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Faculty of Economics & Business



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About the Colloquium on European Research in Retailing

The idea to establish a platform for European retail researchers who focus on marketing as well as operations was born in 2010 at a conference in France. The founding members consist of Professors Xavier Brusset (SKEMA Business School, France), Herbert Kotzab (University of Bremen, Germany) and Christoph Teller (Johannes Kepler University, Austria).

The inaugural edition of the Colloquium on European Research in Retailing (CERR) took place in Paris in 2012. Thereafter, two more bi-annual events have taken place – CERR 2014 at the University of Bremen and CERR 2016 at Toulouse Business School. The 2018 edition took place at Surrey Business School, Guildford. The last edition then moved to Spain and was held in Valencia in 2020. In 2021 CERR was organised by Professor Xavier Brusset in the SKEMA Business School campus of Sophia Antipolis in France. The topic of that edition followed upon the COVID-19 pandemic which has affected all economies worldwide as well as networking opportunities among retail researchers worldwide. Due to aforementioned, as well as the need for closer collaboration among peers, in 2022 we decided to bring the Colloquium on European Research in Retailing to Zagreb, Faculty of Economics and Business in Zagreb (Croatia).

The founders' main focus ever since has been that CERR creates a collegiate environment that sparks ideas, initiates discussions and establishes networks within the retail community in Europe and beyond. Currently, the founding members represent the senior advisory board of CERR and ensure that its key values (as set out below) are reflected in each edition of the colloquium.

VISION: CERR inspires and enables a better, more effective and collegiate retail research community in Europe and beyond. In doing so, CERR furthers advances in rigorous research of contemporary retail phenomena that have managerial relevance.

MISSION: To establish a vibrant and supportive community of retail scholars by markedly expanding opportunities for delegates to connect and explore ideas.

VALUES: CERR is built on the following values.

- *Inclusiveness:* Despite the focus on European retail environments CERR represents a platform for researchers from all continents. It is open to senior as well as junior researchers, to four star through to no star academics and to academic scholars as well as to practitioners.
- *Collegiality:* CERR promotes first and foremost collegiality and tries to create a positive and creative environment where critical discourse is encouraged and supportive mentoring the norm.
- *Rigour:* The underpinning principle of our research is to aspire to the highest possible scientific standards. To achieve this CERR aims to offer extensive feedback based on which participants can grow and develop.
- *Relevance and impact:* CERR reflects the view that retail research should ultimately aim to be of managerial relevance. This commitment thus aspires to make an impact on retail management and the industry.
- *Mentorship:* CERR particularly takes into account the needs of junior delegates, such as PhD students and early career researchers. This is reflected in special sessions and tailored feedback on papers and presentations. As such more seasoned delegates accept their role as mentors for junior delegates.

Faculty of Economics & Business Zagreb

The Faculty of Economics & Business (FEB), University of Zagreb was founded in 1920; hence, it represents **the oldest institution of higher education in economics and business** in the Republic of Croatia, but also in wider international context. **The Faculty of Economics & Business Zagreb** is one of 31 constituents of the **University of Zagreb**, founded in 1669, which position it in the group of the oldest universities in Europe. Based on the results of its economic, social and political activities, the number of current students and members of its Alumni society, the number and the competencies of its professors, associates and accompanying staff, awarded international accreditations, and many top economists, managers, entrepreneurs and politicians, **the Faculty of Economics and Business Zagreb** is recognized as leading and largest institution of economic and business education in the Republic of Croatia, and the wider region.

The Faculty of Economics & Business Zagreb is a community of 260 professors and associates who carry out study programs and participate in various research projects. In addition to the teaching staff, there are 115 non-teaching staff members assigned to Faculty's professional services.

The Faculty of Economics & Business Zagreb provides study programs at all levels: professional undergraduate and graduate specialist studies, integrated undergraduate and graduate university studies, then undergraduate and graduate university study programs in English, as well as postgraduate specialist and doctoral study programs in the field economics and business economics, and economics and global security. All study programs of **the Faculty of Economics and Business Zagreb** are in accordance with the principles of the Bologna Declaration and have valid permits issued by the Ministry of Science and Education of the Republic of Croatia.

The Faculty of Economics and Business Zagreb is currently attended by more than 8,500 students at all levels of study, and each year about 1,500 students complete their studies at various study programs.

The Faculty of Economics and Business Zagreb organizes and hosts many scientific and professional conferences, but also regularly publishes six international scientific journals in the field of economics and business, most of which are indexed in leading internationally relevant citation databases (eg. WoS and Scopus). **The Faculty of Economics & Business Zagreb** is an important advisory body of the economic system of the Republic of Croatia, while its professors, to a greater or lesser extent, influence the economic policy-making not only in Croatia but also at the level of the European Union. **The Faculty of Economics and Business Zagreb** is recognized as an important and desirable strategic partner by the largest companies in the Republic of Croatia. This orientation enables our teachers and associates to realize their own research and advisory potentials.



