline	4.021	1.483	2.095	.036*
	Online	3.811	1.527		
Social Bonds	Offline	3.271	1.490	−1.379	.168
	Online	3.410	1.538		

*p < .05.

accumulation of such responses and experiences over time results in creating a strong emotional bond with the place, regardless of its dematerialised character.

To gain deeper understanding of how the place attachment bond is formed in online environment, we have examined the differences in the distinct dimensions separately. We again performed an independent sample t-test, with independent variable being the type of the store (offline/online) and distinct place attachment dimensions as dependent variables. *Place identity* and *place dependence* were each measured with a scale of three items adapted from Johnson *et al.* (2015); *social bonds* were measured with a five-item scale adapted from Hsieh, Chiu, and Chiang (2005). The dependent variables were obtained by calculating a mean for each dimension. As shown in Table 9.1, the only place attachment dimension that seems to significantly differ in offline and online environments is *place dependence*. *Place dependence* is significantly lower in the online environment than in the offline environment. As discussed earlier, in the physical environment, consumers face spatial and timely constraints that limit how many stores they can visit, while digital platforms and online stores overcome these boundaries. They significantly increase in the number of options that consumers have and enable browsing in multiple stores with only a few mouse clicks.

Unlike the functional dimension of place attachment, the personal and social dimensions do not seem to differ in these two environments. Despite the increased intangibility and the limited number of physical attributes of online stores, consumers can perceive and identify with the identity of a place in the online environment. This finding has important implications for retailers who are operating in online channels. In the traditional physical retail environment, place attachment has shown a positive impact on consumers' loyalty (Johnson *et al.*, 2015), the absence of switching intentions and the spreading of positive WOM (Brocato, Baker, and Voorhees, 2015). It is, therefore, crucial to conceptualise the atmospherics and important attributes of online stores and examine how consumers form their relationship with online place. This allows retailers to construct their online stores to increase consumers' place attachment and loyalty.

Interestingly, consumers seem to perceive the importance of social aspects and interactions that online stores and digital platforms offer equally with physical places. Digitalisation transforms the interface between retailers and consumers and also affects the communication channels and brings new channels such as SM. In the online environment, a form of parasocial relationships replaces face-to-face relationships between consumers and employees as well as between other consumers. Moreover, novel forms of

social relations arise with the emergence of AI technology as consumers interact with an AI-driven chatbot instead of a human being.

Conclusion

In this chapter, we reviewed the theoretical grounds of commercial places and consumers' attachment to these places. By reflecting on the transformation of the retail servicescape from the physicality of brick and mortar stores towards dematerialised intangible digital platforms and online spaces, we have provided an account of the transition from physical places to digital platforms. We connected our theoretical insights with an empirical study that focused on consumers' attachment to offline as well as online places. Our results suggest that consumers establish strong emotional bonds, such as attachment, not only with physical places but also with online places that can only be accessed virtually and do not possess the physical attributes of traditional store atmospherics.

This conceptual paper provides a valid ground for future research on online places and digital platforms. We suggest that future research continues seeking deeper understanding of consumers' relationships to commercial places. The three dimensions of place attachment, that is, place dependence, place identity and social bonds, seem to characterise how consumers form bond with places. Place attachment is one important factor in ensuring customer loyalty and positive word of mouth communication. Future studies should more thoroughly investigate the forms of social relations that are associated with digital platforms and online places, how consumers establish these novel forms of relationship and how they affect consumers' emotions and their attachment to retail stores.

Key lessons for future research

- The pace of technological advancement is rapidly changing the retail landscape. It is, therefore, crucial that researchers reflect on the transformation happening in the commercial places and the various bonds that connect consumers and marketplaces.
- The shopping environment has undergone significant changes in recent years, yet surprisingly few studies have examined the transformation of servicescapes from physical stores to intangible virtual spaces. Future research should examine the consequences of digitalisation on consumers' social and emotional attachment to servicescapes and further impact on shopping behaviours.
- Digital platforms and online stores provide new opportunities for consumers to engage socially with different marketplace actors. Multichannel shoppers use traditional retail to establish relationships with employees as well as other consumers while interacting with both human actors and non-human actors driven by AI in the digital space.

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10 Social media and consumer power

Opportunities and challenges for digital marketing activities

Agostino Vollero and Chiara Valentini

Introduction

Social Media (SM) have progressively transformed interactions between twenty-first century consumers and companies and among consumers. Several technology-driven factors, such as the proliferation of digital platforms and online consumer-generated content combined with increased media audience fragmentation (Papacharissi, 2002; Valentini, Romenti and Kruckeberg, 2016), have challenged assumptions, practices and strategies in traditional marketing management models. These are generally company-centric and often consider consumers as marketing targets.

The rapid diffusion of different SM worldwide (e.g. in January 2020, 3.8 billion people were active SM users [We Are Social/Hootsuite, 2020 – see Further reading]) has created additional opportunities for organisations to reach larger and more diversified groups. It has also pushed marketing and communication managers to reconsider their activities regarding SM's main characteristics, including possible innovative uses and the diverse interests developed by consumers.

However, SM marketing research is still fragmented (Felix, Rauschnabel, and Hinsch, 2017), and the philosophical underpinnings in most marketing literature consider SM one of several tools for marketing communication. Thus, the research focuses primarily on specific push-content tactics. This has led some practitioners to either overestimate SM influence, which is often considered a panacea to acquire and engage (new) consumers or consider an organisation's SM presence to be a promotional façade with little or no marketing return.

However, noting the complexities of certain user participation patterns on SM, some authors (e.g. Schultz and Peltier, 2013; Yadav and Pavlou, 2014) have proposed reconceptualising the understanding and function of SM from a marketing perspective. The literature acknowledges that consumers have increased their influence towards organisations and brands by generating highly sharable content (e.g. comments and reviews) with a global reach that impacts the opinions and behaviours of thousands of consumers. This generation of consumers is thus becoming empowered (Denegri-Knott, Zwick, and Schroeder, 2006) and continuously growing.

The influence of those empowered consumers could potentially affect brand evaluation by other consumers who tend to trust those perceived as peers more than companies. These empowered consumers can modify the perceived nature and structure of a brand via their SM activities (Anker *et al.*, 2015; Van Noort and Willemsen, 2012). For marketers, engaging and retaining information-savvy consumers have become more difficult (Kitchen, 2005). However, organisations can exploit their SM interactions with

consumers in a way that positively impacts their consumer–brand relationships. Consumer participation and collaboration through SM have resulted, for example, in co-created product development (Firefox, Lego, Danone Activia) (Ind, Iglesias, and Schultz, 2013; Muniz and Schau, 2011; Pitt *et al.*, 2006).

In this chapter, consumer empowerment via SM (Kucuk and Krishnamurthy, 2007; Labrecque *et al.*, 2013; Pires, Stanton, and Rita, 2006; Pitt *et al.*, 2002; Vollero, Schultz, and Siano, 2019) is seen as a main driver of a paradigm shift in Digital Mrketing (DM). This chapter aims to embrace the emergent DM perspective of SM as a symbolic interactionism phenomenon. SM is not merely a marketing tool; rather, it is a space to symbolically re-discuss interaction dynamics and power relations among consumers and organisations and a way to understand user interaction behaviours in these digital environments, including how such behaviours may impact organisational marketing and communication activities.

Drawing from literature on consumer empowerment in digital environments (Denegri-Knott, Zwick, and Schroeder, 2006; Labrecque *et al.*, 2013; Siano, Vollero, and Palazzo, 2011), this chapter explores the SM-driven empowerment of consumers as a pervasive process that enables consumers to increase control of the marketplace and potentially overturn the traditional power imbalance between organisations and consumers.

The chapter is structured as follows. The next section provides the conceptual background for understanding SM's impact on marketing activities, followed by the needs, motivations and communicative behaviours of consumers in SM and a discussion on consumer power in SM. This is further deepened by the analysis of a model of value co-creation in SM based on consumer empowerment. Opportunities and challenges in SM marketing research are then presented, followed by concluding remarks.

Social media and its impact on digital marketing activities

SM are a group of Internet-based applications that encourage the creation and exchange of User-Generated Content (Kaplan and Haenlein, 2010; Valentini and Kruckeberg, 2012). SM are embedded in high user-to-user interactivity (i.e. anyone can create, share and co-create content) and also have a participative nature and social connectivity, which allow individuals to feel connected to others (Valentini and Kruckeberg, 2012). SM are mostly virtual spaces of 'social interactions' that encourage conversations among individuals and organisations.

The most used and prominent SM applications are social networking sites (e.g. TikTok, Instagram and Facebook) and opinion platforms (e.g. TripAdvisor), where users create, exchange and/or consume other individuals' content. Social networks allow individuals to define their visibility, identity and preferences and articulate a list of their social network connections (Boyd and Ellison, 2007; Valentini, 2018). Each social medium was developed to have specific media usage patterns and technical features (Go and You, 2016), such as photo or video sharing. However, there is now progressive integration of technological and communication features across different SM types. Most current SM also provide a built-in instant messaging technology for one-to-one interactions between users. SM are also highly integrated with mobile applications, such as smartphones and other portable/wearable devices, which can be accessed from nearly anywhere (Valentini, 2018).

The participative nature and social connectivity of SM combined with the aforementioned technological features has created great appeal among worldwide Internet users who consider SM an 'online social environment' where they (and organisations) can engage in personal, professional and spiritual relationships (Valentini and Kruckeberg, 2012).

This digital environment has proliferated both in size and interest during the last decade and contributed to new forms of social interactions. For some sociologists, this environment has created a new global village (cf. Castells, 2000; van Dijk, 2006) of worldwide citizens meeting virtually to discuss and share information.

Given that most social interactions on SM manifest through communications, SM can be considered a conversational environment (Valentini *et al*., 2016) or, in Habermasian terms, a virtual public sphere of discussion (Papacharissi, 2002). SM conversations are 'communicative interactions based on an exchange of contents that are interdependent and adapted to the communicative situation as well as to the social medium-specific features' (Valentini *et al*., 2016, p. 4060). Users can raise their global awareness and actively participate in online actions for/against causes. They can also engage in conversations regarding consumer experiences with brands, which are powerful DM endorsements that can impact companies' image, reputation and sales (Galea, 2007). It is also important to consider what motivates consumers to engage in brand conversations on SM.

Social media users: needs, motivations and communicative behaviours

Identifying user motivations and preferences for SM helps marketers and communicators tailor their activities. Relevant research has shown that different users' motivations for using SM can exist/co-exist (Woodall and Colby, 2011 – see Further reading). Motivations can include impulse satisfaction, sharing experiences, seeking entertainment or advice (from trusted people), social connectivity via conversing with others with similar interests, etc. Determining SM users' motivations elucidates their consumption needs and information-sharing patterns (i.e. whether and what content to share with friends and relatives). Furthermore, those needs drive different types of digital behaviours, which can vary along a passive–active behaviour continuum. Individuals in the SM environment do not simply consume/use online content; they can create, share and even modify it. Importantly, some users can be satisfied by looking at their friends' walls (passive behaviour), while others only feel gratified when their own posts (e.g. selfies) are appreciated by their friends (active behaviour).

Research has examined other online behaviour patterns and developed more sophisticated metrics for grouping SM users. For example, Kozinets (1999) proposed evaluating users' online behaviours based on their consumption activity and relationship intensity with other participants in an online community. Brandtzaeg (2010) proposed the Media User Typology, which collects data on frequency, variety of use and content preferences for classifying SM users. Classification typologies demonstrate that individual behaviours on SM are diverse and can be measured differently by platform, individual characteristics and the study's focus. Media usage is highly related to the satisfaction of users' needs (Katz, Blumler, and Gurevitch, 1974), which is an important driver of consumer behaviours.

The combined research on SM users' needs, motivations and communitive behaviours shows that consumers are increasingly perceiving having control over their SM use and content preferences, the freedom to create and present their identity (Bonanno, 2014) and the ability to control the medium through conversations. As a result, different kinds of power emerge in SM environments that affect the traditional information asymmetry between an organisation and its consumers.

Forms of consumer power in social media

SM use by consumers has increased their power towards organisations and brands (Labrecque *et al.*, 2013; O'Brien, 2011; Quinton, 2013; Vollero, Schultz, and Siano, 2019), which has somewhat reverted the balance of influence among consumers and organisations. Traditionally, the control of market relationships and brand discourses lays with organisations, but consumers can now express their own brand discourses and dictate market relationships. While recent research shows that such power can take different forms (Labrecque *et al.*, 2013; Vollero, Schultz, and Siano, 2019), it generally manifests as follows:

1   *Information-based power* enables consumers to freely and quickly access several online information sources to enhance their consumption and buying behaviours. The ease of access to service/product information on SM by other users reduces traditional information asymmetry and increases individual influence on markets (Valentini and Kruckeberg, 2012).
2   *Participation-based power* enables consumers to make personal choices about their participation in SM and create brand-related content. This power, which is derived from content creation and dissemination (i.e. sharing), completion (e.g. commenting, tagging) or modifications (e.g. meme) (Labrecque *et al.*, 2013), creates influencers and forms a network of power.
3   *Community-based power* co-creates meaningful content that exerts significant control over marketing activities, such as promoting new products/services, with like-minded consumers or companies. Community-based power creates more buying power for groups/communities and enables crowdfunding projects and sharing economy platforms.

These forms of power have progressively increased with the use/spread of SM. Thus, organisations can no longer merely create and distribute content for (potential) consumers (O'Brien, 2011); they must move towards multi-layered interactions across different SM (Quinton, 2013; Singaraju *et al.*, 2016) with a mix of user-generated and company-generated content.

Diverse consumer behaviours on SM affect how organisations can strategically use SM. They must understand the directions that brand or company-related communications can take, including multi-vocality and multiple voices, which often conflict and contrast with what appears in the SM ecosystem. Organisations must acknowledge and exploit these richer interactions among consumers and among other members of the public (Sawhney, Verona, and Prandelli, 2005). They must also accept that a relationship can now be initiated and controlled by consumers without the company's consent and be able to manage multiple brand touchpoints, which are interconnected in the SM environment and controlled by both firms and consumers (Vollero, Schultz, and Siano, 2019). Managing this complex scenario requires a different approach to DM – one that we argue should implement strategic SM listening via various tools, such as big data analytics and SM engagement.

Consumer empowerment and value co–creation in social media

An empowered consumer can create and destroy value for an organisation brand. Consumers sometimes assume negative attitudes towards brands in SM (e.g. brand boycotting) to express dissatisfaction or a value contrast, which can negatively affect a brand's

value (Kähr *et al.*, 2016; Luoma-aho *et al.*, 2018). Consumers can conversely act as brand ambassadors and amplify a company's communications on SM to generate brand attachment and engagement (Muniz and Schau, 2011; Ind, Iglesias, and Schultz, 2013).

Organisations can deploy appropriate value co-creation strategies on SM via the co-creation theory and the service-dominant logic perspective. Value co-creation on SM has been associated with the engagement of empowered consumers (Carlson *et al.*, 2017), where interactions among SM users generate value-in-context and value-in-use from customer-oriented and mutually satisfying interactive processes (Merz, He, and Vargo, 2009; Tierney, Karpen, and Westberg, 2016). These interactions provide additional opportunities for value co-creation (Bechmann and Lomborg, 2013).

Despite continuous exchanges on SM, brands and customers do not always align regarding interests and values. Different (even contrasting) positions are frequent on SM, which can divert brand managers' intent (Vollero *et al.*, 2020).

SM interactions, conversations and narratives are constantly mediated and negotiated between organisations and their counterparts (Vollero *et al.*, 2019). Brands should integrate and mediate physical, social and cultural resources from diverse touchpoints to keep the value-in-use and accordingly inform an evolving communication strategy for co-creating brand value (Grönroos and Voima, 2013; Singaraju *et al.*, 2016). Thus, companies should implement resource integration and negotiation to align the organisational and consumer value spheres (Figure 10.1). Value co-creation strategies include one-way engagement and collaborating with consumers to create new services (Felix, Rauschnabel, and Hinsch, 2017).

As shown in Figure 10.1, the premises for consumer interactions with a brand or an organisation have shifted due to SM empowerment effects on consumers. SM are no longer simply a marketing channel for organisational control of communication and interaction flow with consumers. SM have created a different epistemological perspective based
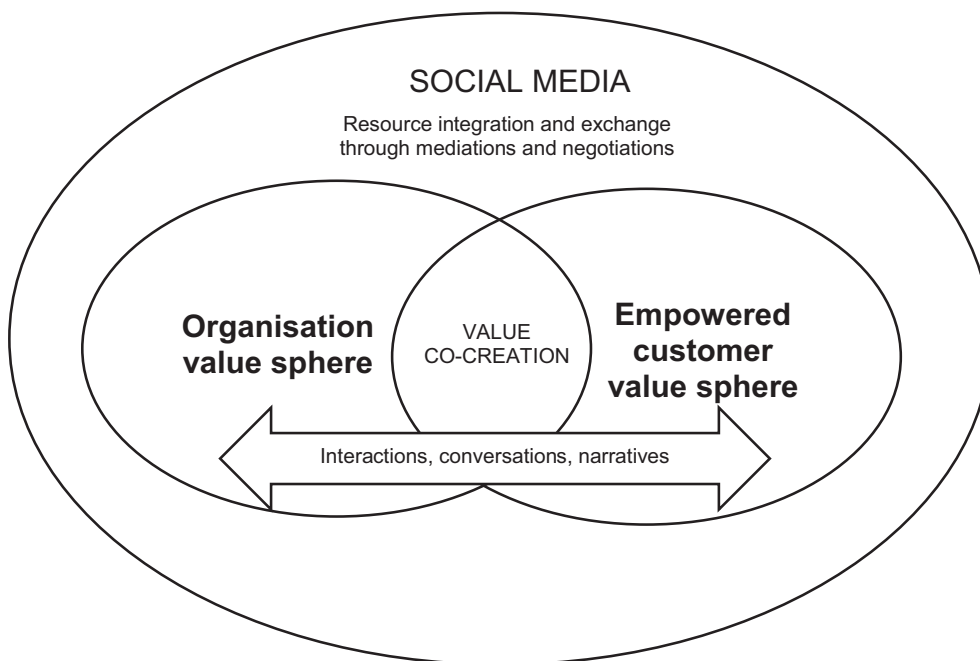
Figure 10.1 Value co-creation in a social media empowered context.

on a (social) interactionist view of consumer–company relations. Accordingly, consumer–company relations are conceived as mutual, social exchanges of communicative interactions via SM. Under this epistemological perspective, marketing and communication managers need to possess specific knowledge and skills to exploit consumers' propensity for content generation and dissemination and to learn how to strategically use SM data generated through consumers' use of these platforms. Negotiation and mediation skills are likely to crucially influence SM co-creation value processes, which are increasingly being initiated by consumers. This would imply, for example, the ability to anticipate trends from unstructured SM data (e.g. topic modelling on SM comments), which could inform future SM strategies.