We are proud to point out that **the Faculty of Economics & Business Zagreb** is the holder of **national accreditation**, signed by the Croatian Agency for Science and Higher Education and the Ministry of Science and Education of the Republic of Croatia, but also **three international accreditations, EQUIS and AACSB Business accreditation** at the institution level, and **EFMD Programme Accreditation** for the university study program in English Bachelor Degree in Business. Faculty of Economics & Business Zagreb is the only institution in the Republic of Croatia accredited by EQUIS, the world's most prestigious accreditation and the only holder of three very prestigious international accreditations, which ranks us among **the top 1% of faculties in the world**, measured by objective international criteria.

More information can be found on the FEB official web page: <https://www.efzg.unizg.hr/en>

Introduction

It is a great honour and pleasure that the 7th Colloquium on European Research in Retailing (CERR) was held from 8th till 9th September 2022 in Zagreb, the city with a million hearts. The University of Zagreb, Faculty of Economics and Business Zagreb, Zagreb, Croatia, hosted this edition. The Colloquium was chaired by Prof. Kristina Petljak, Prof. Dora Naletina and Prof. Ivana Štulec from the Department of Trade and International Business. Faculty of Economics and Business Zagreb represents the oldest institution of higher education in economics and business in the Republic of Croatia, but also in the broader international context and is a holder of three international accreditations (EQUIS, AACSB Business accreditation at the institution level, and EFMD Programme Accreditation for the university study program in English Bachelor Degree in Business).

Since the turn of the century, retail has been facing ever-growing challenges – the ongoing technology development, the increase in consumers' price sensitivity reinforced by the 2008 recession, and the ongoing evolution in consumer behaviour potentiated by the pandemic. What have recent events taught us about retail? Retail is transforming into a new digital industry. Online retailing has gained enviable momentum, and brick-and-mortar stores have taken on a new role while still being the dominant first point of contact between retailers and consumers. Customers seek convenience, experience, and reciprocity through loyalty reimbursement, quick response, sustainability, and social responsibility...

This new reality calls for the rebirth of retailing. It is time to rethink established strategies and retail operations and reconnect with consumers, employees, society and other stakeholders to revive the existing business model and market position.

The overall theme of the Colloquium was **The New Age of Retailing: Rethink, Reconnect, Revive.**

This theme encouraged researchers to address the vast challenges of the digitalization of distribution channels, marketing, operations, supply chain, and logistics. Submissions related to physical/digital stores, agglomerations and platforms in B2B, B2C and C2C, were particularly welcomed. Altogether 43 papers have been presented in Zagreb. The papers of the Colloquium addressed the following topics:

- o Shopper/consumer behaviour and marketing,
- o Digitalisation in retailing
- o Innovation and technology in the retail environment
- o Corporate Social Responsibility
- o Operations and in-store logistics management
- o Servicescape and atmospherics
- o International/global retailing
- o Retail strategy
- o Supply chain management/partnering
- o Retail brand management
- o Multi-/Omni-channel marketing and operations
- o Leadership and retail management
- o Retail and service agglomeration/network marketing

This book of Proceedings presents extended abstracts of papers presented at CERR 2022 at the Faculty of Economics & Business Zagreb. We hope this work will encourage further interest in developing the retail research community.

Within this, we would like to thank all the members of this community for their passion for the development of one of the most exciting and everchanging research areas.

Zagreb, 8 September 2022

Prof. Dr. Kristina Petljak
Prof. Dr. Dora Naletina
Prof. Dr. Ivana Štulec

Chairs of the 7th Colloquium on European Research in Retailing



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Shopper/consumer behaviour and marketing

Touch and assistance in customer-robot interactions

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Keywords

Customer-Robot Interaction, Touch Types, Assistance, Humanoid Service Robot

Introduction

Even though there is increased interest in service robots from both practitioners and scholars (Wirtz et al., 2018; Lu et al., 2020), the knowledge concerning how robots influence consumer behavior in retail settings is still scarce and thus much needed (Shankar, 2018; Biswas, 2019; Lu et al., 2020; Belanche et al., 2021). In particular, there is only little research on the impact of sensory information during the interaction with a service robot (Biswas, 2019). Haptic factors like touch have mostly been overlooked in research on human-robot interaction (Willemse et al., 2017; Law et al., 2021; Hayashi et al., 2022) despite their crucial role for human-robot bonding and communication (Andreasson et al., 2018). Interaction between a service robot and the customer can take place through the modality of touch, in that not only customers touch robots but also robots touch customers (Law et al., 2021). Due to the importance of touch in everyday social interactions (Gallace and Spence, 2010), it is essential for retailers to understand how customers would react to being touched by a service robot. Trust has been considered one of the core responses when studying robots in social contexts (Law et al., 2021). Different types of touch might have different meanings for individuals and are thus evaluated differently by the customer. Moreover, robots, in general, might take over tasks during a human-robot interaction (De Gauquier et al., 2020). For instance, they might provide customers with information, guide them through the store, point them to the location of specific products and recommend products (Barnett et al., 2014). How customers respond to different touch types and shopping assistance by a service robot has not been answered yet in retail and service research.

Purpose

Even though there is increased interest in service robots from both practitioners and scholars in retail and service research, the knowledge concerning how robots influence consumer behaviour in retail settings is still scarce and thus much needed. This research investigates if

and how different types of robot-initiated touch and assistance provided by the humanoid service robot influence customers' trust in the robot.

Conceptual framework

We put forth hypotheses as to the effects of (1) touch type, (2) assistance by a service robot and (3) interaction between touch type and assistance by a service robot on consumers' trust in the service robot. Moreover, we hypothesize that the effect of touch type can be explained by perceived interaction comfort.

Methodology

A usable sample of 245 German consumers (mean age = 28.38 years; 31 % male) was recruited to take part in the study. We employed a 3 (robot-initiated touch type: hug, handshake, no touch/waving) x 2 (assistance from the robot: yes, no) between-subjects factorial design where participants were randomly assigned to one of the six scenarios. Each participant received a scenario and a questionnaire. The scenario described a shopping situation and participants were asked to put themselves into the described situation. The humanoid robot Pepper developed by Softbank Robotics was chosen to portray the service robot in the present study (SoftBank Robotics, 2020). The questionnaire comprised realism checks, manipulation checks, perceived trust in the robot, perceived comfort as well as potential covariates and a standard set of socio-demographic questions. Wherever possible, we used seven-point Likert scales anchored by 1 ("strongly disagree") and 7 ("strongly agree"). To test our hypotheses, we conducted an ANCOVA with trust in the robot as the dependent variable and the manipulations of touch types and assistance together with their interaction as independent variables. Based on prior research, we included gender (Stier and Hall, 1984) and technology readiness (Parasuraman, 2000) as covariates. We further tested whether the effect of touch type on trust was mediated by perceived interaction comfort. Mediation was performed according to Hayes (2013).

Findings

Results indicate that touch types that violate social norms and/or a customer's expectation as to what is appropriate in the shopping context leads to a decrease in trust in a humanoid service robot, which can be explained with the amount of (dis-)comfort felt. Moreover, participants trust the robot more, when the robot provides shopping assistance compared to no assistance. Further, providing assistance to the customer by the robot may change the effect of different touch types on trust in the robot.

Contributions

First, it is essential for service providers and retailers to understand how customers would react to being touched by a service robot and how and why they would react to different touch types. Different types of touch might have different meanings for individuals and are thus evaluated differently by the customer. We provide evidence of the associated underlying process. Second, robots might take over certain tasks during a human-robot interaction (De Gauquier *et al.*, 2020) and thus offer assistance to the customers. This might lead to different evaluations as well. Third, we examine if different combinations of touch types and assistance may affect customer evaluations differently. Our findings are of importance to retailers and other service providers that want to know how robot-initiated touch and assistance can enhance customer interactions at the point of sale.

Practical implications

The findings of this study contribute to the emerging research field of human-robot interaction, with focus on human-robot touch, and provide important insights on how to

employ service robots in retail stores, especially regarding physical interaction with the customer.

Research limitations and outlook

We examined the effects of robot-initiated touch types and assistance based on scenario descriptions and pictures. The participants of the study had to imagine the described interaction with the service robot. A better option would be that participants actually experience the interaction with the service robot and really feel the touch from the robot. Moreover, the study only included service robots as service agents. Although this procedure was useful in order to find out how to employ service robots, it does not reveal the differences compared to human employees in the store. Further research should also examine how the effects of robot touch differ from those caused by human touch in the retail setting

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Keywords

Customer-Robot Interaction, Touch Types, Assistance, Humanoid Service Robot

Retail Patronage – A Well-Known but Undefined Construct

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Purpose

‘Everybody loves someone.’ Nowadays, companies strive for the attention and ‘love’ of their customers (Lemon and Verhoef, 2016; Mintel, 2022). The reason for this is that these efforts result for example in higher revenues, increased sales volumes and more durable customer relationships (Hogreve *et al.*, 2017; Zeithaml, 2000). The probability of selling to an existing customer is nearly about 70%, whereas the probability for new clients is approximately only between 5% and 10% (Griffin and Herres, 2002). In addition, regular customers account for around 70% of revenues, although they only make up just under 30% of the buyer base (Horizont, 2019).