This epistemological perspective can also bridge the two main strands of SM marketing literature (Dwivedi *et al.*, 2020) dealing one with companies' SM strategies and practices for gathering data from and/or communicating with their consumers and the other with SM consumer behaviour in organisational SM spaces. By integrating these lines of research, marketers will more likely understand real consumer attitudes and behaviours in this ecosystem, which will support more effective and efficient integrated DM strategies.

Opportunities and challenges in SM marketing research

Researchers, practitioners and organisations are asked to invest substantial resources in several areas, such as SM listening and monitoring (Schweidel and Moe, 2014), value co-creation metrics and/or metrics for aggregated consumer action on SM (Moro, Rita, and Vala, 2016) and SM industry-specific models and practices (Iankova *et al.*, 2019).

Studying SM interactions in DM allows analysis and theorisation of SM marketing practices' impact on different industries. Iankova *et al.* (2019) showed that business-to-business (B-to-B) companies are likely to consider SM less useful than other communication channels; however, other studies (Agnihotri *et al.*, 2016) have found positive relations between different aspects, such as SM use, customer satisfaction and brand retention. More research is needed to assess whether the firm's position in the production chain (i.e. B-to-B or business-to-consumer) can influence SM users' behaviours and help reach marketing and communication goals.

Further opportunities for marketers and communication professionals include collecting data from SM and gaining insights on consumer preferences, behavioural patterns, etc. Many tools can capture and analyse (big) data from SM and, accordingly, manage omnichannel communications (Dwivedi *et al.*, 2020); yet, there are still challenges in integrating data from different sources. Furthermore, organisations frequently lack knowledge and skills in emerging technologies, such as Machine Learning (ML) and Artificial Intelligence (AI) (Duan, Edwards, and Dwivedi, 2019), and they tend to emphasise optimising short-term marketing investments versus long-term relationship-building efforts (shared value). By focusing on the former, researchers and marketing managers are often asked to mimic – sometimes with no idea of the expected outcomes – what the professional industry considers 'effective' measurements of SM reach and engagement (e.g. number of likes, followers and comments), which offers little towards a long-term assessment of their relationships. Consequently, organisations are pushed to multiply their communication efforts to attain results on interactive short-term metrics, but the (co) creation value remains uncertain. This challenges organisations that must reappraise their

one-sided firm perspective and assess the fairness and stability of interactions throughout the relationship with consumers.

Some methodological issues have also emerged. While engagement as a multidimensional construct has been largely discussed in marketing and communication studies, especially from a conceptual standpoint (e.g. Hollebeek, 2011; Johnston and Taylor, 2018; Lievonen and Luoma-aho, 2015; So, King, and Sparks, 2014; Pansari and Kumar, 2017), in current professional practices, it remains linked to measures that capture short-term value (e.g. interaction and engagement rate) and single SM sources (even a specific SM campaign). These measures often do not represent 'real' engagement, which is intended as a 'psychological state of mind operating independently from interactive behaviours' (Syrdal and Briggs, 2018, p. 4); they only evaluate SM users' immediate responses. To optimise SM, managers should abandon a pure transactional approach (Zahay *et al.*, 2004) and embrace a more consumer-centric approach, including all potential points of contact in a 'shared value creation'.

Another challenge is the increased fragmentation of communications and consumer experiences in SM (Papacharissi, 2002; Valentini *et al.*, 2016). This can increase consumers' scepticism about organisations' authenticity, resulting in increased distance between organisations and their empowered consumers.

These research areas require further investigation, given the paradigm shift outlined in this chapter. Such a shift assumes repositioning SM not only as another marketing communication channel but one that requires a different managerial approach to understanding the complex dynamics of consumer and brand interactions.

Conclusions

SM, its popularity and its wide reach have changed how people interact, socialise and consume digital content. This chapter outlined the main characteristics of and changes brought about by SM that directly impact DM. Along with other scholars, we argue that SM empower consumers in ways that challenge the power dynamics and information asymmetry of traditional marketing communication. However, SM also act as 'systems resource integrators in the interaction between firms and customers' (Singaraju *et al.*, 2016, p. 45). This has caused a shift from a functionalistic view of SM as another marketing communication channel to a (social) interactionist view, where SM are the *loci* of conversations and interactions among SM users, which generate both value-in-context and value-in-use for a company.

Accordingly, marketers and communication professionals require new skills and knowledge, including negotiating, listening and mediating, combined with a more integrated use of user data and long-term strategic goals to measure SM engagement and the value that consumers and organisations can obtain from interacting with one another. The participative and social connectivity nature of SM offers both opportunities and challenges for DM, which call for further research and empirical validation by the academic community.

Key lessons for future research

• Stimulating managerial change from a 'command-and-control' perspective of SM to multidimensional and negotiated organisation–consumer relationships

- Developing value co-creation metrics that focus on the long term versus current commonly used interaction metrics
- Investigating the role of industry-specific elements on the effectiveness of SM marketing practices
- Exploring the potential of consumers' social connectivity for DM goals beyond information sharing and co-creational behaviours

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Section 4

Ethics and privacy in digital marketing

11 The importance of online retailers' ethics for traditional, online and multichannel customers

Mika Skippari, Sami Kajalo and Arto Lindblom

Introduction

Issues relating to ethics and corporate social responsibility are becoming increasingly important for determining retailer performance (Ganesh *et al.*, 2010) and consumer behaviour (Vitell, 2003) in both offline and online retail settings. Retailers use various strategies to address their ethical practices, which can help them establish and maintain long-term relationships with their customers (Roman and Ruiz, 2005). Consumers are increasingly aware of and concerned about retail ethical issues, such as deceptive practices of retailers (e.g. the exaggeration of product qualities and using aggressive and manipulative selling tactics) and the safety of transactions (e.g. privacy policies and warranties) (Miyazaki and Fernandez, 2001; Roman, 2010).

Earlier research on consumer ethics in the retail context has largely focused on exploring how consumers perceive retailers' ethical behaviours or actions and how these perceptions affect consumers' behavioural intentions (see Limbu, Wolf, and Lunsford, 2012). Most of this research has been conducted in the traditional retailing context. Due to the recent growth of online retailing, many scholars have begun investigating consumers' perceptions regarding online retailing (Limbu, Wolf, and Lunsford, 2011, 2012; Roman, 2007, 2010; Roman and Cuestas, 2008). It is largely acknowledged that ethical issues in online retailing are different from the ethics of traditional brick-and-mortar retailing (Limbu *et al.*, 2012). Moreover, ethical issues have emerged as one of the most critical challenges to online shopping; it is vital for online retailers to engage with their consumers in a secure, confidential, fair and honest manner that ultimately protects consumers' interests (Limbu *et al.*, 2011).

Many early contributions to consumer ethics in online retailing were conceptual and had a limited focus on consumers' privacy and security issues (Roman, 2007). More recently, related empirical research has been increasing (Adam, Aderet, and Sadeh, 2007; Limbu *et al.*, 2011, 2012; Lu, Chang, and Yu, 2013; Roman, 2007; Roman and Cuestas, 2008; Yang *et al.*, 2009). However, this research has largely focused on investigating the views of online shoppers; few studies have examined the ethical perceptions of consumers using different marketing channels.

Contemporary consumers are increasingly using multiple channels when making purchases, and it has been suggested that those who shop online behave in fundamentally different ways compared to traditional retail shoppers (e.g. Rohm and Swaminathan, 2004; Srinivasan, Anderson, and Ponnavolu, 2002). As noted by Ganesh *et al.* (2010), we need more empirical consumer research based on responses from shoppers who shop in traditional and online formats. Therefore, in the increasingly important multichannel

environment, it is essential to understand consumer considerations regarding retailer ethics in various marketing channels.

In this chapter, we draw on previous research on retailing ethics and consumers' channel selection to examine how consumers' perceptions of online retailer ethics vary among consumers using different purchasing channels. We utilise Roman's (2007) framework for analysing Consumers' Perceptions regarding the Ethics of Online Retailers (CPEOR), which includes the dimensions of security, privacy, non-deception and fulfilment. With this framework, our aim is two-fold. We firstly investigate the importance of ethics of online retailers on channel selection among consumers by examining how consumer views about online retailing ethics differ between traditional, online and multichannel shoppers. Secondly, we examine how consumers' patronage frequency affects their views about the importance of online retailing ethics.

The emergence of multichannel shopping

Consumers' channel selection, which is one of the most relevant DM issues (Leeflang *et al.*, 2014: Liu, Lobschat, and Verhoef, 2018 – see Further reading), affects current retailing practices and research. Internet-based channels (i.e. online and mobile channels) and advanced technologies have especially created new and innovative opportunities for retailers' marketing activities and improved the flexibility of their marketing decisions (Verhoef, Kannan, and Inman, 2015). It has been argued that the emergence of digitalisation mixed with the current COVID-19 pandemic is accelerating shifts in consumer behaviour (Pantano *et al.*, 2020), which, in turn, enhances disruption in the retailing industry. This was recently witnessed by increasing numbers of store closures and bankruptcies by traditional retailers, such as Toys 'R' Us, Radio Shack and Circuit City (Kahn, Inman, and Verhoef, 2018).

Retailers operate in a digitalised environment, which allows customers to work with a single organisation to search for information, purchase products and return products through one or more of the following channels: bricks-and-mortar retail stores, salespersons, mail-order catalogues, telephone sales, online websites and mobile devices (Dholakia, Zhao, and Dholakia, 2005; Kumar and Venkatesan, 2005; Piotrowicz and Cuthbertson, 2014). Consumers are also increasingly shopping across multiple channels in different stages of the purchase process, and separate channels serve unique purposes (Dholakia, Zhao, and Dholakia, 2005). For instance, a consumer may use a digital channel for information searching and a physical store for viewing and examining the product but return to a digital channel to make the purchase (Kumar and Venkatesan, 2005). The customer journey is no longer a linear experience that can be described by a purchase funnel model; rather, it is a 24/7, multichannel, non-linear social customer experience (Lemon and Verhoef, 2016).

In this digitalised environment, traditional retailers' conventional operating logic based on tempting customers with broad assortments, low pricing and extended store hours is being challenged. They face increasing pressure to become multichannel retailers by extending their operations to online retailing. Such a transformation is not easy, and it includes both opportunities and challenges for a retailer. Multichannel consumers are potentially more valuable than consumers that rely on a single channel because they spend more money, shop more frequently and interact with the retailer more frequently (Kumar and Venkatesan, 2005). Other studies show that adding a new channel has a positive effect on customer loyalty and firm value by increasing customer revenue, decreasing

search costs and providing better service outcomes to consumers (Homburg, Vollmayr, and Hahn, 2014). However, because consumers have become multichannel customers, firms should provide a strong seamless experience across and within multiple channels to attract and create loyal customers (Verhoef, Kannan, and Inman, 2015).

In the digitalised multichannel retail environment, a key challenge for retailers is understanding the differences between traditional, online and multichannel customers and knowing how to serve all three groups profitably. As noted by several scholars, all three types of consumers differ significantly; those who shop online behave in fundamentally different ways compared to traditional retail shoppers (e.g. Rohm and Swaminathan, 2004; Srinivasan, Anderson, and Ponnavolu, 2002). The primary factors identified by past research as important discriminators of online and traditional retail shopping include convenience, perceived risk and ability to search for information about products and price (Ganesh *et al.*, 2010). In addition, recent research has address the role of ethical considerations among consumers using various purchasing channels (e.g. Roman, 2010; Limbu, Wolf, and Lunsford, 2011).

Consumers' perceptions regarding online retailers' ethics in a multichannel environment

Consumers' ethical beliefs and practices and their perceptions of a retailer's ethics have significant effects on consumer behaviour, and they manifest in different ways in various channels. In the traditional offline retailing context, deceptive and manipulative practices of retailers engender consumers' distrust, decrease consumer satisfaction and weaken consumers' loyalty towards a retailer (Roman, 2003; Roman, 2010; Roman and Ruiz, 2005). Compared to the offline context, consumers in online retailing have different resources and opportunities to evaluate retailers' ethics (e.g. lack of opportunities for face-to-face interactions between consumers and retailers in online retailing) (Roman and Cuestas, 2008). While brick-and-mortar stores can address their ethical behaviour through physical factors, such as store outline or employee conduct, Internet retailers must rely on offering high-trust persuasive communication to build consumer trust (Grewal, Iyer, and Levy, 2004).

Research has also shown that consumers perceive risks (e.g. financial risk, product risk and convenience risk) differently in offline and online settings (Forsythe *et al.*, 2006). In general, consumers tend to perceive a higher level of risk when purchasing on the Internet compared to traditional retail formats. However, online retailers' ability to offer safety cues tends to lower consumers' risk perceptions (van Noort, Kerkhof, and Fennis, 2008), and this effect is stronger among online than offline consumers (Biswas and Biswas, 2004). In addition, by offering reliable privacy- and security-related statements on their websites, online retailers can increase consumers' trust and purchase intentions (Adam, Aderet, and Sadeh, 2007; Miyazaki and Fernandez, 2001; Pan and Zinkhan, 2006).

Recent empirical research has largely focused on examining consumer perceptions regarding online retailer ethics. This line of research has focused on measuring the perception of an online retailer's integrity and responsibility in dealing with consumers in a secure, confidential, fair and honest manner. Many of these studies are based on a scale to measure CPEOR (Roman, 2007), which includes the four dimensions of security, privacy, non-deception and fulfilment/reliability. Roman (2007) shows that these four dimensions are strongly predictive of online consumers' satisfaction and trust.

Roman's (2007) framework has been utilised in several subsequent studies, and it has proven to be a robust scale for investigating various antecedents and consequences of CPEOR. Roman and Cuestas (2008) examine the effect of perceived ethics on general expertise and WOM testimonials and show that consumers' general Internet expertise significantly improves CPEOR, which is strongly predictive of consumers' WOM. The results of Yang *et al.* (2009) show how ethics associated with retailers' websites can be a significant predictor of consumers' trust in a website. In addition, Limbu, Wolf, and Lunsford (2012) show that perceived ethics of an Internet retailer's website significantly affect consumers' trust and attitudes towards the website and eventually have positive impacts on purchase and revisit intentions.

Scholars have also examined the relationship between perceived online ethics, satisfaction and loyalty (Roman, 2010; Limbu *et al.*, 2011), providing strong empirical support for the mediating role of consumer satisfaction in the relationship between perceived online retailer ethics and consumer loyalty. Roman (2010) also shows that the deception–satisfaction link is moderated by the type of product, the consumer's attitude towards the Internet and consumer demographics. Accordingly, Lu, Chang, and Yu (2013) examine the link between CPEOR and e-loyalty intention and find that increased CPEOR should lead to increased repurchase behaviour.

However, the existing literature on consumers' perceptions regarding online retailers' ethics has largely focused on investigating the views of online shoppers. Contemporary consumers are increasingly using multiple channels when making purchases; therefore, it is essential to understand how views on online retailing ethics differ between traditional, online and multichannel shoppers. Although previous literature has highlighted the different characteristics of traditional, online and multichannel customers and their preferences, less is known about how consumer perceptions regarding online retailer ethics vary across different customer groups. Since the nature of ethical issues varies between online and offline retailing, we expect to see variation in the way of how consumers using different channels perceive the importance of retailer ethics. Moreover, we assume that the consumers' patronage frequency affects their views about the importance of online retailing ethics. This is the focus of the empirical study presented here.

Methodology

This study focuses on consumers' attitudes towards and ethical perceptions of online retailing. We collected data on such attitudes by surveying Finnish consumers. To gather the necessary data, we collaborated with a department store chain that sent email requests to their loyalty programme customers to take part in an online survey. To capture consumer views across different channels, we sent the survey to traditional shoppers, online shoppers and multichannel shoppers. In total, 1,000 emails were sent to customers who had bought only from a brick-and-mortar department store (traditional shoppers), 1,000 were sent to those who had bought only from the webstore (online shoppers) and 1,000 were sent to those who had bought from both channels (multichannel shoppers). Only customers who had made a purchase during the last three months were accepted in the sample.

We received usable responses from 684 respondents: 216 traditional shoppers (21.60%), 224 online shoppers (22.40%) and 244 multichannel shoppers (24.40%) (Table 11.1).

Table 11.1 shows that the majority of respondents in all three groups are female. This reflects the target of our study, which was a department store chain. Among

Table 11.1 Demographic respondents' characteristics

	Traditional shoppers (N = 216) %	Online shoppers (N = 224) %	Multichannel shoppers (N = 244) %	Total (N = 684) %
Gender				
Female	78.1	66.5	84.5	76.6
Male	21.9	33.5	15.5	23.4
Age				
<19	0.5	0.9	0.4	0.6
19–29	7.0	9.1	16.3	11.0
30–39	13.6	19.5	29.3	21.1
40–49	28.0	27.3	28.0	27.8
50–59	29.9	25.9	19.7	25.0
60 or older	21.0	17.3	6.3	14.6
Household monthly income in euros				
<1,000	6.4	8.8	5.1	6.7
1,000–1,999	12.3	20.5	15.4	16.1
2,000–2,999	25.1	16.7	22.2	21.3
3,000–3,999	13.8	23.3	18.8	18.7
4,000–5,999	28.6	20.5	26.1	25.0
6,000–7,999	7.9	6.5	7.3	7.2
8,000 or more	5.9	3.7	5.1	4.9
How many times have you ordered products from web stores during the last three months?				
0	24.9	1.4	0.4	8.4
1–3	57.7	42.3	40.5	46.5
4–6	13.1	34.5	41.7	30.4
7 or more	4.2	21.8	17.4	14.7
How frequently do you use the Internet?				
Daily	86.4	94.1	90.1	90.2
Several times a week	12.7	4.1	8.7	8.4
Once a week	0.9	0.5	1.2	0.9
Once a month	0.0	1.4	0.0	0.4

online shoppers, there are more men than in the other groups. Regarding age distribution, online shoppers and multichannel shoppers tend to be younger than traditional shoppers. There is no significant difference in income level between the shopper types.