In the literature there are different definitions of brand loyalty (Ailawadi *et al.*, 2014; Hozier and Stem, 1985) or brand love (Batra *et al.*, 2012; Bergkvist and Bech-Larsen, 2010), but sometimes these constructs are not enough to describe a relationship between a company and their clients. Therefore, patronage behaviour describe an increased customer relationship intensity (Spiggle and Sewall, 1987; Pan and Zinkhan, 2006; Blut *et al.*, 2018).

Retail patronage is described and measured in various ways. Blut *et al.* (2018), for instance, describe retail patronage as the phenomenon of firms being able to establish and maintain a close relationship with customers, turning them into “patrons”. Dai and Pelton (2018) see retail patronage as the use of resources to attract and retain customers, whether in online or offline retail locations. Pan and Zinkhan (2006) claim that retail patronage is all about identifying and targeting those groups most likely to purchase. For the measurement of retail patronage different variables like patronage intention (Wakefield and Baker, 1998), attitude (Spears and Singh, 2004) and word-of-mouth (Baker *et al.*, 2002) are used.

Blut *et al.* (2018) mentioned in their future research agenda that the existing measures about retail patronage are insufficient and therefore should be extended. Hence, the need for a scale

development of the construct retail patronage is suggested. In view of that, this study aims to conceptualise the construct retail patronage in a more detailed way. The goal is to explore the construct of retail patronage. Thus, this provides the basis for the development of a comprehensive scale for retail patronage. Furthermore, the project analyses the effects of retail patronage on shopping outcomes, such as satisfaction with the retailer, attitude towards the retailer, word-of-mouth, patronage intention, average spend and shopping frequency.

Methodology

As a first step, the authors conducted a systematic literature review in order to identify existing definitions and conceptualizations of the construct. The focus was on retail patronage itself as well as the differentiation from related constructs such as love and loyalty. In order to conceptualise the construct of retail patronage, we chose a qualitative research method. The authors provide an exploratory research design with semi-structured interviews. This provides insights into the dimensions and description of retail patronage in general. Individual perspectives and needs are criteria for qualitative survey (Flick, 2009).

To provide statistical evidence on the impact of retail patronage on various shopping outcomes, the research included quantitative measurement scales. Therefore, semi-structured interviews contained both open and closed questions (Galletta, 2013). The final sample comprises 20 interviews with consumers from Austria and the focus of the survey was their shopping behaviour in grocery retail. The interview guide consisted of 15 questions with the goal to understand the construct retail patronage. The first part dealt with the retailer itself and the influenced shopping behaviour (satisfaction, attitude towards the retailer, willingness to stay, intention of spending, word of mouth, patronage intention, average spending, frequency of shopping and browsing time), followed by a short description of retail patronage in general. At part three and four the interview partners were asked to describe whether they see a difference between loyalty and retail patronage or rather between love and retail patronage or not.

The interviews were transcribed according to Dresing and Pehl (2018) and analysed by the means of a qualitative data analysis regarding to Mayring (2015). To assess a high quality of the content analysis the transcripts were double-coded by two independent coders and the reliability coefficient kappa (>0.7) was assessed (McHugh, 2012). The authors used MAXQDA for this qualitative content analysis procedure (Kuckartz and Rädiker, 2019) and developed the category system deductive (based on literature review) and inductive (based on transcripts).

Preliminary Findings

Based on the identified literature and insights of the first interviews preliminary findings can be outlined. First, we can identify retail patronage as a distinctive construct, with multiple dimensions. Second, we can distinguish the construct retail patronage from similar constructs, like love and loyalty. Finally, we can suppose that the construct retail patronage has a positive influence on consumers' shopping behaviour.

Originality

This research contributes to theory and practice in different ways. It emphasizes an in-depth understanding and exploration of the construct retail patronage (Contribution 1). Therefore, the authors conducted a systematic literature review as well as semi-structured interviews. The research underpins the need for the development of a measurement scale of the construct retail patronage (Contribution 2). Furthermore, this study investigates preliminary statements about the effects of the construct retail patronage on shopping outcomes (Contribution 3). Finally, the authors provide recommendations for practice with the focus on how to measure the construct of retail patronage in a uniform manner (Contribution 4). It underlines the importance that loyalty should not be the ultimate goal for retailers. Retail patronage describes the increased intensity of the relationship between the retailer and its customers.

Research limitations

This research approach is constraint by several limitations. First, this study deals especially with the construct retail patronage in grocery retailing. Only one specific retailing sector is addressed and therefore, the findings should be extended to other industries. Second, the research procedure focuses on qualitative research efforts, using a literature review and semi-structured interviews. To assess statistical relationships of retail patronage and shopping outcomes a quantitative approach should be conducted as well. Finally, the paper provides the first step of a scale development process, the conceptualisation of the construct retail patronage. Thus, the next steps of a scale development process need to follow.

Keywords:

Retail Patronage, Shopping Behaviour, Conceptualisation, Loyalty, Love

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Customer Avoidance and its Impact on Consumers Shopping Behaviour

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Purpose

One of the most challenging disadvantages of offline retailing is the occurrence of crowding (Blut and Iyer, 2020). Whereas online retailer are unlimited in the number of customers, brick-and-mortar retailer are constraint in space (Blut and Iyer, 2020; Mehta, 2013). In 2022, nearly 55% of U.S. shoppers reported crowd avoidance as key driver for their switching behaviour to online purchases (Statista, 2022). Basically, crowding refers to two different dimensions, human and spatial crowding (Machleit *et al.*, 1994; Mehta, 2013). The former describes the density of people while shopping (Machleit *et al.*, 2000), like queuing (Dahm *et al.*, 2018) and the latter contains the available space in retail environments (Mehta, 2013), like store size and layout (Park and Zhang, 2019).

Research has shown that crowding can have both positive (Machleit *et al.*, 1994) and negative effects on consumers' shopping behaviour (Eroglu *et al.*, 2005; Blut and Iyer, 2020). For example, crowding in discounters (Aguiar *et al.*, 2015) and restaurants (Tse *et al.*, 2002) influences the evaluation of the product and service quality positively. On the other hand crowding in retail outlets induces negative emotions (Dahm *et al.*, 2018) and results in reduced satisfaction (Li *et al.*, 2009; Santini *et al.*, 2022) and attitudes towards the store (Pan and Siemens, 2011).

Every customer has different traits, one loves to be around people and the other tends more to avoid them (Dhaundiyal and Coughlan, 2016). People who are more comfortable being in company than being alone are referred to as sociable (Cheek and Buss, 1981). Those who favour being alone and who have negative feelings such as restraint or unease when they socialise are described as shy (Cheek and Buss, 1981; Jones *et al.*, 1986).

Additionally, this avoidance of social contact increased during the Covid-19 pandemic. In 2021 approximately 70% of in-store shopper stated, that they change their planned shopping behaviour to avoid crowds (Rakuten Insight, 2021). Due to the spread of the virus people got more and more anxious to get contaminated (Galoni *et al.*, 2020). Therefore, they started to avoid crowds (Campbell *et al.*, 2020), not as a result of shyness but as a consequence of the fear of contamination.

However, these various levels of sociability lead to different expectations towards a shopping experience (Dhaundiyal and Coughlan, 2016) and to different consumer behaviours (Schmidt, 1999; Vertue, 2003). The existing literature already supports the finding, that shyness influences consumers behaviour (Amico *et al.*, 2004; Saunders and Chester, 2008) and especially the buying behaviour negatively (Dhaundiyal and Coughlan, 2016; Aydin and Hasiloglu, 2017). Concerning the choice of shopping location, it can be said that shy consumers switch more often to online channels to avoid crowded shops (Aydin and Hasiloglu, 2017).

The effects of crowding in retail environments have been well explored. However, there are no qualitative findings regarding feelings and motives of crowd avoidance (Santini *et al.*, 2022). A linkage between the personality trait sociability and the intention to avoid crowds in retail environment is also missing. Hence, there is no overarching research model that examines the influence of crowding, sociability and shopping outcomes. Furthermore, changings due to the Covid-19 pandemic and crowd avoidance have not yet been considered in current research efforts.

In view of that, this study aims to investigate the reasons and feelings of people avoiding crowded retail outlets. A general linkage between sociability as personal trait and customer avoidance is outlined. Furthermore, the effects of customer avoidance on shopping behaviour, such as patronage intention, word-of-mouth, choice of shopping location, average spend and shopping frequency are analysed. Lastly, changes due to the Covid-19 pandemic on customer avoidance are examined in more detail.

Methodology

This study applies a mixed method research design. A qualitative research method described and generated further insights about the feelings and thoughts of shy consumers. To assess the impact of the construct in relation to consumers shopping behaviour, we also included combined quantitative measurement scales, such as willingness to stay, word of mouth or shopping frequency. By means of semi-structured interviews, the sample consists of at least 150 consumers from Austria. The distribution of the sample is approx. 50% female and 50% male from all age groups (18-30 years 25%, 31-50 years 25%, 51-65 years 25%, 65+ years 25%). The interview can be divided into three parts: question concerning customer avoidance in general, questions related to consumers who want to avoid customer, questions for shoppers who like to purchase in crowded areas.

The authors transcribed the interviews according to Dresing and Pehl (2018) and conducted a qualitative content analysis (Mayring, 2015). The transcripts were double-coded from two independent coders and a inter-rater reliability coefficient (>0.7) was assessed (McHugh, 2012). Codes and categories derived from literature (deductive) and from the interviews itself (inductive). The interviews were qualitatively analysed with the software MAXQDA (Kuckartz

and Rädiker, 2019). In order to analyse the included scales, variance-based structural equation modelling was used (Hair *et al.*, 2014).