As expected, the number of online purchases from any web store in the last three months is significantly higher among online and multichannel shoppers. Table 11.1 also shows that all three groups are active Internet users; even among the traditional shoppers, 86.4% use the Internet daily. These findings suggest that the traditional shopper group might shop online. Thus, their responses are likely to reflect the reasons why people might not become online or multichannel shoppers.

Overall, Table 11.1 supports our results regarding department store customers, and the data provide possibilities to investigate the differences between the three studied groups of shoppers.

Results

We firstly investigated how channel selection is related to customers' views regarding online retailer ethics. We used Roman's (2007) four-dimensional scale (security, privacy, non-deception and fulfilment/reliability) to capture the consumers' perceptions regarding online retailer ethics. We then used a one-way ANOVA test to examine the relationships. Table 11.2 shows how traditional shoppers, online shoppers and multichannel shoppers differ in their views towards the ethics of online retailing.

Table 11.2 The importance of online retailers' ethics by retail patronage behaviour: one-way ANOVA (n = 684)

	Traditional shoppers n = 216 %	Online shoppers n = 224 %	Multichannel shoppers n = 244 %	Total n = 684 %	Sig.
Security					
The security policy is easy to understand.	4.72	6.00	**6.10**	5.94	.01*
The site displays the terms and conditions of the online transaction before the purchase has taken place.	5.95	6.33	**6.37**	6.22	.00**
The site appears to offer secure payment methods.	6.02	6.37	**6.43**	6.28	.00**
This site has adequate security features.	5.84	6.14	**6.32**	6.11	.00**
Privacy					
The site clearly explains how user information is used.	5.81	**6.21**	6.14	6.06	.01**
Only the personal information necessary for the transaction to be completed needs to be provided.	5.92	6.19	**6.26**	6.13	.01*
Information regarding the privacy policy is clearly presented.	5.95	6.15	**6.19**	6.10	.14
Non-deception					
The site exaggerates the benefits and characteristics of its offerings.	5.79	5.97	**6.03**	5.93	.16
This site takes advantage of less experienced consumers to make them purchase.	5.77	6.02	**6.12**	5.98	.03*
This site attempts to persuade you to buy things that you do not need.	5.51	**5.91**	5.84	5.76	.02*
Fulfilment/reliability					
The price shown on the site is the actual amount billed.	6.17	**6.54**	6.52	6.42	.00**
You get what you ordered from this site.	6.12	**6.55**	6.52	6.40	.00**
Promises to do something by a certain time are kept.	6.05	6.38	**6.39**	6.28	.01**

Note: All items were measured from 1 (not important at all) to 7 (very important). *Significant at $p < .05$ level; **significant at $p < .01$ level.

The results in Table 11.2 demonstrate that there are significant differences among the views that traditional, online and multichannel shoppers have on the ethical aspects of online retailing.

1   Online shoppers and especially multichannel shoppers value the security issues of online retailing much more highly than shoppers who only use physical stores.
2   Online and multichannel shoppers consider two of the privacy items more important, but the third item has no statistically significant difference between the groups.
3   In non-deception, two items are considered more important among online and multichannel shoppers, whereas exaggeration of the benefits and characteristics of the online store's offerings are equally perceived among the shopper groups.
4   Among the fulfilment/reliability items, all items are statistically significantly more important to online and multichannel shoppers.

Overall, the results demonstrate that, for online shoppers and multichannel shoppers, the ethics of online retailing are more important than they are for traditional shoppers.

Next, we examined how consumers' perceptions regarding online retailers' ethics are linked to their shopping behaviour. In particular, we looked at the interconnection between consumers' online purchasing frequency and their ethical considerations towards the online retailer. The frequency of online shopping was measured by the number of online purchases during the last three months.

Table 11.3 shows that the ethics of online retailers are more important for consumers who have made the most purchases during the past three months. This finding may

Table 11.3 The importance of online retailers' ethics by number of online purchases during the last three months: one-way ANOVA (n = 675).

	0 purchases n = 57	*1–3 purchases n = 314*	*4–6 purchases n = 204*	*7 – or more purchases n = 99*	*Total n = 675*	*Sig.*
Security						
The security policy is easy to understand.	4.96	5.97	6.06	**6.26**	5.95	.00*
The site displays the terms and conditions of the online transaction before the purchase has taken place.	5.28	6.25	6.37	**6.43**	6.23	.00**
The site appears to offer secure payment methods.	5.33	6.26	6.44	**6.62**	6.29	.00**
The site has adequate security features.	5.14	6.10	6.30	**6.36**	6.12	.00**
Privacy						
The site clearly explains how user information is used.	5.51	6.08	6.08	**6.33**	6.07	.00**
Only the personal information necessary for the transaction to be completed needs to be provided.	5.47	6.19	6.17	**6.28**	6.14	.00**
Information regarding the privacy policy is clearly presented.	5.38	6.17	6.17	**6.22**	6.11	.00**

(*Continued*)

Table 11.3 (Continued)

	0 purchases n = 57	1–3 purchases n = 314	4–6 purchases n = 204	7 – or more purchases n = 99	Total n = 675	Sig.
Non–deception						
The site exaggerates the benefits and characteristics of its offerings.	5.38	5.92	6.02	**6.14**	5.94	.01*
The site takes advantage of less experienced consumers to make them purchase.	5.39	5.94	6.05	**6.33**	5.98	.00**
This site attempts to persuade you to buy things that you do not need.	5.14	5.68	5.87	**6.14**	5.76	.00*
Fulfilment/reliability						
The price shown on the site is the actual amount billed.	5.71	6.40	6.57	**6.60**	6.42	.00**
You get what you ordered from this site.	5.54	6.37	6.59	**6.64**	6.41	.00**
Promises to do something by a certain time are kept.	5.51	6.24	**6.45**	**6.52**	6.28	.00**

Note: All items were measured from 1 (not important at all) to 7 (very important). *Significant at $p < .05$ level; **significant at $p < .01$ level.

suggest that those consumers who more frequently engage in online shopping are more aware of the different aspects of online retailers' ethics. There are also no differences between ethics scales, implying that security, privacy, non–deception and fulfilment are all equally important for frequent online shoppers.

Discussion and conclusions

Scholars have recently begun focusing on understanding the ethical issues in e-commerce from the consumers' perspective (Limbu *et al.*, 2012; Lu, Chang, and Yu, 2013; Roman, 2010). It is not only the retailer's ethical and socially responsible initiatives but also consumers' perceptions regarding ethical issues that affect consumer patronage decisions and channel selections. Our study further extends this line of research and provides additional understanding of the links between consumer ethics and consumer channel selection in retailing.

We utilised the concept of CPEOR by Roman (2007) and provided empirical evidence of the linkages between CPEOR, consumer channel selection and patronage behaviour. By adopting the CPEOR approach, we extended prior research that assumes consumers' ethical perceptions as a complex and multidimensional construct that consists of ethical concerns regarding privacy, security, non–deception and fulfilment.

We extended earlier research by comparing customers' ethical perceptions in different shopper groups, including not only online shoppers but also traditional and multichannel shoppers. Earlier studies have focused solely on examining CPEOR among consumers who have shopped online. Our results show that online shoppers and multichannel shoppers more highly value the ethics of online retailing than traditional shoppers do. This finding has several implications. It underlines the strategic importance of

ethical conduct for online retailers because ethical issues are more important for online and multichannel shoppers. In addition, a higher valuation of ethical concerns might be linked to the possibility that online and multichannel shoppers have encountered ethical problems when shopping online. Although ethical concerns were less important among traditional shoppers, our results demonstrated the value of examining CPEOR among consumers who do not shop online (cf. Lu, Chang, and Yu, 2013), which offers e-retailers a more nuanced and multifaceted understanding of consumers' ethical concerns. Finally, our findings support the contention that consumers' past-purchase behaviour and channel selection influence their perception towards different purchasing channels (cf. Melis *et al.*, 2015).

Our study has certain limitations, which open avenues for further research. We investigated the consumer perceptions of retailer ethics among traditional, online and multichannel customers. However, a new approach to channel integration – the omnichannel – is emerging. In this approach, retailers aim to deliver a seamless customer experience regardless of the channel (Piotrowicz and Cuthbertson, 2014). Thus, future research is needed to explore how consumer perceptions regarding retailer ethics affect shopping in the omnichannel context.

Our empirical examination focused on customers of a department store chain. Department stores and shopping malls have recently struggled with declining patronage due to increased multichannel consumption. Moreover, a consumer's decision to use a certain channel may vary according to the retail context (Piotrowicz and Cuthbertson, 2014). Therefore, our results might not be generalisable to other retail sectors (e.g. grocery retailing) in which the disruptive effects of online shopping have yet to make a significant impact.

Finally, our study was administered in the Finnish context, which adds to earlier accounts of Spanish (Roman, 2007), US (Limbu, Wolf, and Lunsford, 2011, 2012) and Taiwanese (Lu, Chang, and Yu, 2013) online consumers' ethical considerations. Notably, in Finland, consumers have relatively high ethical standards (Lindblom and Lindblom, 2016 – see Further reading). It has been reported that consumers' online behaviour and individuals' ethical attitudes vary across different cultures (Limbu, Wolf, and Lunsford, 2011). Lu, Chang, and Yu (2013) show that different individual cultural patterns (individualism vs. collectivism) lead to a focus on different dimensions of CPEOR. Therefore, the importance of consumers' perceptions of retailer ethics might be different in a country context in which consumers possess a lower level of ethical standards than those of Finnish consumers.

Key lessons for future research

- As the digital disruption continues to evolve in retailing, the impact of ethical issues related to, for example, data privacy and security will most probably increase in the future retailing. Therefore, more research will be needed to investigate how consumers respond to these ethical challenges.
- Further research is needed in understanding of how consumer perceptions regarding online retailer ethics affect consumer behaviour in omnichannel retailing environment.
- Consumers' past-purchase behaviour (in terms of what channel they have selected) is linked to their perceptions regarding the importance of online retailer's ethics.

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12 Data obstacles and privacy concerns in artificial intelligence initiatives

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Introduction

Artificial Intelligence (AI) is considered a revolutionary technology in the marketing industry. Although it has existed as a technology and a field of study for decades, it has only recently shown rapid growth among different markets. AI has disrupted a variety of industries (Campbell *et al.*, 2020), and the growth of AI adoption and its positive effects on businesses are clear; estimations predict that AI will increase the global economy by 14% (equivalent to 15.7 trillion USD) by 2030 (see Future Reading: Al Sheibani, Cheung, and Messon, 2018). By investing in AI, firms may increase their return on investment significantly, which will further accelerate AI adoption.

One factor that influences AI is data, which are the raw materials that are required to run AI machinery. Data serve as a new source of idea generation for product development, customer service, shelf location, distribution, dynamic pricing, etc. (Erevelles, Fukawa, and Swayne, 2016). Good data are the foundation of AI modelling, and the appropriate data are needed to optimise projects (eMarketer, 2019 – see Further reading). During the past few years, the use of data sciences, which facilitate decision-making and the extraction of actionable insights and knowledge from large datasets in the marketing environment, has remarkably increased. Despite these advances, strategies for improving the management of data sciences in DM remain scarce (Saura, 2020). AI both lives and dies by data; problematic data can introduce risks that can be economically devastating for any company (Harrison *et al.*, 2019)

Therefore, we must explore whether companies are preparing themselves in terms of data collection and management to fully capitalise on AI technology. Specifically, businesses reportedly waste considerable time organising, cleaning and structuring the databases of their users and customers (Kelleher and Tierney, 2018). There are problems in data acquisition, data labelling and the improvement of existing data (Roh, Heo, and Whang, 2019). It is important to determine whether companies have organisational chassis to successfully support AI initiatives. A strong dimension of data that is often ignored is ethical issues related to data privacy. For example, the two tech giants Google and Facebook were both sued for submitting consumers' photos for biometric scanning (Solove and Schwartz, 2014). This development might affect data-driven AI initiatives, especially since the implementation of the General Data Protection Regulation (GDPR) in Europe. Data privacy can also create problems because customers are becoming more aware of the collection of their personal data, and it is raising concerns (Davenport *et al.*, 2020).

This chapter aims to determine whether firms have sound structures for collecting and organising data to fully harness AI technology. We used a special data privacy angle to monitor the industry's current outlook regarding data privacy issues. For this purpose, we conducted in-depth interviews with relevant AI and data industry experts in five countries. The results showed that companies are currently lacking in structures and systems for collecting and managing data; thus, their ability to harness AI technology is weak. It was also evident that data privacy issues are extremely important, and measures like the GDPR will help the industry cultivate a more ethical use of technology while not blocking overall industry growth. Our study will assist managers who want to capitalise on data based on AI technology.

Literature review

The concept of AI in its contemporary sense is not new. It was firstly initiated during the Dartmouth Summer Research Project on AI in the 1950s. However, AI appears new to those looking to repackage Big Data (Elish and Boyd, 2017). Marketers can now generate more accurate results for a variety of marketing intelligence tasks, including customer segmentation and profiling, product reputation management, pricing strategy, competitor analysis, promotional marketing analysis, recommender systems, location-based advertising and community dynamic analysis (Fana *et al.*, 2015). These results have important implications for forecasting purchases, and they can affect sales forecasting (Liu, Xiao, and Ding, 2016). AI and Big Data are not only changing existing marketing tasks but also supporting innovative marketing solutions. For example, Liu, Xiao, and Ding (2016) propose an automated and scalable garment recommender system using real-time in-store videos that can improve the experiences of garment shoppers and increase product sales.

Data are the foundation of AI-driven marketing; AI requires data to run, and most AI-powered solutions require existing datasets to run. If a project lacks the appropriate data, the results will be less than optimal (eMarketer, 2019 – see Further reading). AI makes data meaningful through cognitive computing because analysis of data by humans can be a time-consuming task; thus, the utilisation of AI techniques helps clarify data (Gupta *et al.*, 2018). More data are available today than ever before but companies cannot generate effective results if their data are compromised (Alshura, Zabadi, and Abughazaleh, 2018). Data offer greater insights into marketing performance than they did in the past, and these insights help marketers make successful decisions for optimising their marketing actions and improving their return on investment (Wedel and Kannan, 2016). While finding data used to be a challenge for marketers, they now face the challenge of transforming data into value. Data have attained a central role in marketing solutions. As data become larger, more complex and more inexplicable, the limited mental capacities of humans pose difficulties in deciphering and interpreting an unknown environment (Sammut and Sartawi, 2012). Data create a competitive advantage, and marketers are creating more personalised experiences through data (Wright *et al.*, 2019; Ozcelik and Varnali, 2019; Jarek and Mazurek, 2019; Aguirre *et al.*, 2015). Companies should be using an infrastructure that can facilitate the adoption of AI, and this particular area of research needs further examination.

Data-based innovation and marketing can trigger consumers' privacy concerns from a contextual integrity perspective. Such concerns can, in turn, influence the future of these data-intensive fields. Firms must carefully evaluate their use of consumer data in

their innovation and marketing efforts (Bleier, Goldfarb, and Tucker, 2020; Davenport *et al.*, 2020). Addressing data ethics and politics is an integral task of data studies. Big Data and their meaning are socially constructed and influenced by evolving social, political and technological forces (Chen and Haase, 2020). Martin, Borah, and Palmatier (2017) state that growing efforts towards data collection and usage increase customers' concerns about their privacy. They might feel uncomfortable receiving personalised advertising and content when they realise how much of their data are being collected and analysed (Aguirre *et al.*, 2015). Per Martin and Murphy (2017), the more worried customers are about their data privacy, the more negative their responses are towards the brand. In addition, regulations, such as the GDPR, are considered revolutionary in terms of data privacy, but they create challenges for marketers (Kietzmann, Paschen, and Treen, 2018).

Research methodology

To reach a holistic understanding of what data issues challenge marketers, managers and other industry executives, semi-structured interviews were used for data collection in this research. The interviewed experts were working with AI technology and had knowledge of and/or experience in marketing. Given the complexity of the research problem and that the phenomenon under study may vary between the interviewees depending on their expertise, it was important to consider that new information could emerge during the interviews. This study used purposive sampling. A review of the interviewees' titles shows that they varied in their level of expertise. We conducted in depth-interviews (see Table 12.1 for details) with 14 relevant managers, CEOs, entrepreneurs and consultants.

We conducted telephonic interviews with the informants from Finland, the United Kingdom, the United States, Switzerland and Peru to ensure balanced and comprehensive results. Most of the interviews were conducted in Finland. The interviewees were selected because of their knowledge/practice/experience, particularly in the AI field and generally for their ability to reflect from marketing perspectives. The interviews, which lasted ~45–60 minutes, were recorded and transcribed.

Our data analysis was conducted via thematic analysis (the ethnographic imagination approach). Ethnography is a way to imagine 'social'. In other words, ethnography is a type of qualitative research that involves immersing yourself in a particular community or organisation to observe their behaviour and interactions up close. Per Watson (2011), organisational ethnography involves creating systematic generalisations about a topic that must be theoretically informed, informing and contributing to the broader body of knowledge that constitutes organisation and management studies. This approach enables theoretical rather than empirical generalisations. Sociological imagination allows individuals to rise above their everyday social context, making it possible to acquire the distance necessary for critical reflection and change (Mills, 1959).

The thematic analysis included five steps. (1) Braun and Clark (2006) stress that the researcher should familiarise themselves with the data. When transcribing the interviews for this study, strict attention to detail ensured that no information of value was overlooked. The interview recordings were firstly transcribed in writing, and filler words (e.g. so, um and like) were left out. Both the interviews and the transcriptions were conducted in English. (2) The second step included generating initial codes. Coding is defined as 'the process of assigning meaningful numerical values or names that reduce data from a

Table 12.1 Interview participant details

Interviewee	Country	Title	Type	Duration
I–1	Finland	Head of data	Face-to-face	28 min
I–2	Finland	Chief Growth Officer	Telephone	52 min
I–3	Finland	Lead Data Scientist	Telephone (with I4)	46 min
I–4	Finland	Business Lead AI	Telephone (with I3)	46 min
I–5	Finland	CEO	Telephone	37 min
I–6	Finland	CEO and Co-Founder	Telephone	49 min
I–7	Finland	Director, Analytics	Telephone	36 min
I–8	Finland	CEO	Telephone	24 min
I–9	Finland	Founder and Chairman	Telephone	38 min
I–10	Bulgaria	CEO and Co-Founder	Telephone	51 min
I–11	Switzerland	AI expert	Telephone	55 min
I–12	The United Kingdom	CEO	Telephone	39 min
I–13	The United States	Previous Digital Director/ Adjunct Professor	Telephone	1 h 2 min
I–14	Peru	CEO	Telephone	60 min

large amount of undifferentiated text' (Hair *et al.*, 2015, p. 302). Thus, coding helps the researcher focus on valuable key characteristics of the data. During this step, the entire dataset was read and coded with precision. (3) The third step involved searching for themes within the data (Braun and Clarke, 2006). Similar codes were put together in potential themes; the codes that demonstrated patterns throughout the dataset were considered themes. The themes were then colour coded to help analyse the data. Braun and Clarke (2006) suggest (4) reviewing the themes and (5) naming them. Here, the themes were reviewed against emerging similar themes to avoid duplicates, and they were named to provide a clear visual map of the data.

Findings

Figure 12.1 outlines the framework for factors affecting the successful implementation of AI and required actions.

The analysis consists of themes that emerged from the semi-structured interviews regarding data issues. Most of the interviewees stressed that the current data collection and management methods that are used in most organisations are insufficient.

> *The biggest issue with AI is the data quality and the storing of the data. And I see there are a lot of things to be done to get AI really − Because 80% of our time, when we work with customers and AI-related projects, it is to just start collecting the data, cleaning the data and managing the data, and only after that can we start running the AI.*
>
> (I-3, Lead Data Scientist)

> *I don't think they know what data is there. They never made sense of it. It's not been tuned, not been managed, I doubt. And there's no kind of data lineage. What is the purpose and why was it collected historically vs its purpose now? Is it labelled? Is it normalised?*
>
> (I–13, Digital Director and Adjacent Professor)
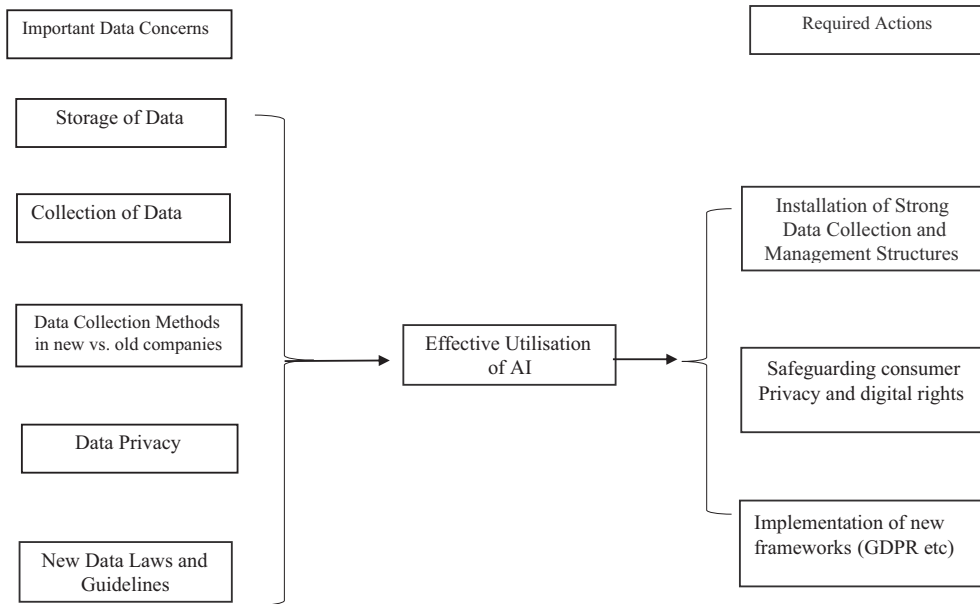
Figure 12.1 Result framework: factors affecting successful implementation of AI and required actions.

The findings also showed that, in some cases, companies are collecting data, but they have no idea how to use it.

> *I believe that companies have quite a lot of data, of which a big part is not used. Nobody cares, and they do not know what they have. So, I would start with what data is there and make conclusions about whether it is in the right format or not.*
>
> (I–5, CEO)

Building a large data warehouse was not considered the optimal approach for companies, as explained by one of the interviewees (I-6). Instead, the interviewees found starting with the business goals and the use case, followed by determining what data and tools were required as well as how to label the data the correct approach.

Davenport *et al.* (2020) stress the importance of ensuring that these processes do not hinder gathering relevant data insights from customers and innovating. This conclusion can also be drawn from the interviews; the interviewees agreed that privacy requirements and regulations guide the operations of companies. They considered the GDPR the most significant change in data privacy regulations in recent years and stressed its role in marketing practices today. The interviewees saw regulations as having a positive effect on the incorporation of AI into marketing practices.

> *I am 100% convinced that GDPR will affect it in a good way. Data privacy is a huge issue nowadays already, and it will be more so in the future. And now when we have GDPR in place, it will force the companies to concentrate on these privacy issues already in the beginning. It is not possible to if something is already up and running; it is very difficult to take into account certain privacy things. But if we have those rules in place already in the beginning, it will be a great thing.*
>
> (I-6, CEO and Co-Founder)

I think GDPR was the best thing that could happen in the data business . . . I would say that these regulations help create fair and sustainable AI business. Fair is kind of the same as being ethical but an easier concept.

(I-9, Founder and Chairman)

As seen earlier, the GDPR guides companies in the right direction regarding consumer data privacy from the outset, and it is a major factor when it comes to incorporating AI into marketing practices. It only has a negative impact when a lack of understanding is involved.

Another interviewee (I-1) explained that, thanks to the GDPR, consumers are now more aware of what data are collected about them, and they also understand their responsibility regarding the data they provide, which can be considered positive. However, customers also expect to gain value from giving out their data via better services. This connects to the findings regarding the expectations that consumers have from younger companies, especially when considering marketing activities that are based on collected data, such as personalisation. Interviewee I-1 also highlighted that compliance with the GDPR or other regulations allows companies to create better services and increase their overall brand image as well as the confidence of certain partners.

While the positive role of the GDPR was emphasised by the interviewees, few challenges were mentioned concerning related limitations in AI-driven marketing practises. One challenge described by an interviewee (I-4) was data collection and management processes.

You have to understand what data you are using and how you are using it and whether the usage of that data is purposeful for why it was created.

(I-4, Business Lead AI)

Another interviewee (I-11) agreed that the GDPR has complicated things for marketing practices. However, he emphasised the role of trust between the company and its customers correspondingly to the rising privacy concerns among consumers that were noted by Davenport *et al.* (2020) and Martin, Borah, and Palmatier (2017). Regarding the opinion presented earlier, Martin and Murphy (2017) also stress the role of providing customers some control over their data to build trust with the company and increase the likelihood of customers providing their data. Thus, building trust between a company and its customers is critical for receiving customer data while complying with certain regulations, such as the GDPR.

Discussion

This chapter aimed to determine whether companies are structurally prepared to adopt AI in terms of data collection and management. This step is important to ensure the optimisation of AI benefits. We sought to determine how privacy issues and new reforms, such as the GDPR, can affect a company's AI initiatives and processes. Our main findings indicated that companies might be neglecting the expertise required for sound data collection and management practices. This is consistent with Saura's (2020) claim that relevant measures for improving data management remain scarce. Henke *et al.* (2016– see Further reading) emphasise the importance of having proper data ecosystems in place to deliver successful AI campaigns (Chui, 2017 – see Further reading). In some cases, even companies that are

collecting large datasets are not utilising them in their favour. We also found that privacy should be at the centre of data policy when implementing any data initiatives. Martin, Borah, and Palmatier (2017) state that growing efforts in data collection and usage are increasing customers' privacy concerns. Firms must carefully evaluate their usage of consumer data in their innovation and marketing efforts (Bleier, Goldfarb, and Tucker, 2020; Davenport *et al.*, 2020). New initiatives, such as the GDPR, are helping industries safeguard consumer privacy without causing problems for AI initiatives. Figure 12.1 extracts the findings from this paper. Many data issues must be fixed if companies want to harness AI technology. Currently, most companies' data collection and management systems are inadequate; they are not striving to collect all possible forms of internal data. External data can be useful but only after internal data are fully understood. While data collection methods in older companies are more inadequate than those in newer companies, older companies can survive without data because they have long-standing, strong relationships with their customers, and the market recognises their products and/or services. However, to be more competitive, they must introduce new data collection and management policies. There is no simple answer regarding which data are the most effective in any campaign; instead, the desired results need to be identified before beginning a project to know which data will help achieve effective results.

There are certain limitations to this research. For example, the data collection was conducted via semi-structured expert interviews on a rather broad scale instead of focusing on a specific factor. Although the semi-structured interviews offered the possibility of finding new aspects, this thesis offers a general overview of the factors that make data appropriate for practising effective AI campaigns in marketing versus a detailed description.

Key lessons for future research

- Future research should seek an exact framework for the deployment of data management and collection structures as well as a general privacy framework model.
- A clear/new framework is required to explain how to establish an AI strategy and the how company's data should be managed to make the strategy work
- Exploration is needed into how data collections and management practices can be tailored in different organisational settings (e.g. large organisations vs. small organisations; old organisations vs. new organisations).

Disclaimer

The research presented in this chapter was remodified from the University of Jyväskylä Master's thesis '*Factors affecting the success of AI campaigns in marketing: data perspective (2020)*'. The copyright for this JYU thesis belongs to Varmavuo, Eevi as the Author. Research presented here has not been otherwise previously published.

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13 GDPR guidelines for academic research in marketing

Sachiko Scheuing and Outi Niininen

Introduction

With the introduction of the European Union (EU) General Data Protection Regulation (GDPR, 2016a – see Further reading) and high penalties for failing to protect study participants' privacy, academic researchers must now design research that uses personal data with great care. The processes and documentation requirements for the GDPR are similar to what is expected by an Institutional Review Board (IRB) (Mourby *et al.*, 2019). While there are numerous publications on GDPR compliance for academic research in the medical field, little has been written about the lawful treatment of data for research in the marketing context. This chapter attempts to fill this gap and suggests checklists that researchers can follow for designing GDPR-compliant academic research in marketing.

The topic of sensitive data will not be discussed in detail in this chapter; rather, the focus is on non-sensitive data. Data collection from secondary sources, including social media (SM) or third-party registries and databases, is also not addressed in this chapter because such data may be subject to further restrictive terms of use that are unique to each platform. Given that this chapter aims to highlight the impact of the GDPR on academic research, the debate on the intricacies of research styles is also omitted. Finally, this chapter relies heavily on legal articles, with the majority coming from the law text itself and regulators' guidance.

This chapter begins with an overview of IRBs, followed by a brief introduction of the GDPR and a description of the data used by academic researchers in the field of marketing. The chapter's second half includes a seven-step approach to designing GDPR-compliant research in marketing, including processes and documents that are required for a lawful marketing research project.

Institutional Review Boards seek to ensure ethical research practices

Academic research advances knowledge in society in general and thus often includes challenging research projects. Traditionally, IRBs have ensured high ethical standards for academic research. In the review process, the IRB's members review research proposals and all supporting documents, including instructions to study participants. Drawing on the national or institutional ethical conduct of research guidelines, this team of experienced researchers discusses the features of the proposed study. Researchers may then be asked to provide further clarification of the project and/or adjust the research design.

IRB approval is awarded only after the board members are satisfied with the ethical soundness of the research design (Ienca *et al.*, 2019).

Typically, IRB members review applications from psychological, medical, biological or physiological research projects. If the research aims to study respondents in vulnerable positions, IRB approval becomes essential. Furthermore, academics seeking external funding may also need IRB approval, even if their research does not involve human physiological data and is perceived as low risk. High-quality journals may also demand IRB approval before publishing a study (TENK, 2019).

The responsibility for ethical research practice lies with all researchers, and typically only high-risk projects are taken through the full IRB review process. IRB processes can require a significant amount of time from even the most experienced researchers. Therefore, various processes for filtering out low-risk research designs that pose no challenge to the respondents' well-being or institutional reputation are implemented. Institutional research guidelines, for example, participant information packages and self-assessment for data management practices, can be used to determine the risk level of each proposed research project. As an example, La Trobe University in Australia has developed a step-by-step online portal that allows researchers to self-certify projects with a low ethical risk (see Further reading).

In most instances, the GDPR mainly requests procedural changes to the already well-defined national codes for ethical research practice. Many research funding bodies and national-level codes for the ethical conduct of research have now incorporated specific GDPR requirements (Meijering *et al.*, 2020; Tikkinen-Piri, Rohunen, and Markkula, 2018).

The GDPR

In May 2018, the GDPR implemented a higher standard of data protection. The EU legislature believed that a stronger data protection law would give EU citizens more control over their personal data (see the European Commission Statement – see Further reading). The GDPR is based on seven principles: lawfulness, fairness and transparency; purpose limitation; data minimisation; accuracy; storage limitation; integrity and confidentiality (security) and accountability.[1]

One of the important aims of the law was to harmonise the then-fragmented data protection laws of EU member states.[2] However, perfect harmonisation was not achieved due to delegated acts in the GDPR that allowed member states to supplement the law with additional national rules. Thus, even when working with research collaborators within the EU, some aspects of data protection requirements may differ slightly (Ienca *et al.*, 2019; Mourby *et al.*, 2019).[3] This chapter will focus on the uniform requirements in the GDPR that were adopted in all EU member states and the United Kingdom (before Brexit).

Designing GDPR-compliant research

The following section aims to help academic marketing researchers design studies that are GDPR compliant. It will also provide a general overview of the documents and processes that are required to treat research subjects' data lawfully. These seven steps are summarised in Figure 13.1.

As shown in Figure 13.1, the seven steps recommended to achieve GDPR-compliant academic research are as follows: review guidance notes already provided by your

Step 1	Review documents by the Data Protection Officer of your institution
Step 2	Determine the applicability of the GDPR to the research – Anonymous vs. Personal Data
Step 3	Decide the legal ground on which to base the data processing for the research
Step 4	Determine if the research exemption can be applied to the research
Step 5	Examine if profiling will be used as part of the research
Step 6	Determine if the research requires data sharing, use of service providers and cross-border data transfer
Step 7	Determine if a Data Protection Impact Assessment is necessary

Figure 13.1 Seven steps towards GDPR compliant research.

institution's Data Protection Officer (DPO); determine the applicability of the GDPR to the study (anonymous vs. personal data); determine the legal grounds for processing data and whether a research exemption can be applied; study how data are analysed and utilised and if either results in profiling of the respondents and identify whether there are instances in which the collected data may need to be shared with external organisations, including any cloud-based software that will be used for, for example, data collection or analysis.

Step 1: review the documents provided by the DPO of your institution

EU regulators have long considered DPOs as key players in making organisations accountable for data protection.[4] Accordingly, the GDPR, a law that is based on the accountability principle, the role of DPO is clearly stipulated in Section 4. If the university, institution or company of the researcher has appointed a DPO, they should be a valuable resource for the required research documents. The DPO's tasks include the provision of advice to the organisation and its employees.[5] DPOs can also help answer many of the questions throughout the seven steps outlined in this chapter. Many academic institutions have already worked with their DPO to establish internal requirements for technical and organisational measures in academic research projects. These will be discussed later in this chapter under the section titled *Protecting personal data with appropriate technical and organisational measures*.

Step 2: determine the applicability of the GDPR to the research: anonymous versus personal data

Before beginning a research project, it is important to determine whether the GDPR is applicable. The general interpretation is that if it is verifiable that the dataset does contain personal data, then the GDPR applies. The GDPR states the following regarding personal data:

> *Personal data means any information relating to an identified or identifiable natural person ('data subject'); an identifiable natural person is one who can be identified, directly or indirectly,*

in particular by reference to an identifier, such as a name, an identification number, location data, an online identifier or to one or more factors specific to the physical, physiological, genetic, mental, economic, cultural or social identity of that natural person.[6]

Thus, any information that can lead to a natural person or can be used to identify a person is considered personal data.

If data are anonymous, the GDPR does not apply to the research. Unlike personal data, anonymous data are not defined in the GDPR, but there are clues to what requirements need to be fulfilled for data to be classified as anonymous. Recital 26[7] of the GDPR states that data are anonymous only if the researcher, in their capacity as the Controller,[8] is not in the position to either identify or single out the person with whom the data are associated. For instance, if the researcher has no means to (re)identify the research subject because he/she lacks access to the cross-referencing table, the data may be considered anonymous[9] (Mourby *et al.*, 2018).

Academic researchers, as medical researchers, often apply pseudonymisation techniques to protect the identity of research participants by replacing direct identifiers, such as names and addresses, with unique ID numbers (Verhenneman *et al.*, 2020). While pseudonymisation is considered a protective measure by the GDPR, pseudonymised data are still considered personal data; therefore, the law applies.

In the context of qualitative research, the researcher might unintentionally offer information that could lead to the identification or singling out of an otherwise anonymous interviewee. For instance, interviewees may be known for their exceptionally artful communications or even their vocabulary. Citing such respondents may result in the interviewee being identified if a quote is compared to the respondent's previous statements in the press or on SM (Ienca *et al.*, 2019). The paradox here is that it is often the most unusual, colourful quotes that bring true value to qualitative data analysis.

Aggregated datasets and organisations

When working with aggregated datasets (i.e. individual data are summarised or averaged for the entire group), on a geographic level, for example, such as for cities or street sections, data are considered anonymous (see the Future of Privacy Forum (FPF) Visual guide to practical data de-identification in Further reading). However, studying organisations' data requires further examination to determine whether the data are anonymous or personal. If employees are being studied, the GDPR will most likely apply. As an example, consider a data sample comprised of people with the title 'Head of the Purchasing Department' that does not include individual names but does identify companies. While the individual names are not known, it is likely that only one person holds this title per organisation, which means the data can identify a person and thus the GDPR applies.

If organisations' records are being studied but people and/or functions within the organisation are not, there are two possible scenarios. When the study includes only organisations with many employees, such as companies listed on the stock market, hospitals and universities, it is highly unlikely that a record will point to a single person; therefore, the research is likely not subject to the GDPR. However, if the study includes micro-organisations (i.e. a specific doctor's practice or a web store owned by one person), the data related to the organisation must be treated as personal data.