Preliminary Findings

First, the literature as well as the interviewees describe their feelings regarding crowded retail outlets as negative. Feelings like anxiety, annoyance, panic, confinement, stress and inconvenience are frequently mentioned in this context. Second, the main reasons for customer avoidance are the number of people as well as the density in the store as well as time and health concerning issues. Third, we found that not only shy people avoid crowded grocery stores also sociable ones do. There is a difference even if someone is generally sociable, they tend to avoid crowds when shopping for groceries. Fourth, the participants describe negative effects on their shopping behaviour due to crowded stores. They state that their shopping duration has become much shorter and the procedure is more targeted and reduced on the essentials. Fifth, we discovered an enhancement of crowd avoidance behaviour due to the Covid-19 pandemic. As additional reasons for these the behaviour of other customers, feeling like the fear of contamination and insecurity, as well as concerns about health are referred. Finally, we concluded that although crowding has a negative impact on shopping behaviour, consumers would still not switch their choice of shopping location to online in the context of grocery retailing.

Originality

This paper provides an in-depth understanding of feelings and reasons for crowd avoidance behaviour in retail environments (Contribution 1). Additionally, it contributes to the crowding literature in connecting crowd avoidance behaviour with the literature about sociability (Contribution 2). Therefore, the authors investigate a research model, which includes these two constructs and other shopping outcomes (Contribution 3). This research elaborates the changes due to the Covid-19 pandemic with regard to crowd avoidance for the first time (Contribution 4). Finally, there are various recommendations for dealing with consumers who avoid crowded grocery outlets by knowing their specific reason for avoidance (Contribution 5).

Research limitations

The present work is constraint by several limitations. First, this paper deals with customer avoidance in the specific context of grocery shopping. The results only represent one retail sector and should therefore be extended to others. Second, this approach does not account contextual factors. For example, factors like the purpose of the trip or the urgency of the purchase can influence the shopping outcomes. Therefore, future research should consider contextual factors as well as potential moderating variables, like previous shopping experiences. Finally, we examine a latent construct by using a survey as a research strategy. To assess the real and unbiased behaviour a field experiment should be conducted.

Keywords

Customer Avoidance, Sociability, Shopping Behaviour, Grocery Retailing, Covid-19 Pandemic

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Customer acceptance of humanoid service robots across different service roles

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Keywords

Customer Acceptance, Service Roles, Customer-Robot Interaction, Humanoid Service Robot

Introduction

Humanoid service robots (HSR) developed for the interaction with customers in retail environments are believed to have great potential for innovation (Meyer *et al.*, 2020). However, despite the increased use of service robots and their expected exponential growth in the upcoming years, the understanding of the impact of HSRs on consumers is still critical (Lu *et al.*, 2020). Customers' acceptance of HSRs has evoked interest among service and marketing researchers (van Doorn *et al.*, 2017; Wirtz *et al.*, 2018). The potential roles of HSRs in retailing are manifold and the service literature discusses several ways to incorporate HSRs into service environments ranging from hedonic use cases that mainly focus on entertainment of customers to functional use cases focusing on enhancing the shopping experience (Meyer *et al.*, 2020). However, up to date it is not clear if and to what extent customer acceptance of HSRs is influenced by the service role performed by the robot.

Purpose

This research experimentally focuses on the different service roles that HSRs can assume, namely the role of a “Greeter and Orientation Provider”, a “Service Provider”, and a “Sales Associate”, and investigates whether customer acceptance of HSRs is influenced by this role.

Conceptual framework

SoftBank robotics, manufacturer of the HSR “Pepper”, proposes several different fields of applications of its robot within retail stores. First, a HSR can be used as a “Greeter and Orientation Provider”. The HSR welcomes customers and provides basic information about the store (e.g. business hours or in-store orientation and navigation). Second, a HSR can be deployed as a “Service Provider”. Different services such as click and collect or ticketing can be offered and executed by the HSR. Third, a HSR can be employed as a “Sales Associate”. The HSR would replace a human sales associate by providing accurate product consultation based on the customer's needs, by giving personalized recommendations, and by using up- and cross-selling methods (SoftBank Robotics, 2020).