Step 3: determine the legal ground on which to base the research's data processing

The GDPR requires that the processing of personal data, including for academic research purposes, be based on one of the six lawful bases provided in Article 6(1). For research in marketing, consent and legitimate interest can be used as legal grounds (Maldoff, 2016 – see Further reading).

Consent, which may be the most used legal basis in academic research, is a typical IRB requirement (TENK, 2019) although it has some limitations. The challenge lies in that consent must be specific and freely given.[10] Academic research processes do not always follow the original study plan, and the data analysis might eventually highlight a new direction for the study. Consequently, data use may fall outside the specific parameter communicated in the consent language (Ienca *et al.*, 2019). Therefore, when consent is used as a legal basis, the data must not be used for other purposes or other studies[11] unless, as we will discuss in the next section, GDPR exceptions can be applied.

When using legitimate interest, instead of consent, it allows data to be re-used in future research. To use legitimate interest as the legal ground for a research project, a carefully written assessment that weighs the researcher's interest against that of the research subjects (i.e. a Legitimate Interest Assessment, LIA) must be carried out.[12]

Regardless of whether consent or legitimate interest is used, the legal basis must be documented and communicated to the research subjects when either legal ground is used.

Step 4: determine whether a research exemption can be applied

GDPR has provisions for certain scientific or historical research and for statistical purposes to be exempt from providing data subject rights such as the right to data access, rectification, restriction, erasure and, in some cases, objection. In addition, the research can be exempted from purpose limitation, one of the basic principles of the GDPR that requires data to be used only for the purposes it was collected, and data retention limitation. Without these restrictions, the data collected for the research can be repurposed for future studies, even by other researchers.[13]

Marketing research that is aimed at improving products or financially benefitting an organisation will generally not be able to make use of the scientific research exception. By contrast, academic research by universities and research institutions is more likely to be considered scientific and thus able to use this provision. Marketing research that is carried out by academics for companies should, therefore, be examined with extra care to determine whether the provision can be used. If a study's results are summarised (e.g. in a report or academic publication) as opposed to being in a format that can be used for a people-based targeted marketing campaign, then the research may fall under the category of 'statistical research', which also enjoys the research privilege and the GDPR does not apply (see the Information Commissioner's Office [ICO] Registry of processing activities in Further reading).

Step 5: determine whether profiling will be used as part of the research

While most research will carry out 'profiling', as defined in Article 4(4) of the GDPR, it is uncommon for academic research to apply profiling followed by automated decision-making, which can have legal effects on the research subjects. In the academic context, profiling could include, for example, assigning a category classification to records, creating

additional variables or enhancing records with additional information but without any automated follow-up processes that could prove detrimental to the study's participants. Thus, in most cases, the researcher does not need to collect explicit consent, which is detailed in Article 22 of the GDPR.

When it is determined that the exemptions of the GDPR are not applicable, additional requirements can arise when profiling is used. Such is the case when research results are then later used to make automated marketing decisions by a company (e.g. which advertisement message the research subject should receive). When applying the research data that are collected for marketing purposes, such as targeting particular groups of individuals with specific advertisements, research subjects must be provided with the opportunity to object to the marketing use of their data.

Step 6: determine whether the research requires data sharing, the use of service providers and cross-border data transfer

There are instances when data need to be shared externally, including international research collaboration, the expectation to participate in Open Science, submitting an article for review to a top journal or completing externally funded research projects (Mourby *et al.*, 2019). Furthermore, some types of data transfer and data sharing are not obvious. For example, a simple career move by an academic could result in data being transferred between institutions and even countries (Mourby *et al.*, 2019).

When sharing data with research partners that require a Controller-to-Controller data transfer or working in a joint-controllership arrangement, a contractual agreement outlining the responsibilities and obligations of the research parties is essential, that is, joint-controller agreement (Ienca *et al.*, 2019).

A data protection agreement that formalises the Controller-to-Processor relationship must be put in place when research partners are working on the researcher's behalf, under strict instruction or when a service provider, such as a survey platform, is used. The GDPR requires informing research subjects about the recipient or the category of the recipient of their data.[14]

Similarly, if the research data need to be transferred to countries outside the EU, it is important to ensure that the same level of data protection is granted to the data when it is transferred to a non-EU jurisdiction as would be used in the EU. Several instruments can be used; however, the most practical way is to sign a standard template agreement called Standard Contractual Clauses (SCC), which are drafted by the European Commission. Currently, there are two types of SCCs: Controller-to-Controller and Controller-to-Processor (or Processor-to-Processor). The Executive Vice President of the European Commission Margrethe Vestager has recently signalled that a new set of SCCs could soon be ready (Chee, 2020; Europa.eu, 2020 – see Further reading). The first type is suitable for data sharing with collaboration partners based outside the EU, and the latter is for cases that are working with service providers based outside the EU. When research data will be shared across borders, research subjects must be informed of the transfer.[15]

A recent ruling of the European Court of Justice (ECJ) requires additional protective measures when transferring data to the United States. This may be particularly relevant for quantitative marketing research because many internationally recognised online survey platforms are based in the United States (e.g. SurveyMonkey and Qualtrics). When using a US-based platform, the level of processing risk must be evaluated on a case-by-case basis, and a data protection agreement as well as an SCC must be implemented. One

remedy may be adding contractual language to provide extra data protection. However, at present, neither the court ruling nor the European Data Protection Board has clearly defined this 'additional protection'.[16,17] An alternative is to use a non-US platform, or even better, an EU-based online survey provider that does not transfer the data outside the EU, such as Webropol.

Step 7: determine whether a Data Protection Impact Assessment is necessary

When increased risks are expected, a thorough review of the data processing via a Data Protection Impact Assessment (DPIA) becomes necessary. Processing is considered a high-risk task when, for instance, a systematic and extensive evaluation that can affect the data subject significantly takes place, sensitive data[18] is used on large scale or the systematic monitoring of public areas occurs.[19] For example, a study that has surveillance cameras installed on billboard advertisements at major train stations would most likely require a DPIA.

The GDPR details what information is required in a DPIA in Article 35(7). Some domestic regulators have also produced a DPIA template, and they are making these available through their websites.

Documentation and the processes required for a GDPR-compliant academic research proposal

The seven steps outlined in Figure 13.1 help determine whether (a) the GDPR applies to the research, (b) the research can make use of the GDPR exemption, (c) profiling takes place, (d) data will be shared and/or transferred to a non-EU country and (e) a DPIA will be necessary. The following section describes the documents and processes that are required to carry out compliant academic research in marketing.

Drafting the necessary documents

The following section guides researchers on the documentation required for GDPR-compliant academic research (see Figure 13.2).

Use clear and plain consent language
Carry out a Legitimate Interest Assessment
Write a Privacy Statement
Create the Record of Processing Activities
Determine and document measures for protecting collected data throughout the research process
Implement the Data Protection Impact Assessment
Plan processes to ensure research subjects' right to data protection is guaranteed

Figure 13.2 Guidance for the documentation required for GDPR compliant academic research.

As shown in Figure 13.2, the GDPR has several requirements for supporting documents. Researchers must ensure that documents are written in a clear language that is easy to understand, demonstrate the completion of a legitimate interest assessment, include a privacy statement and a record of processing activities, document all measures aimed at protecting collected data throughout the research process and, if required, complete the DPIA as well as plan how the study participants' rights to data protection can be implemented.

Use clear and plain consent language

If consent is being used as a legal basis, an explanation of the research processes needs to be written in clear and plain language. In addition, the consent language must be presented in a distinguishable form so that it cannot be missed.[20] Article 7(2) of the GDPR lists the requirements for capturing valid consent. Notably, for research subjects below age 16 years, parental consent is required.[21]

Complete a legitimate interest assessment

When the research's legal ground is legitimate interest, the researcher's interest in carrying out the research must be balanced against the interest, fundamental rights and freedoms of the research participants.[22] Only when the interests of the research participants do not outweigh the researcher's interest can legitimate interest be used as the legal ground.

The result of the balancing exercise, which is often called the legitimate interest assessment, must be documented. The Data Protection Network and the Information Accountability Foundation provide templates and guidance on how to carry out a legitimate interest assessment (see Further reading).

Write a privacy statement

Article 13 of the GDPR details the types of information that must be provided to the research subject. This information is typically provided as a Privacy Statement, either on a website that is specifically designed for the study or on the website of the researcher's organisation. It is also good practice to provide the information in layers. This approach helps when there is not enough space on the landing page of the online survey. In such cases, state (a) the purposes of the processing, (b) the identity of the researcher and (c) the participants' rights under the GDPR on the survey. The remaining information can be provided through a link to the Privacy Policy that connects to the website. When collecting data via interviews, the interviewee must be informed of any consequences that might occur unexpectedly and that could greatly impact the person in addition to (a), (b) and (c). The remainder of the information can be provided via email with a link to the privacy statement online (see Further reading, 2016b).

Create a record of processing activities

The researcher's university or institution must keep a record of processing activities as defined in Article 30 of the GDPR. The researcher may be asked to provide information

on the research subject's data and the processing envisioned for the study. Links to templates for the record of processing activities provided by the UK-Regulator, the ICO and a OneTrust translation of the Belgian document are included in Further reading.

Determine and document measures for protecting the collected data throughout the research process

Designing compliant research also includes implementing and documenting protective processes and measures for the data. Many of the processes listed in this section may already be in place within the researcher's organisation, and the DPO may be able to help with fulfilling the data protection requirement.

Protecting personal data with appropriate technical and organisational measures

The GDPR requires organisations to implement appropriate measures to protect personal data. As part of a university or a research institution, the researcher will have access to technical and organisational measures and documentation that are already in place. The DPO or the IT and security departments may also be able to assist.

The higher the risk to the rights and freedoms of the data subjects, the more robust the protective measure the GDPR requires (risk-based approach). At a minimum, data pseudonymisation and encryption, robust systems and software, the ability to rapidly recover from a security incident and regularly tested security are expected, depending on the situation.[23] On the practical level, this translates to (among other things) only using software and apps that are approved by the relevant organisation's IT and security departments, regular installation of critical security updates, password protection of computers and laptops, the use of a Virtual Research Workplace with robust security measures and the pseudonymisation of data (Meijering *et al.*, 2020; Mourby *et al.*, 2019). The ICO has a comprehensive checklist for this purpose available on their website (see Further reading).

Carry out the DPIA

When the research is determined to carry the level of risk that triggers a DPIA, the assessment must be carried out and documented. Article 35(7) of the GDPR lists the assessment's requirements. The Commission Nationale de l'Informatique et des Libertés (CNIL), the French regulator, offers a comprehensive template and an app in both French and English that can guide the analysis (see Further reading). The institutional DPO may also be able to assist.

Plan processes to ensure research subjects' rights to data protection

If the research exception of the GDPR can be applied, the right to access, rectification, restriction and (in some cases) objection to processing are waived (Frauenhofer IOSB, 2019). If the research is not exempt, the GDPR requires the implementation of certain processes to allow research subjects to exercise their rights to access, rectification, data erasure, restricted processing, data portability and the right to object. These are detailed in Chapter 3 of the GDPR and summarised here in Figure 13.3.

Subject Access right
Research participants may request information of the data used in the research. The law requires the processing purposes, categories of data processed, recipients or categories of recipients of the data and where applicable the duration of storage and the criteria in determining the duration to be disclosed. In addition, a copy of the data must be provided to the research subject.[1]
Right to rectification
There may be occasions where research participants will request their data to be corrected, claiming that it is incorrect. In such cases, the researcher is required to make requested amendments without delay.[2]
Right to data erasure
The GDPR allows persons to request the deletion of their personal data. This right extends to data that were made public or shared with other researchers, which means data recipients will need to be informed of the deletion request.[3]
Right to restrict processing
Research subjects have the right to restrict the use of data about them, if (1) they believe the data about them is incorrect, for the duration for the researcher to verify the claim, (2) processing is unlawful but they do not want the data to be deleted, (3) data is no longer required for the research but they do not want the data to be deleted due to legal claims, or, (4) they objected the use of data for the research, for the duration for the researcher to verify if the objection has to be honored.[4]
Right to data portability
This right only needs to be considered in case the legal ground for the research is consent. There may be cases where a research subject requests the data that they have provided to be sent in a digital format. The research participant may, under certain circumstances, also request this file to be transferred to another organisation.[5]
Right to object
This right needs to be considered in case legitimate interest is the legal ground for the research. The research subjects may object to the use of their data, including profiling. Unless there are compelling reasons that demonstrates the importance of the research, that outweighs the interests of the research subject.[6]

Figure 13.3 Rights of research participants in the context of academic marketing research.

1 GDPR article 15
2 GDPR article 16
3 GDPR article 17
4 GDPR article 18
5 GDPR article 20
6 GDPR article 21

Conclusion

The GDPR requires academic researchers in marketing to approach their data with extreme caution in a way that is similar to the IRB review process to ensure the ethical use of data in academic studies. Academic researchers in the field of marketing will be able to provide stronger protection to research data by using the seven-step approach for designing GDPR-compliant research recommended here. DPOs can provide invaluable help in generating the necessary documents and implementing research protection measures.

Key lessons for future research

* Research that includes personal data must consider and adhere to the rules of the GDPR.
* Research plans can identify the specific aspects of data protection that are applicable by using the seven-step approach introduced in this chapter.
* Researchers should complete the required research documents and processes in a compliant manner by using the results of the seven-step approach.

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Notes

1 GDPR Article 5.
2 The GDPR 'where as' (3), (53), (150) and (152).
3 GDPR Article 89(2).
4 Article 29 Working Party Opinion 3/2010 on the principle of accountability https://ec.europa.eu/justice/article-29/documentation/opinion-recommendation/files/2010/wp173_en.pdf.
5 GDPR Article 39(1) a.
6 GDPR Article 4(1).
7 Recital 26, for instance, provides a detailed explanation, which is provided in Article 4 of the GDPR.
8 As defined in the GDPR Article 4(7).
9 In Breyer vs. Germany (C-582–14), the ECJ rules that anonymity is relative, meaning the same data can be personal data or anonymous data depending on the party http://curia.europa.eu/juris/document/document.jsf?text=&docid=184668&pageIndex=0&doclang=en&mode=req&dir=&occ=first&part=1&cid=1130557.
10 GDPR Article 4(11), also see GDPR Article 7(4) for examining whether consent is freely given.
11 GDPR Article 6(4) excludes data collected on consent from re-purposing.
12 GDPR Article 6(4).
13 GDPR Article 89, 17(3)d and 21(6).
14 GDPR Article 13(1) e.
15 GDPR Article 13(1) f.
16 The ECJ's ruling on data transfer to the United States, aka 'Schrems II' https://curia.europa.eu/jcms/upload/docs/application/pdf/2020-07/cp200091en.pdf.
17 The EDPB's FAQ of the ECJ's ruling on Case C-311/18-Data Protection Commissioner v Facebook Ireland Ltd and Maximillian Schrems https://edpb.europa.eu/sites/edpb/files/files/file1/20200724_edpb_faqoncjeuc31118_en.pdf.
18 Refers to a special category of data defined in Article 9(1): *Personal data revealing racial or ethnic origin, political opinions, religious or philosophical beliefs, or trade union membership, and the processing of genetic data, biometric data for the purpose of uniquely identifying a natural person, data concerning health or data concerning a natural person's sex life or sexual orientation shall be prohibited.*
19 GDPR Article 35(3).
20 GDPR Article 4(11).
21 GDPR Article 8(1).
22 GDPR Article 6(1) f.
23 GDPR Article 32.

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14 'Interesting but scary'

Customers' perceived value of MyData

Heidi Haapio and Outi Uusitalo

Introduction

Most organisations regularly collect large amounts of data about their customers and use it for different purposes. When consumers use their credit cards or apps or allow the use of cookies, they accept the storage of the data in a data warehouse. The owner of the data warehouse can mine the information and selectively use it to fit the needs of the organisation (Janasik-Honkela and Ruckenstein, 2016).

Big Data is a new form of capital: it facilitates decision-making and operations. Data are also a valuable resource for organisations because understanding customers' buying behaviours and constantly changing needs helps organisations develop the direction of their operations and servicescapes (Janasik-Honkela and Ruckenstein, 2016). Information is used to predict customers' actions and contemplate and estimate tactics and strategic business activities. Recent discussion has emphasised the quality of data, analytic tools and the ability to analyse and use data in decision-making (Erevelles, Fukawa, and Swayne, 2016; Gandomi and Haider, 2015).

Despite the proliferation of data collected from customers and the transformation of customers' actions into data – a phenomenon called datafication (Ruckenstein and Schull, 2017) – there is still little understanding of how customers can control and use that data. To date, two major approaches have been identified. In the first approach, organisations offer access to data to their customers via different websites and apps. For instance, electric companies offer information about their customers' electricity usage, which the customers can use to find ways to reduce their own electricity consumption. The second approach is consumers collecting data themselves, such as with sports trackers and mobile phones. Various apps provide tools for analysing, for example, one's everyday activity or quality of sleep. Both forms of data are called MyData.

Datafication has raised concerns about and awareness of the possible risks of sharing personal data. Nevertheless, data equal value for organisations and customers. Previous research has addressed the issues of well-being apps (e.g. Koivumäki *et al.*, 2017), and the value of the data to organisations (Kumar and Reinartz, 2016). Saarijärvi (2012) focuses on grocery shoppers' reverse use of data (customers using data that have been collected about them) from nutrition codes to support healthy eating, which could lead to changes in customers' buying habits.

One risk to this approach, as perceived by customers, is uncertainty about the types and details included in the data. Previous studies indicate that customers' main worries include data privacy and security (Kshetri, 2014; Kuoppamäki, Uusitalo, and Kemppainen,

2018). However, other dimensions of data, such as its direction (positive vs. negative) or its potential to awaken thoughts, feelings or social meanings, have rarely been addressed.

Data are coveted as a valuable resource in the marketplace because they can reveal insights regarding customers' actions and uncover previously unknown patterns (Erevelles, Fukawa, and Swayne, 2016). Previous studies have examined customers' perspectives on MyData, including its benefits and affordance in the field of self-tracking and quantified self, measuring health and exercise information (Nafus and Sherman, 2014; Ruckenstein and Pantzar, 2017). Studies in information technology have proposed models for how to exploit data and share it with different actors. However, regarding data value, little is known about its content, the prerequisites for creating it, when it decreases and its contradictions. This study aims to increase our understanding of how consumers benefit from these data. We examine what MyData means to customers, how they define data that capture their purchases and how they feel after they have explored the data.

The value of MyData for consumers

MyData refers to data that have been personified, personalised and returned to the owner to use for their own needs. MyData includes understanding Big Data from the customers' perspective, which highlights the data's visibility and transparency and allows people to control and use information that is collected from them. The consumer is then free to use the data as desired. They can read, sometimes correct and ultimately decide who is allowed to use their data (Poikola, Kuikkaniemi, and Kuittinen, 2014). Essential features of MyData are accessibility to and control by people. All the information is personalised and adequate from the customer perspective (Saarijärvi, 2012).

Online services provide an illuminating example of value creation in collaborations between customers and organisations. Online customers interact with technology (i.e. the physical resources that the company offers) instead of directly interacting with a company's personnel or resources (Grönroos and Voima, 2013). MyData implies that people use data collected of them for their own purposes, and in this situation, value–in–use is created. Value creation is interwoven with various social and physical tasks that are prevalent in the customer's everyday life. Accordingly, customers create value in their context and from their own starting point. Friends, family and work are typically part of customers' everyday lives, and experiencing value is related to all these important aspects of life (Heinonen and Strandvik, 2015).

Organisations enable value creation processes and provide service facilities, such as web services and platforms, which help customers manage their daily chores (Galvano and Dalli, 2014; Grönroos and Voima, 2013; Heinonen, Strandvik, and Voima, 2013; Saarijärvi, 2012; Saarijärvi, Kannan, and Kuusela, 2013). Value is created and experienced when the customer is using the product or service (Holbrook, 1999). Accordingly, when an organisation succeeds in giving value to its customers, it is likely to gain a significant competitive advantage (Helkkula, Kelleher, and Pihlström, 2012).

Value–in–use implies that consumption involves experiences that enable value creation. An integral condition in value–in–use is that the product or service has a concrete use. For the provider organisation, value–in–use processes are often invisible, and it may not be possible to affect or intervene in them. Customer-Dominant Logic (CDL) indicates that the customer controls service situations and thus creates value independently; customers

decide what products or services to use (Anker *et al.*, 2015; Heinonen and Strandvik, 2015). CDL suggests that value is multi-contextual; consequently, many different factors of customers' lives affect how their created value is experienced (Heinonen, Strandvik, and Voima, 2013). Additionally, customers decide whether to look at their own data, and if they do look, they decide what to do with it or (if they are indifferent to the data) to ignore it.

Both customers and organisations are needed to ensure value creation (Echeverri and Skålén, 2011; Eichentopf, Kleinaltenkamp and van Stiphout, 2011). The data in this study include answers from customers who have tested S-Group's 'Omat ostot' [my purchases] service. The data are shared with customers in the S-mobile app, which allows them to view their personalised information. We focused on perceived value and which meanings it reflects. Customer value emerges when the customers scroll through their own shopping data and find pieces that are interesting and/or necessary for decision-making. The company is a facilitator of value when it offers the data back to the customer, even though there is no interaction between the customer and the company. The customer has a relationship with the data service (Anker *et al.*, 2015).

Data and method

The empirical data in this study describe the meanings, benefits and risks that customers perceive in their data. We utilised survey data and answers to open-ended questions that contained meanings, hopes, expectations, information, associations, perceptions and attitudes. The data were collected from S-Group's Omat ostot service. In this platform, customers can view their purchase data, which are gathered from their membership cards. The data are organised by product group level and displayed as the number of products purchased and the euros spent. The data were collected in March 2017 while the service was in its pilot stage. The Omat ostot service was officially released in 2019. The questionnaires were sent by email to panellists who had consented to receiving a questionnaire. While the questionnaire included both structured and open-ended questions, this paper utilises data from the latter.

In total, 2,070 (15%) panellists answered the questionnaire. While 70% of the respondents used the Omat ostot service, 20% did not use it, and 10% did not want to answer the questionnaire. Regarding gender, 44% of the respondents were male and 56% were female. The panellists were active customers who were interested in developing the company's performance; thus, they did not represent the average S-Group customer.

In the open-ended questions, the respondents were asked to write their opinions and understanding of five topics depicted in Table 14.1.

The answers provided a rich variety of descriptions, opinions and convictions, some of which included a lengthy discussion on the service, whereas others featured only a

Table 14.1 Topics of the open-ended questions

Describe freely what kind of thoughts you had when you saw your shopping data	n = 1,703
Give free-form feedback on the features of the Omat ostot service and its usability	n = 706
Give free-form feedback on how the Omat ostot service could be improved	n = 404
If you want, please state any compliments you have for the developers of the service	n = 283
If you want, please write feedback on this questionnaire; you can also further define previous answers if needed	n = 93

word or a smiley face. The one-word answers and answers that included, for example, addresses, were deleted, resulting in 1,259 answers being included in the data analysis. The textual data were analysed using the qualitative content analysis technique as follows: (a) the material was coded; (b) the codes were reworked iteratively several times to ensure that all possible codes were found; (c) words, phrases and sentences that emerged from the data were used as code units (e.g. the codes funny, big brother, unnecessary, amazement and fear were generated from the data); (d) all codes were arranged into categories; (e) categories were examined carefully so that all the relationships between the categories were found and potential new categories were identified and (f) larger themes were constituted based on the categories (Eriksson and Kovalainen, 2015; Hair *et al.*, 2016).

Findings

Analysis of the data produced six themes – entertainment, learning, reflecting on buying behaviour, easing everyday living, transparency and privacy – which reflected the value experienced by the respondents when examining their data.

The results found that 47% of the respondents mentioned things that were either positively or negatively related to entertainment, while a reflection of buying behaviour was present in 29% of the responses. Learning and privacy were both adduced in 7.4% of the responses, and transparency was highlighted in 7.1% of the responses. Easing everyday life was highlighted in only 2.1% of the responses, but notably, the answers in this value reflected more negative than positive associations.

Formation of value in MyData

Regarding the role of the service provider, privacy and transparency were connected to the possibility of S-Group contributing to value creation. For example, when referring to privacy, some respondents felt that the company was monitoring and stalking people; thus, many did want to use MyData and the Omat ostot service. Some customers appreciated how everyday life became easier when using the Omat ostot service. By contrast, others found it too time-consuming and difficult to use.

Holbrook's (1999) typology of customer value, which was used to analyse expressions of value in the data, states that value is created when using a service or product, and each customer creates value from his/her own basis and needs, resulting in some customers getting more value and others getting less value. Value creation is contingent on the situation and the relationship between different services. Value is essentially a subjective experience.

Three different dimensions of value experience emerged when using the service: extrinsic/intrinsic, self-oriented/other-oriented and active/reactive (Gallarza *et al.*, 2017; Holbrook, 1999; Willems, Leroi-Werelds, and Swinnen, 2016). The extrinsic condition is when a service is used to gain a functional or utilitarian purpose other than consumption. Conversely, the intrinsic condition is when customers use the service to gain value for themselves. When it is self-oriented, value is meant for the individual and that individual uses it for his/her own purposes. Other-oriented value is that which stems from a consumption situation that depends on how other people react to it or how it affects others, such as family, friends or nature. Value is active when a customer does something, such as drive a car, and it is reactive when value is created through, for instance, admiration or reverence. A product can also create value although activity from the customer is not required.

Group 1: benefit

Answers to the open-ended questions in our data indicated that the customers experienced various positive outcomes when using the service and contemplating their data. Thus, benefits were created. Customers actively reviewed data when seeking desirable benefits for themselves, such as savings or healthier purchases. The benefits in the current study were extrinsic and varied between respondents, ranging from financial to nutritional, etc. The expressions of value creation were connected to easing everyday life (positive), learning (positive) and reflecting on buying behaviour (positive).

The responses indicated efficiency (Gallarza *et al.*, 2017), how life became easier when using the service and that different uses for the data can be found. Planning and tracking one's economy are easier when there is no need to document the expenses. Therefore, the service saves time. The utilisation of MyData involves creating apps and affordances that are supposed to ease everyday life, such as by allowing customers to track their energy or water consumption.

MyData allows people to learn something new from their behaviour and subsequently conduct favourable actions (e.g. control their finances or improve their health). Thus, by gaining access to their consumption data, customers can move their buying habits in a positive direction. While data are important to both companies and customers, MyData shows that customers need to learn about and reflect on their data to reap benefits from it.

When the customers noted that the service eased their everyday life, they attributed it to the ability to track their expenses and buying behaviour. However, for some, their days became more complicated because the data activities required extra time to sign in to services and review the information. Importantly, the respondents who had been tracking their consumption in one way or another experienced easing of their everyday life. Conversely, the respondents who had not tracked their consumption felt that the service required too much of their time, thus the lack of efficiency.

Learning often involved accumulating new facts about consumption habits (e.g. where and how much money they spent). A common thread was that customers were unaware of how much money they were spending. Therefore, the data were often either a positive or a negative surprise. The presentation of their true spending caused many shocked reactions, but the data helped the customers understand their consumption habits. A sample of the responses included the following:

> *I was shocked by how much I buy sweets and chocolate. I hadn't realised the amount of euros I spent on those. I think this kind of service really opens your eyes.*
>
> (female, aged 35–44)

> *It was absolutely a shock that the second most money has gone to cheese after fuel. All aspects are demonstrative of your own buying habits.*
>
> (male, aged 45–59)

However, reflecting on one's purchases via the data was described as a useful experience. The expenditures and their content became understandable.

> *The experience was WOW!! Here my life is now wide open – when I go to a store, where I shop, what I buy and how much. But all the same, I think the information I received is very interesting and certainly thought-provoking.*
>
> (male, aged 25–34)

One consequence of reflecting on their shopping habits was the strengthened perception of previously invisible purchasing habits. Even without obtaining any new information, it was felt that buying behaviour can be managed, which strengthened the positivity of the experience.

Group 2: uselessness

Several responses indicated that the users of the service failed to recognise why they should use their data and how to benefit from the information. We labelled this value uselessness, as it reflects lack of excellence (Willems, Leroi-Werelds, and Swinnen, 2016). In Holbrook's (1999) typology, this type of value is self-oriented and aimed at gaining external benefits, such as saving money. This value is considered reactive because it does not imply any actions from the consumer.

Here, uselessness involved expressions of reflecting on buying behaviour (negative), learning (negative), entertainment (positive and negative) and easing everyday life (negative). However, at the time of the survey, the service was not yet published and the respondents used it only to answer the survey. Therefore, the respondents may not yet have found reasons for using the service.

Entertainment involved responses that described looking at MyData as 'just for fun'. When the respondents did not see a purpose for watching their data, they did not perceive any aspects that would affect them, such as their buying behaviour. Exploring their data was mostly considered fun yet pointless. For some respondents, the amount of data offered caused anxiety and even irritation. Some responses included the following:

Quite funny . . . maybe I should buy chocolate less frequently:).

(male, aged 45–59)

Pretty interesting trivia.

(female, aged 25–34)

I don't see any purpose for this. Pure nonsense.

(male, aged 60–69)

When reviewing one's buying behaviour was considered negative, there was nothing to reflect on, and thus, the service was considered unnecessary. Some respondents also felt insulted about the insinuation that they needed help with their memory and understanding of past purchases.

I know what I have bought, and I don't need any services for this.

(male, aged 45–59)

I feel that such detailed information is unnecessary, and I don't understand how I could use it. I have budgeted my expenses and have kept track of my purchases for decades, so I know what I am spending my money on.

(female, aged 60–69)

The respondents who considered learning negative connected it to a lack of need or reason. In these cases, the respondents reacted extremely negatively to the service:

Completely unnecessary and indifferent service that officers who regulate consumers and Data Protection have already been forbidden [from using].

(male, aged 60–69)

I don't see any reasons why I would need information about my own purchases. It wouldn't guide me to make certain types of purchases.

(female, aged 45–59)

Uselessness was connected to negative meanings regarding easing everyday life, which became more complicated and difficult when using this service. This was justified because signing into a new system requires remembering a new username and time to look at the data. Some complaints were as follows:

Nobody bothers or has time to see their MyData constantly?????

(female, aged 60–69)

Quite pointless to be straight. Just a waste of time.

(female, aged 45–59)

Group 3: privacy

The responses conveyed several worries related to privacy, such as feelings of being monitored and spied on by organisations. The concern that a third party is monitoring customers' shopping raised the respondents' concerns that service providers are invading people's private lives. Privacy was also associated with worries about information security. Customers' information could end up with an unintended party; thus, others could review the data without permission. Privacy value is similar to aesthetics (Gallarza *et al.*, 2017). Connected to Holbrook's (1999) model, the privacy of data is a self-related and intrinsic value, especially when consumers feel that their privacy has been violated. It was also reactive because the respondents did not want to give out such information.

The fear of losing their privacy stirred strong feelings of irritation, distress and fright. It was interesting when the respondents realised that, regardless of their wishes, the organisation was collecting information about its customers, and the Omat ostot service is not the only service that collects and analyses MyData. Some respondents' comments included the following:

Big brother is watching. Everything seems to be known frighteningly accurately.

(male, aged 45–59)

It is completely unnecessary, and it outrageously insults privacy if there is any more.

(female, aged 60–69)

The information is endangering privacy if it's available for others, such as from an error in information technology, data theft or due to some other situation.

(male, aged 45–59)

Privacy was considered important, and the threat of losing privacy created negative feelings. There were also suspicions about opportunism. The Omat ostot service is useful

for S-Group; thus, they tried to sell data collection as acceptable in the eyes of customers. The control of privacy translated to an unwillingness to let others see the customers' shopping data and the customers not wanting to look at the data themselves.

Group 4: transparency

In our study context, transparency is other-oriented, that is, created when customers have an experience through others, such as seeing what family members have bought. Transparency is active because customers must sign in to the service to see the data. It is also intrinsic because customers do not consider benefits, such as savings, but instead seek the feeling of transparency. In line with these characteristics, transparency as value reflects ethics (Gallarza *et al.*, 2017).

Transparency can be either positive or negative. When transparency was considered positive, it was seen as fair to return the data to customers. Given that the company was collecting the data anyway, sharing the data with customers was seen as a benevolent act of transparency. Customers want both companies and the data to be transparent. Some customers even wanted as much data as possible to use for themselves. Transparency had a negative value for customers when it was connected with troublesome situations, such as when all family members could see the information that was collected. Transparency can be uncomfortable for people who presume that no one else knows what they have bought. Some relevant comments included the following:

> *Of course, S-Group uses the service for their own company, but it is great that the shopping information is also available to consumers. As long as the consumer data is not spread out to outsiders.*

> (female, aged 25–34)

> *It is fair that I can look at my own shopping when the statistics are compiled anyway, such as for marketing.*

> (female, aged 45–59)

During the survey, data were collected from the Omat ostot service via S-cards but not from collateral family member card owners. In the responses, transparency was considered from this perspective, but there were contradictory goals among the respondents. The service was sometimes considered useful and sometimes not when the entire household's information was given. The latter opinion was connected with controlling their data and preventing other family members from seeing it. Some respondents even wanted to delete the data. In these cases, transparency was a debilitating factor and included the potential for conflicts and discord, which could lead to avoiding authentication or keeping the data secret if possible.

Conclusion and discussion

This chapter introduced the customers' perspective of MyData that was collected in grocery stores to illustrate their shopping behaviour. Until now, how data serve customers' interests has been poorly understood. The findings gathered several insights into the value of these data and raised important questions that must be answered when customer data are collected and published for customer use. More broadly, this is a case

of how technology can be designed to serve customers and how customers experience the value of it.

Customer value of MyData is created interactively when customers use the data. The service provider facilitates this value creation, but customers subjectively contemplate the data. Value created is relative, that is, different customers form different subjective value experiences such as benefits, uselessness, privacy and transparency. These experiences imply underlying value types efficiency, excellence, aesthetics and ethics (Gallarza *et al.*, 2017). Importantly, customer value of MyData also reflects preferences, as strong feelings and opinions were expressed when contemplating the data. Consequently, value experiences can indicate behavioural intentions. This study can help identify a strategy for the development of data services that facilitate positive value experiences for customers.

This study has a number of limitations. We utilised data collected in the pilot phase of launching the Omat ostot service. Therefore, the customers who participated in the study had only limited experience of using the data in their everyday lives. Future studies could examine the evolving value experiences after customers have accumulated experiences of MyData.

Key lessons for future research

- Customers' use of MyData allows creation of subjective experiential value.
- Value is idiosyncratic to each customer, and it can be positive (empowering) for consumers, while it can also be negative (value destruction) and reduce customers' well-being.
- Future research should explore the behavioural consequences of MyData services. For example, how does the incorporation of the local ingredients or the carbon footprint affect data value and purchasing behaviour?
- Further research could examine how service providers utilise the customer data. Is there any added value that can be utilised in sales promotion or when designing selections of, for example, environmentally friendly products?
- This study did not address the usability and the physical and aesthetic aspects of the system; future studies could examine how the MyData service system design influences customer value.

Disclaimer

The research presented in this chapter was collected for my University of Jyväskylä Master's thesis '*On reilua, että voin itsekin katsoa ostoksiani*' *– Arvon muodostuminen omadatan kontekstissa (2018)*. The copyright for this JYU thesis belongs to Heidi Haapio as the Author. Research presented here has not been otherwise previously published.

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Section 5

The future for digital marketing communications and conclusions

15 Future look

Communicating with customers using digital channels

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Introduction

When predicting the future, especially in Digital Marketing (DM), for customer–firm communication platforms, the only given is that there will be constant change. Although we believe that many of the old models/theories of marketing and communication will still be valid and used to understand the future of DM, it is clear that we will also see the rise of new models and theories for better mapping and understanding of the customer in the digital era. For this academic research chapter on anticipating key DM trends, we are fortunate to have the opinions of some of the world's leading researchers as well as practising DM and Social Media (SM) Manager to highlight trends emerging from the literature and account management practice.

This chapter firstly explores the future of automation, Artificial Intelligence (AI) and chatbots and their potential impact on customer–company communication. This is followed by a discussion of the future roles that influencers may have as well as the emerging negative aspects of DM Communication. This chapter concludes with a review of the impact that blockchain technology can have on DM and business in general.