Customer acceptance of HSRs in different service roles within the retail environment is determined by their level of integration in the consumer buying process, that is the intensity

and length of interaction with the HSR. In the role of a “Greeter and Orientation Provider”, the integration of the HSR into the consumer buying process is rather low. The HSR welcomes the customer and provides directions within the store. The actual sales conversation, in which the customer demand is identified and product recommendations are provided, is then led completely by a human employee. Hence, the intensity and the length of the interaction with the HSR is the lowest of all three roles. When the HSR is being used as a “Sales Associate”, the integration into the consumer buying process is considerably higher. The robot is basically replacing the human frontline employee completely, which makes both the intensity and length of the interaction extremely high. In a service situation where the checkout is automated as well (e.g. through a self-checkout), the entire shopping process could be entirely free of human service. The HSR as a “Service Provider” can be positioned in between these two roles. Customers are longer and more intensely exposed to a “Service Provider” than to a “Greeter and Orientation Provider”, but not as much compared to the role of a “Sales Associate”. Another difference is that the purchase decision itself has already been made. Taken together, we put forth the following hypothesis:

H1: Customer acceptance of HSRs is higher the less the HSR is integrated in the consumer buying process (i.e. the lower the intensity and length of the interaction with the HSR).

Methodology

Study Design and Stimulus Material

The hypothesis was tested through a scenario experiment. Each participant received a scenario and a questionnaire. The scenario was set in a consumer electronics store. The HSR presented in the study was either filling the role of a “Greeter and Orientation Provider”, “Service Provider” or “Sales Associate”. “Pepper” was used for the HSR in the scenarios (see also van Pinxteren *et al.*, 2019). “Pepper” was developed as an emotional and socially interactive robot that can recognize a user’s facial expression, body movement, and verbal expression and respond precisely to the customer’s needs and inquiries. “Pepper” can engage with customers through its built-in touchpad and conversation function (Pandey and Gelin, 2018; SoftBank Robotics, 2020).

A usable sample of 300 German consumers (mean age = 32.2 years; age range from 18 to 83 years; 38 % male) was recruited to take part in the study. The participants were randomly assigned to one of the three video scenarios (length of the videos was between 4:00 and 4:30 minutes) following a between-subject design. In the end, 99 (104, 97) participants were in the “Greeter and Orientation Provider” (“Service Provider”, “Sales Associate”) condition. The setting of a consumer electronics store was used because these stores normally offer a wide product range in usually quite large stores with a high degree of self-service. Furthermore, the majority of these stores often offers different product options within one category and are positioned in a mid-range segment, which make them particularly suitable for the use of HSRs (De Panafieu *et al.*, 2016).

The videos were specifically created for the study. Participants were asked to watch the video and put themselves into the presented situation. The initial situation was the same for all participants. Their coffee machine broke and thus they decided to look for and buy a new one at a nearby electronics store. The described situation differed regarding the role that the HSR assumed. In the role as a “Greeter and Orientation Provider”, the HSR welcomed customers entering the store and escorted them to their desired department. Furthermore, the robot conducted simple customer satisfaction surveys or posed for selfies. In the “Service Provider” role, the HSR worked as a contact person for customers who ordered item(s) (i.e. a coffee machine) online and wanted to pick up their order in the store. The robot organized the process and assisted with finding accessories. In its role as a “Sales Associate”, the HSR

basically replaced the human frontline employee completely. The robot evaluated customers' demand, reacted to customers' specifications and recommended products (i.e. coffee machines). After watching the video, the participants had to complete a questionnaire.

Measures

The questionnaire comprised realism checks, a manipulation check, customer acceptance as well as potential covariates and a standard set of socio-demographic questions. Wherever possible, we used seven-point Likert scales anchored by 1 ("strongly disagree") and 7 ("strongly agree").

"Customer acceptance" was measured by averaging items (e.g. "It is likely that I will use a humanoid service robot in the retail store"; Cronbach's $\alpha = 0.94$) taken from Park and Del Pobil (2013) and Song (2017). With respect to the covariate "pre-existing anxiety towards robots", the scale by Nomura *et al.* (2008) was adopted (e.g. "Standing in front of a humanoid service robot would make me nervous"; Cronbach's $\alpha = 0.86$) and the covariate "personal technology innovativeness" was measured with items by Agarwal and Karahanna (2000) (e.g. "Compared to my friends/colleagues/family members, I am usually one the first to try a new information technology"; Cronbach's $\alpha = 0.91$). Participants had to specify their age and gender (dummy coded with 0 = male and 1 = female).

Findings

Realism and manipulation checks

Across all three scenarios the participants were able to put themselves into the presented situations ($M = 6.08$, $SD = 1.07$) and participants also evaluated the scenarios as realistic ($M = 5.67$, $SD = 1.20$). The evaluations indicated no differences among the three scenarios ($p > 0.10$). The manipulation check indicated that participants perceived the manipulation as intended. Participants were able to correctly recall which role the service robot assumed in the respective scenario.

Hypothesis testing

An ANCOVA was performed with customer acceptance as the dependent variable and the manipulations of the service roles as the independent variable. Based on prior research, pre-existing anxiety towards robots, technology innovativeness, age, and gender were included as covariates.