AI and automation

As discussed in previous chapters, AI and automation are current buzzwords that are used regarding the future of DM. Although AI has existed for decades, we believe that it is still in its infancy regarding its potential. In the future, AI will replace many increasingly complicated tasks in the digital landscape, from telephone sales to a more profound role in customer communications, such as personalising communications and recommendations for customers. Automation, in turn, will significantly affect how marketing communications are conducted. Marketing automation, when combined with AI, will lead to more completely automated digital communication. Everything from automated email newsletters to automated chatbots is becoming wiser each year and will presumably replace humans in the future.

AI is already an integral part of targeting digital advertising. Ad platforms, such as Facebook and Google, are giving advertisers more options to use AI to find the most potential customers. At the same time, those platforms are offering fewer manual options for ad targeting. However, AI requires data to function. The more money that is invested in ads, the more data that are collected, which leads to better AI ad targeting. The same theory applies to any other AI application: the more data, the better it works. In the context of marketing, the amount of data gathered correlates with the number of people interacting

with DM. Advertisers with big budgets will be able to drive more traffic to their websites; thus, they will benefit more from AI than companies with lower budgets. This raises a question regarding equality: does AI create an unfair advantage for bigger businesses?

Chatbots

What are chatbots? They are simply computer programmes that are expected to imitate human conversation, typically on a website, an SM platform (such as messenger) or a mobile app. The form of conversation to date has mostly been text, but it can also include speech (such as Amazon's Alexa). Chatbots are most commonly used to either help potential or existing customers on a website or SM platform complete their task or to offer customer service in general. Ultimately, the main goal of the chatbot is to drive sales.

Real-time communication via chatbots will continue to grow exponentially, and some would even argue that it is a glorious march. Increasing numbers of businesses have installed chatbots on their websites to assist and guide website visitors in their searches. Chatbots also encourage customers towards a Call to Action, such as making a purchase or downloading content. The challenge with many chatbots to date has been that, even though they all use AI, few are helping the website visitor. We hope and believe that, in the coming years, chatbots will become wiser and thus add value for the website visitor.

Chatbots emerged in 2014 and have become one of the fastest growing digital opportunities concerning firm–customer communication online. On the positive side, chatbots never sleep and can guide us 24/7. The most advanced bots also work well without any human intervention. Thus, replacing some human customer service operators with automated chatbots can offer organisations savings as well as 24/7 flexibility. In addition, chatbots are excellent market researchers because they constantly collect data from their interactions with customers. Analysis of the data collected by chatbots can reveal many important issues, such as what slows customers in the purchasing process; at what purchasing stages customers end the conversation and leave the website (e.g. the chatbot is not working well) and issues related to customers' levels of engagement and satisfaction.

However, scientific research on chatbots is still in its infancy. Recent research has revealed that consumers are frustrated with chatbots' poor functionality (Adam, Wessel, and Benlian, 2020; Shumanov and Johnson, 2020). In another recent study of 205 German respondents, perceived usefulness and perceived enjoyment were the key drivers of consumers' acceptance and use of chatbots (Rese, Ganster, and Baier, 2020). By contrast, consumers have concerns regarding privacy and the immaturity of the technology.

What chatbots should and should not do depends on the context. For example, a chatbot could be programmed to recommend relevant content after a website visitor has read 80% of an article or to propose a time for an instructional phone call after a consumer has downloaded demo software.

Authentic content and Influencer Marketing

In addition to AI and automation, we will definitely see Influencer Marketing flourishing in the future. The shift from large-scale influencers to micro-influencers is something we believe will happen because younger DM audiences follow influencers, watch them on YouTube and make decisions based on influencer recommendations. In essence, there are three key groups involved with User-Generated Content (UGC): people who consume/

interact with the content, organisations participating with UGC and those who create the content.

Consumers view many SM platforms as an opportunity to share their achievements and experiences as well as to connect with other consumers; we also consume online/ SM content for entertainment or as a source of information. UGC particularly engages consumers on YouTube and Instagram. Hence, it is also crucial to understand that DM communication in the future will be video-driven. Understanding younger audiences is key to determining why video is much more important than text (Carpenter Childers, Lemon, and Hoy, 2019). Initially, the emergence of UGC was welcomed as a sign of empowering consumers to engage in active participation that could shape future products and services.

Social Media Influencers (SMIs) are a specific UGC category of people who have amassed a following by sharing snippets from their everyday lives. SMIs may or may not collaborate with brands for a fee. In essence, SMIs are 'leveraging their social and cultural capital on SM to shape the opinions and purchasing patterns of others' (Wellman *et al.*, 2020, p. 68 *as cited in* Asquith and Fraser, 2020, p. 5730). The greatest challenge for SMIs is to balance trustworthiness, authenticity and credibility when sharing snippets of their lives (or collaborating with brands) whilst increasing their SM following with the help of technology, such as platform analytics (audience management is an essential criterion for attracting paid collaborations). SM platforms can further muddle the UGC field by prioritising posts that gain high engagement levels (i.e. simply being a nice person is not enough to get your post displayed beyond personal followers) (van Driel and Dumitrica, 2020).

By contrast, marketers view these same platforms as an intermediary between advertisers and consumers and as an opportunity to harness the power of positive Word-of-Mouth (WOM), extend the reach and build credibility (Carpenter Childers, Lemon, and Hoy, 2019; Hollebeek and Macky, 2019; Schouten, Janssen, and Verspaget, 2020). Brands are seeking favourable connections with current and potential clients to foster online engagement and disseminate positive, branded communication to breach consumer scepticism towards traditional advertising (Carpenter Childers, Lemon, and Hoy, 2019; Hollebeek and Macky, 2019).

Influencer Marketing is also an opportunity for organisations to combat 'banner blindness' and ad blocking: rather than interrupting consumers' entertainment online, brands now seek to become part of this same entertaining content (Asquith and Fraser, 2020). Influencer-created content is viewed as more direct contact with consumers with greater organic/authentic tones. Furthermore, influencers with established expertise within their own network are viewed as a credible, effective source of information, for example, for product recommendations (Lou and Yuan, 2019; Schouten, Janssen, and Verspaget, 2020). Ideally, SMIs 'provide an authentic voice on behalf of brands that show real people using real products in real time' (Carpenter Childers, Lemon, and Hoy, 2019, p. 265).

SMIs are increasingly striving for a highly professional content and active use of analytics. *Forbes* magazine declared SMIs 'new brands', and *Adweek* called influencers 'the next big thing' in 2015 (van Driel and Dumitrica, 2020, p. 2). Some argue that highly successful SMIs are self-professionalising their content for future advertising revenue, resulting in the institutionalisation of, for example, a YouTube celebrity (Asquith and Fraser, 2020; van Driel and Dumitrica, 2020).

Currently, Influencer Marketing is at a crossroads: private citizens have amassed substantial online followings simply by sharing content from their own lives or through

their expertise. This content can satisfy both the entertainment and information needs of their audiences, and it is significant that this interaction was originally built on non-commercial values. Simultaneously, whilst traditional advertisers are looking for ways to have a greater impact on their audiences, DM firms are forced to deal with ad-blocking technology, consumers hiding behind fake profiles or location distorting Virtual Private Networks (VPNs). It is no surprise that IM is being embraced (it has grown exponentially as a business) as organisations can gain a significant return on investment when matching successful influencers with their products (Carpenter Childers, Lemon, and Hoy, 2019; Lou and Yuan, 2019; Schouten, Janssen, and Verspaget, 2020).

Influencers are also at crossroads: through collaborations with brands, influencers can potentially achieve financial rewards, increase their following and even achieve greater credibility with carefully selected commercial collaborations. However, the risk of losing content authenticity and alienating their core followers is also there if 'authenticity becomes carefully choreographed', strategic self-presentation (van Driel and Dumitrica, 2020, p. 4) (i.e. when intrinsically motivated posts become planned/curated content that resembles traditional advertising).

Influencer Marketing is a fast-developing and fast-growing field. Although Influencer Marketing is regulated in most developed countries, and paid collaborations must be clearly identified (Asquith and Fraser, 2020; Carpenter Childers, Lemon, and Hoy, 2019), regulatory bodies need to be able to adjust to new platforms/types of influencer content quickly. The 'commercialisation' of UGC is an interesting trend to analyse in the long term because organisations are now striving to achieve authentic, non-paid participation on SM platforms. As with many emerging research avenues, findings from the effectiveness of Influencer Marketing can be contradictory. Critical success factors are influencer credibility (including source expertise, trustworthiness and perceived personal similarities/attractiveness between audience and influencer), perceived trust and brand awareness (Lou and Yuan, 2019).

The dark side of digital marketing and communication

The technological progress we are experiencing is driven by the incessant objective of facilitating, improving and advancing human interactions, including practical life-situation aspects as well as work-related tasks. The purposes behind technological advances and their use in DM are, after all, meant to facilitate routine and, in the future, even more specialised business activities. Yet, technological advancements, such as those driven by AI technologies, can pose many challenges of an ethical, normative and even legal nature for digital marketers and communicators. Thus, there is a dark side to the development and use of these technologies for marketing and communication purposes.

In the following sections, we elaborate on three main dark aspects related to DM practices and the use of digital technologies that have emerged in public and academic discussions during the past few years: free digital labour, data surveillance and the rise of deepfakes. We believe these aspects will become even more compelling in the years to come.

Free digital labour

A critical aspect related to increasing consumer engagement via DM activities is related to the phenomenon of digital labour. Paradoxically, one of the main objectives of DM and communication activities is to increase consumer and customer experiences across

different touchpoints and actively engage them to co-create value for the brand and/or organisations. Often, this means relinquishing some organisational power to consumers and allowing them to customise and engage in many activities that can create value for the brand.

This type of engagement is typically unpaid, voluntary and at times rewarded with contests or sweepstakes, where small prizes are awarded for promotional purposes. Even in the latter situations, the economic benefits of participation do not match the economic value that organisations obtain from consumer participation. Media sociologist Fuchs (2014) argued that many DM and communication activities aim at promoting digital labour, in which 'digital publics either consciously or unconsciously become instruments of economic power' (Lovari and Valentini, 2020, p. 323). The surplus value generated from consumers' digital participation can be seen in all three value-chain moments of consumption, production and marketing, with the latter taking on an important aspect of the promotional activities of an organisation in the form of brand endorsement, sharing and resharing product and brand-related content with fellow consumers and friends.

While most of this surplus value is freely offered, savvy consumers may soon realise that their digital engagement and participation in a marketing setting produce economic and reputation capital for organisations. They may start posing questions on the nature of DM and communication initiatives or challenging established practices related to Influencer Marketing. If any kind of digital labour that results from consumer participation in the value-chain process is to be monetised, what will it happen to Influencer Marketing?

Data surveillance

One of the most controversial aspects of digital technology use for marketing and communication purposes is utilising data collected through consumer–organisation interactions, such as via chatbots, and consumers' online behaviours on organisational websites, official SM accounts, etc. Every time a consumer interacts with an organisation, brand or specific online content, a 'footprint' of this interaction is saved and registered. These data are, indeed, an important resource for digital marketers and communicators, who can then better understand and target their consumers with further digital content and enticing offers. While this practice is widely spread across industries and organisational types and sizes (Valentini, 2018), it has increased attention towards Data Surveillance – a specific form of targeted monitoring of our online behaviours, which often occurs without our knowledge. Han (2015) underlines this paradox when stating that while Web 2.0 and in general digital media have increased the transparency of what is going on around the world and in organisations, they have also created more control and can produce a 'digital panopticon' (i.e. a central place from which everyone can be observed and controlled everywhere and by anyone).

This dark side of data collection, which has been a panacea for many years in DM research and consumer behaviour understanding, poses several problems in terms of who owns the data, who can use it and for what purposes.

In recent years, privacy and data security matters have emerged as hot topics among citizens, legislators and organisations. At the European level, this phenomenon has been addressed through several regulations limiting the rights of collecting and using data from consumers without their consent. The 2017 European General Data Protection Regulation (GDPR) is today one of the most advanced regulations in the world for supervising this specific aspect. This regulation has already impacted the data collection practices

of many companies worldwide because the protection applies to data collected on EU citizens, whether it is processed in or outside European countries (Valentini, 2017). However, new forms of data collection and monitoring are and will occur that can bypass legal requirements, leaving ethical concerns for future digital consumers.

The rise of deepfakes

The third challenge for digital marketers and communicators is related to the phenomenon of deepfakes – the spread of hyper-realistic digital content in the form of manipulated videos and audio content that looks authentic but is fake.

The advancement of digital technologies and AI is already showing some negative effects regarding how these technologies have been used to distort social reality and promote media forgeries. AI-based technologies can alter videos and images by replacing them with someone else's likeness, resulting in the appearance that someone has said or done something that they have not (Westerlund, 2019). This phenomenon has been particularly evident in the area of politics, with high-level politicians, presidents and prime ministers being shown in manipulated situations that were false. Because of the digital nature of this content, deepfake videos and images can quickly and widely spread online, causing problems worldwide for the person and/or organisation that they represent.

However, the deepfake phenomenon is also affecting the business community in many ways, such as by featuring synthesised talking heads of CEOs or prominent corporate personalities saying or doing things that they have never done. According to *Wired* (Simonite, 2020, July 7 – see Further reading), start-ups are now crafting AI technology that can generate video and images that can pass as substitutes for conventional corporate footage or marketing photos. The dark side of this practice is that concepts like authenticity, trustworthiness and credibility lose meaning when consumers discover that there are deepfakes behind the content. Additionally, this practice could be hijacked by trolls and anti-company groups and used to undermine the credibility of an organisation or its representatives. However, blockchain technology could help alleviate trust concerns in the future.

Implications of blockchain technology on marketing practices

Breakthrough technological advances, particularly the types that have far-reaching effects on the economy, society and institutions, have previously transformed the practice of marketing. For example, the Internet permanently changed the way marketers communicate with their target audience, where marketers now appreciate the notion that information consumption is more of a two-way dialogue than a one-way communication process. Hence, blockchain technology will significantly transform marketing practice and society as a whole in ways that would be difficult to envisage today.

Like the Internet, blockchain technology promises to not only disrupt marketing practices but to significantly transform the way in which marketing is applied as a business discipline and to society as a whole (Gleim and Stevens, 2021). Blockchain is a foundational technology positioned to create new foundations for economic and social systems (Iansiti and Lakhani, 2017). It is particularly well placed to address one key limitation of the current Internet infrastructure: *trust* (Ghose, 2018). Blockchain provides the trust protocol, which is currently missing from the Internet protocol that forms the rules of Internet communications.

The current architecture of the Internet is not designed to protect consumer privacy. Blockchain addresses this issue by giving consumers total control of their personal data; consumers transacting via a blockchain-enabled Internet infrastructure are assured anonymity because their identities are prevented from being monetised by third parties (Zheng *et al.*, 2018). Blockchain ensures anonymity through pseudonymity, which allows users to continue conducting their transactions anonymously while providing their proof of identity on the Internet Protocol level (Iansiti and Lakhani, 2017). Trust assurances in the current, predominantly non-blockchain-based Internet infrastructure are governed by information intermediaries (including dominant centralised server-based technology platforms, such as Visa, PayPal, Amazon, eBay, Google and Facebook), which are known as Trusted Third Parties (TTPs). These parties are privy to consumer transaction data on the Internet. The fundamental flaw with this model is that TTPs are able to claim ownership and monetise consumers' personal data without the consent of the very consumers who generate these data, given that the TTPs are actually the owners of these data because consumers are registered on their centralised server-based platforms (Gleim and Stevens, 2021). Although consumers have become accustomed to this phenomenon when they register for an account with these TTPs to communicate and transact via the Internet, in principle, consumers do not own the personal data they produce, and this is simply unreasonable.

Through the pseudonymity feature offered by blockchain technology, consumers can cryptographically store their data in a digitally encrypted secured wallet or smartphone and present their proof of identity on the Internet Protocol level as a way to remain anonymous to any other third party. In other words, consumer data are shared only on a need-to-know basis (Ertemel, 2018). This presents a fundamental transformation in that data ownership and control shifts from third parties, such as Google and Facebook, to its rightful owners: consumers. This concept, which is known as Self-Sovereign-Identity, directly contrasts the centralised identity paradigm upon which the current Internet protocol is based (Naik and Jenkins, 2020). In instances where a third party needs to know whether a customer is at a legitimate age to use their product, only that information needs to be confirmed (i.e. a yes/no response); other data, such as age and date of birth, will remain undisclosed for the purpose of that transaction (Ertemel, 2018). In this regard, blockchain has the potential to fundamentally disrupt entire industries, including established firms in the financial services industries, such as Visa and Mastercard; centralised server-based platform providers, such as Google and Facebook and sharing economy platform providers, such as Uber and Airbnb (Gleim and Stevens, 2021; Mattioli, 2020; Marr, 2018 – see Further reading).

Blockchain promises to fundamentally reshape the Internet by being the missing and long overdue trust-layer of the current Internet Protocol architecture. Trust is integrated into the protocol using cryptographic technology such that not only information but also value (e.g. tangible or intangible assets, such as patents, property rights, ownership records, and money) can be transferred via the Internet. The key contribution of blockchain technology to the current Internet infrastructure is its ability to enable decentralised trustless transactions by removing all the middlemen (TTPs) via cryptographically secured peer-to-peer distributed immutable ledgers, which makes the TTPs' role between firms and customers effectively redundant (Ertemel, 2018). This phenomenon (the disintermediation and decentralisation of the Internet) paves the way for a fundamental shift in the way marketing theory and practice will be applied in the next decade (Cui *et al.*, 2021).

Swan (2015) chronicles the evolution of blockchain technology in three distinct phases. Blockchain 1.0 (Ertemel, 2018) refers to currency transfer over the blockchain network. Cryptocurrencies, such as Bitcoin, Ethereum and Ripple, are some of the most successful applications of Blockchain 1.0. Blockchain 2.0 pertains to Smart Contracts, which is essentially a programming logic embedded in cryptographically secured blocks in a blockchain. Its function is to automatically insert the terms and conditions of an agreement, programming trust and transparency into business transactions (Peters and Panayi, 2016; Ertemel, 2018). As a result, complex transactions involving several parties can be executed without the need for intermediaries. There are numerous areas of application for smart contracts, including supply chain integration, smart properties (blockchain-enhanced IoT), mortgages, titles, etc., where business process logics can be embedded for automation of the business processes that underpin business transactions. Smart contracts unfold and self-execute as events occur and hence coordinate and settle all the possibilities that can occur in a supply chain. In this regard, blockchains significantly shift transaction costs between upstream and downstream partners within a supply chain (Cui *et al.*, 2021). For example, when one party in a business transaction does not deliver the product as declared, the payment of the other party is automatically rolled back. Blockchain 3.0 refers to digital applications beyond finance and markets. Blockchain 3.0 application areas include scaling blockchain applications on the Internet for transactions involving but limited to government, smart cities, health records, education and science (Ertemel, 2018).

In marketing, the implications of blockchain technology are expected to be far reaching, penetrating the very fabric of marketing strategy, tactics and operations. For example, blockchain technology provides a solution to the problem of fake identities (deepfakes) on the Internet through encryption via its underlying cryptographic technologies, specifically by applying pseudonymity, which reveals the proof of identity of all interacting parties, such as the firm and the consumer, at the Internet protocol level (Iansiti and Lakhani, 2017). This allows for verification and authentication of the credibility of each party in a transaction, thereby restoring trust between the transacting parties.

In managing supply chains, blockchain distributed ledgers serve as an agreed-upon reality (e.g. proof of work and a form of consensus mechanism) via a Secure Hashing Algorithm among non-trusted parties (Shahzad and Crowcroft, 2019; Zheng *et al.*, 2018). In this regard, transparent and real-time monitoring of assets eliminates any uncertainties. In brand management, brand promises are verified and authenticated by providing full visibility and traceability of supply chain activities from the source to the point of consumption. For example, the ingredients of a product could be irrefutably traced throughout its supply chain to verify the organic claims, as stated on product packages, when developing sustainable business practices (Gleim and Stevens, 2021). To ensure the authenticity of brand labels, blockchain provides brand protection from the threat of counterfeits (Ertemel, 2018). Other measures that promote consumer trust for a brand include their ability to gauge brand performances based on information available to consumers via the blockchain on measures like customer complaint rates, customer satisfaction score, product defect rates and on-time delivery rates (Iansiti and Lakhani, 2017).

In the online advertising domain, blockchain technologies are expected to allow consumers to have authenticated and verified profiles on the blockchain network through their pseudonymity, which will enable users to opt-in to viewing ads rather than being compelled to do so and offer financial rewards for interacting with ads of their choice (Gleim and Stevens, 2021). This will liberate advertising revenue from the monopolistic grip of the major centralised server-based platform providers, such as Google and

Facebook. Brave is an example of a blockchain-based browser that is built with 'consumer privacy' in mind; only blockchain-based advertising is integrated as part of the consumer Internet experience. The underlying premise of Brave is that users will own the rights to their data and share in the profits of the firms that are advertising to them (Brave, 2019 – see Further reading). Although the concept underpinning the Brave browser is not entirely beholden to the principles of blockchain, it nevertheless provides a glimpse into the world of advertising in a blockchain-enabled Internet experience (Cui *et al.*, 2021).

It is important to recognise that blockchain as a technology for business and marketing is only in its embryonic stages of development. While blockchain provides promise as a solution to consumer trust in firms and in markets generally, it also creates new challenges and opportunities that marketers will need to confront and address as we move further into the unknowns presented by blockchain technologies. However, it is clear that marketers will increasingly contend with an online business landscape where consumers will have a transparent overview of how their data are attributed value and which brands might be willing to engage in an exchange with them for these data to create value propositions for more equitable business transactions.

Conclusions

In conclusion, the key changes we foresee changing the DM landscape are as follows: the future of DM Communication will see greater automation (e.g. AI-enabled chatbot technology) that aims to create a better customer experience with true 24/7 access, and with improvements in Natural Language Processing (NLP), future chatbots will be able to provide expert customer service with 'standardised politeness' and without breaks.

The introduction of SM has changed the balance of cyberspace control, with consumers and organisations now co-existing on digital platforms. Consumers are creating content not only for other consumers but also for brands and organisations (UGC). The most successful individuals sharing content online have become influencers whose messages impact buying behaviour worldwide (we predict that particularly video content will have a notable impact in shaping future consumption patterns). However, these powerful influencers have used business-like analytics to shape their content to attract an audience and form (paid) business collaborations. To maintain their authentic appeal, influencers must find a balance between being a paid collaborator and simply another online consumer.

Unfortunately, the blending of branded communication and UGC has also introduced negative aspects to digital communication: free digital labour is a potential outcome of individuals engaging with brands online when data surveillance harvests customer information from our online interactions. The GDPR and other recently introduced national privacy codes aim to empower consumers to take some control of their gathered data. Unfortunately, until we reach the full implementation of blockchain technology with cryptographically stored personal identifying data, consumers will not be in full control of how their data are utilised.

Blockchain technology will also bring new levels of trustworthiness to online interactions through cryptographically secured peer-to-peer distributed immutable ledgers. This technology can eradicate deepfakes and bring full traceability to supply chains, from raw materials to final consumption, and eliminate counterfeits. Blockchain will also revolutionise online advertising technology: in the future, consumers can choose which advertisements to view and even be financially rewarded for doing so.

Future research

- Once AI-empowered chatbots can better imitate human communication, how should consumer trust (of chatbot-powered online communication) be managed?
- Critical research into the balancing of authenticity and self-branding activities of SMIs is required. Such studies should compare the views of advertising executives, SMIs and academic researchers.
- DM and SM can also introduce negative tones of communication to online interactions. How can such negative implications be minimised?
- With consumers confused by blockchain as a concept, how can this new technology be harnessed to create trust in the online environment?

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16 Conclusions

Outi Niininen

The five sections of this book covered some key trends evident in the Digital Marketing (DM) and Communication field: **Data analytics and measurement**, **Digital trans–formation and innovations in marketing**, **Customer experience and** (the merging of digital and physical) **servicescapes**, **Ethics and privacy in digital marketing**, and **Future for digital marketing communications** and **Conclusions** relevant to DM.

In Section 1, Chapter 2 highlighted several challenges emerging from Big Data and the IoT. This chapter addressed these trends across the full 8Ps of the Marketing Mix structure – Product, Price, Place, Promotion, Process, Physical evidence, Partnerships and People – to highlight how pervasive these new digital technologies are for the business of marketing. The volume of unstructured data for marketing decision-making support has never been this high; notably, we are not yet able to address the volume (too much), velocity (faster arrival) and variety (diversity) of characteristics of such data (an extensive description of the 'V' characteristics of Big Data can be found in Hussein [2020]). AI and NLP applications are already assisting managers in decision-making in stable business environments. While AI-assisted strategic decision-making is also an emerging trend, any innovative decision-making is best left to human minds (i.e. AI should be used to augment decision-making and not to replace human strategy formulation and human responses to unanticipated events).

The Big Data analytics is likely to expand beyond an object's sphere to include talent analytics, which aims to assist individuals in achieving their peak performance. This will extend the debate of privacy, Big Data and AI to the Human Resources (HR) field. In general, HR is not within the focus of this book, but it must be recognised that the future skills required for DM decision-making can be vastly different from what is expected of today's Marketing Managers.

The volume of data gathered regarding target audiences' online behaviour is vast; our digital footprints reach across the business use of online applications to entertainment and socialising via digital applications. The EU acknowledges that, at times, the data harvested from individuals do more than simply aim to offer better services to customers; such data can potentially be used to build extensive customer profiles, which could then be used for targeted advertisements. The General Data Protection Regulation (GDPR) is designed to address the harvesting and packaging of personal data (processing) for commercial purposes without explicit permission from the individual. However, the GDPR has far-reaching implications for DM in general because any data that can be used to identify a natural person (European citizen) is guided by this regulation, and organisations dealing with such data must take extra steps to ensure that the data collected are (a) accurate, (b) protected from unauthorised access and transfer outside the EU region and

(c) not used for automated profiling, which could be detrimental to the individual (see Further reading: Article 22 of the GDPR). Today's DM organisations must carefully plan how personal data are handled within their own processes and shared with partner organisations. The IoT will present interesting questions in this regard (e.g. voice-controlled devices that can be used to streamline our daily tasks and complete routine transactions can leave a record of highly personal data because one's voice is an identifiable characteristic). However, the privacy vs. marketing data challenge has already been acknowledged by 'Big Tech' companies. For example, Google is drafting guidelines for responsible AI uses that include liability considerations (Goul, Sidorova, and Saltz, 2020), and Apple appears to be positioning itself as the privacy champion of smartphones.

As is evident in Chapter 3 data-driven (marketing) decision-making processes offer organisations unprecedented opportunities to refine their management and strategies across all organisational functions. The organisational culture refers to all the values and norms shared within the organisation; thus, it is no surprise that cultural barriers also influence data-driven decision-making. Specifically, the interviewees noted the lack of common language and 'silo-thinking' as a hindrance to data distribution. Proactive data-sharing practices and encouragement for professional personal development were viewed as a positive development towards constructive marketing analytics utilisation. Rigid structural barriers were also identified as a barrier to fluid data utilisation. Finally, managerial barriers were cited as an obstacle for the implementation of data-driven processes, especially when the top management was not familiar with either the data or the analytics applications. Therefore, a shift in the overall organisational culture is needed to fully utilise these opportunities. For example, marketing analytics and data are not only beneficial for the marketing department but should be utilised for the competitive advantage of the entire organisation. Consistent, long-term change initiatives are required from top management to find the balance between overall business opportunities offered by marketing analytics and potential data fatigue.

The conclusions from Chapter 4 highlighted several advantages of Programmatic Advertising, such as sophisticated and granular audience segmentation based on holistic online audience profiles. Granular audience segmentation relies on layers of audience attributes, such as demographics, location, interests and online behaviour, which enable lookalike audience targeting. Programmatic Advertising also reduces ad impression duplication across channels/devices and enables a more holistic evaluation of a campaign's success.

However, Programmatic Advertising has some challenges, such as platform and data fees (the more layers applied to audience targeting, the greater the cost), the audience buying concept is difficult to appreciate and, at times, it is easy to construe the system as inefficient. Furthermore, the limits of specific sizes and formats for banner ad inventories can also limit Programmatic Advertising. Owners of premium ad placements with high reach and viewability are reluctant to sell such impressions via programmatic channels. Regional fragmentation of ad inventories can also limit the effective use of Programmatic Advertising. Finally, Programmatic Advertising is highly technical in nature, and further research, especially into Programmatic Creative, is required for a holistic understanding of this topic.

Section 2 comprised three chapters. Chapter 5 explored the role that Consumer Brand Experience plays when consumers interact with company web pages. This chapter identified the central role that a website's appearance has in evoking Consumer Brand Experience, which can, in turn, result in brand trust, electronic Word-of-Mouth (eWOM)

and favourable behavioural intentions. The findings from this study elevated the website's aesthetic design features to a new level of importance.

Chapter 6 concluded that UX studies are valuable for e-commerce sites because there is a link between good usability and positive UX and adoption. UX can also predict a trusting customer–company relationship, which can lead to purchase intention. Perhaps, the greatest contribution UX studies offer for e-commerce websites is the opportunity to remove potential pain points from website design before they can have a detrimental impact on certain functions (e.g. sales). Hence, a UX study is recommended after each website (re)design to solve any potential problems. UX development and customer journey planning should be a continuous process. Furthermore, UX practice has demonstrated that the majority of usability issues can be identified with only six users.

The case study adopted for Chapter 6 asked the participants to complete six main tasks: go to the brand's website, evaluate the product's attributes, add the product to the shopping cart, proceed to the checkout, sign up for the newsletter and complete the exit interview. The UX analysis identified minor design features that reduced the ease with which the users interacted with the website (e.g. low contrast in buttons and links, small fonts used and inconspicuous secondary navigation). Such findings could be added to any web developer's checklist because they are easily overlooked at the design stage.

Chapter 7 highlighted future changes in consumer decision-making once we have become comfortable ordering goods through conversations with the VAs in our homes. A secondary, and likely, outcome will be that as customers become comfortable buying products from a narrower selection offered by VAs and appreciate the convenience, they will make repeat purchases. Will this result in limited decision-making, learning or memory capacity in general, such as that reported by Tanil and Yong (2020) for smartphone adoption? Furthermore, will our large-scale reliance result in future consumers losing the capacity to compare complex products or to select the best match from a larger selection of items?

For marketers, a voice-based ecosystem is an opportunity to increase brand awareness and create new augmented product offerings – a notable opportunity in the current COVID-19 social isolation environment. VAs and commerce offer interesting psychological challenges for future researchers, whereas digital marketers will have to develop an entire voice-based ecosystem that is similar to current text- (or image-) based search engine marketing.

Section 3 included three chapters. Chapters 8 and 9 explored the social aspect of servicescapes and how digital (and mobile) technology could augment these service experiences. These two chapters took different approaches to place, atmospherics and servicescape, but both concluded that virtual shopping places can imitate the social and physical atmospherics of a traditional brick-and-mortar store. Online environment enhances opportunities for customers to gain added value benefits. Such a trend is, indeed, recognised by retailers that now offer multichannel transaction opportunities. With the COVID-19 pandemic forcing consumers to seek information and buy products online at increasing rates, the future of omnichannel retailing looks promising. However, physical retail outlets could start playing an increasingly social role in retail, even if products are ordered online.

Chapter 10 outlined how Social Media (SM) enables interactions between consumers and organisations. These should be viewed as accumulative social interactions online and should not be represented by simple numerical values of likes and shares. Consumers' motivation to interact with brands online could determine whether the

interaction will either co-create or destroy value. DM and communication specialists can use SM to gauge consumer preferences and identify behavioural patterns. Notably, Chapter 15 further highlighted the role that influencers can play in DM as well as the negative aspects of engaging consumers in (work-like) tasks in the value co-creation process.

Section 4 included four chapters that focused on ethics, privacy and the EU GDPR across various DM situations. Chapter 11 linked customers' perception of retailers' ethics to their channel selection (brick-and-mortar, online and multichannel retail). Consumers evaluated available channels by variables, such as convenience, perceived risk, information search ability and ethical considerations. The higher perceived risk of online purchases could be offset by ethics linked to retailers' websites. Online and multichannel shoppers reported heightened concerns for retailer ethics, especially those who bought products online frequently. This highlighted the importance of transparency of ethical conduct for all online retailers. However, further research into the consumer interpretation of retailer ethics is required as new (online) retail channels emerge. Furthermore, as ethical interpretations are highly culturally dependent, findings from one country to another are not easily transferable.

Based on interviews conducted in five different countries, Chapter 12 reported on the impacts that the GDPR initiatives have had on AI applications. Considering that the GDPR was initially viewed as highly restrictive by organisations working to become compliant, the feedback from AI technology experts was rather positive: the GDPR had placed an organisational focus on customer privacy and the processes companies should implement to protect their interests. Private citizens have also become more aware of the potential for harvesting their data and the value that customer data can bring to companies. This study also highlighted the notion of consumers 'trading their personal information' for better service, a more enjoyable browsing experience or targeted, tailor-made offers, as suggested by Niininen, March, and Buhalis already in 2006 and 2007.

Chapter 13 applied the *GDPR Guidelines for Academic Research in Marketing*. Although the GDPR was supposed to harmonise European data management practices, the reality is that the GDPR (and related privacy regulations) still allows each member state to supplement the regulations with their own legislation. Thus, a move from one country to another by a researcher might change the interpretation of the regulation. This chapter introduced a seven-step approach to achieving GDPR-compliant research, with some steps aligning with the Institutional Review Board for the ethical conduct of research recommendations (many national ethical research guidelines have also incorporated the essential GDPR regulations). Academics conducting research in marketing should pay special attention to online services (e.g. online survey software or cloud storage) used for data collection, which could unintentionally result in sharing individual information between the EU and the United States. Qualitative research colleagues should also take care when citing study participants who use particularly colourful expressions because this could result in the individual being identified. One's voice is also an identifiable variable, and it should be treated as such.

Chapter 14 outlines a study wherein customer loyalty application was piloted (n = 1,259). Qualitative feedback on the new application was classified under four major headings: benefits (e.g. customers used the data to make more informed buying decisions, such as for following a healthier diet or budgeting their expenditures better); uselessness (i.e. when customers could not understand how they could benefit from access to the

data); privacy (i.e. when customers were concerned that their shopping behaviour was being monitored) and transparency (i.e. when the respondent's emotions varied between positive and negative, depending on their situation because the loyalty cards to which the application was linked were commonly issued for all family members).

Chapter 15 re-emphasised the vital role that AI will play in interpreting Big Data into actionable datasets. Natural Language Processing will introduce human-like communication to chatbots that never sleep, making this the ultimate customer service opportunity. However, AI is not yet producing content that entices customers in a way that is equal to that of human influencers. The appeal of influencers is linked to liking peers who share aspects of our lives or those who volunteer their expertise in a field that interests us. In the future, AI influencers may be possible, but by then, blockchain technology will have hopefully developed to such an extent that audiences can verify the identity of influencers (and deepfakes) whose messages they read.

Some chapters in this book had already addressed the value of User-Generated Content where private citizens amass an SM following through exceptional content. This is an interesting paradox: organisations are keen to harness these influencers (who are often perceived to be independent from any brand) for positive consumer sentiment, and some influencers are keen to explore paid collaboration opportunities with brands. If that occurs, how will 'authentic content' be ensured? Moreover, some argue that enticing consumers to interact with brands is a form of unpaid digital labour!

The potential future applications of digital communications technology also pose challenges: as consumers, we regularly trade information about our buying preferences to obtain better quality services, but when will this enter the realm of 'data surveillance'? The introduction of the GDPR has brought publicity to the practice of tracking consumer behaviour online, and new privacy regulations have already been introduced in many jurisdictions.

Blockchain technology is another major opportunity for DM as well as other businesses (i.e. a major disruption). The trust protocols offered by blockchain will, for example, make deepfakes easier to identify and increase the tools that consumers have to protect/manage their personal data. True ownership of our personal data can revert back to us as consumers if we store our data cryptographically in a digitally encrypted, secure wallet, which would eliminate third-party access. In this sense, a new layer of trust can be injected into the Internet's ecosystem.

This book has outlined major changes currently taking place in the DM and communications field. Some of these developments are at the conceptual stage, while for others, the technology already exists. We have also outlined various research methodologies suitable for the DM and communication context and made specific recommendations for future research. We hope these will be helpful for the next wave of research in the DM and communications field.

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Further reading

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Index

Note: Page numbers in *italics* indicate a figure and page numbers in **bold** indicate a table on the corresponding page. Page numbers followed by 'n' indicate a note.