Prior research found that pre-existing anxiety towards robots negatively influences customer acceptance of HSRs and decreases the probability of using them (Song, 2017). Technology innovativeness of customers is believed to have a positive influence on the acceptance of HSRs (van Doorn *et al.*, 2017). Customers who look forward to experiment with new forms of technologies and feel positive about interacting with them will most likely seek a longer and more intense experience with the HSR. Scopelliti *et al.* (2005, p. 154) identify the age of a person as a critical variable accounting for "differences in the responses to representation of robotic devices". Furthermore, Niemelä *et al.* (2017) found evidence that older users have more negative feelings towards HSRs. Similar to age, the gender of the participants is an important variable when looking at human-robot interaction. Men perceive robots as a more easy to use technology (Heerink, 2011).

The results of the ANCOVA indicated that the mean values for customer acceptance of HSRs differ significantly across the different service roles ($F(2, 293) = 12.26$, $p < 0.001$). In order to obtain more detailed insights, planned contrasts were calculated to identify where exactly the differences were located. Planned contrasts revealed a statistically significant difference in the customer acceptance of HSRs between the groups "Greeter and Orientation Provider" ($M =$

5.30, SD = 1.18) and “Sales Associate” (M = 4.63, SD = 1.22) ($p < 0.001$). A statistically significant difference was also found between the groups “Service Provider” (M = 5.11, SD = 1.16) and “Sales Associate” (M = 4.63, SD = 1.22) ($p < 0.05$). However, a statistically significant difference between the groups “Greeter and Orientation Provider” (M = 5.30, SD = 1.18) and “Service Provider” (M = 5.11, SD = 1.16) ($p > 0.10$) could not be observed. Thus, H1 can only be partially confirmed.

Contributions

The main contribution of this research is to shed light on the question if and to what extent customer acceptance of HSRs is influenced by the service role performed by the robot. We found that the role of a “Greeter and Orientation Provider” shows the highest acceptance in our sample.

Practical implications

HSRs can take on several different roles within a retail store and provide different levels of service to the customer. Yet not all service roles are accepted by customers to the same degree. A gradual introduction of HSRs, beginning with the role “Greeter and Orientation Provider”, is recommended, since the customer acceptance displayed for this service role is the highest. By starting with this gradual introduction, the retailer can give customers the chance to slowly familiarize themselves with the HSR and build trust in its capabilities. If these first attempts indicate promising outcomes and positive customer responses, the HSR can be further integrated into the consumer buying process and can be used as a “Service Provider”. Using service robots in order to support human service employees seems to be beneficial. The final step of integration is the use of an HSR as a “Sales Associate”, replacing a traditional salesperson. However, customer acceptance of this service role is the lowest.

Research limitations and outlook

Different cultures show different degrees of acceptance of new technologies (Vu and Lim, 2022). Thus, customer acceptance of different service roles of HSR might also depend on the country where data is collected. Since this research was conducted in Germany, the results might be different in other countries and should be replicated across countries. Moreover, it would be interesting to investigate acceptance among different consumer groups (e.g. based on gender, age).

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Keywords

Customer Acceptance, Service Roles, Customer-Robot Interaction, Humanoid Service Robot

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Introduction

We are living in times of a digital revolution that affects many areas of our lives, not least how we consume and shop for products. In retail, we are witnessing the rise of online shopping. In the last two decades, growth rates of online retail have by far outperformed those of traditional stores. Mobile shopping has become a major thing, social commerce is gaining traction and store openings in the Metaverse are the latest media buzz.

Nevertheless, one should not forget that the vast majority of purchases is still taking place in brick-and-mortar stores. A market share for remote shopping of 14% in Austria in 2021 (KMU Forschung Austria, 2021) also means that the remaining 86% of sales are generated by purchases in physical retail outlets. These stores have to face the challenges arising from online competition and digitisation in retail. There is an ever-growing number of new technologies available to retailers to complement or enhance their in-store experience (Grewal et al, 2020; Inman/Nikolova, 2017) and especially younger consumers expect retailers to keep up with technological advances (Kleinjohann/Reinecke, 2020). Digital natives have been socialized with online media, are familiar with using new technologies and do not differentiate between online and offline the same way that digital immigrants do.

Book retail was among the sectors that were first and most affected by the digital revolution. In 1995, Amazon started its business with selling books for a reason: they have a moderate to low unit price and high margins, they are highly standardised (so consumers do not have to test, touch and try them before they buy) and they can be shipped easily. The same reasons explain why books have an online market share well above the average, i.e. 25% in Austria in 2021 (KMU Forschung Austria, 2021). The fact that books themselves can easily be digitised, resulting in e-books and audio-books (Business Club of Frankfurter Buchmesse, 2019; Börsenverein des Deutschen Buchhandels, 2018), puts book retailers under even more pressure to find ways to provide a store-experience that is attractive for digital natives.

Purpose

The underlying study was carried out in cooperation with the Main Association of the Austrian Book Trade (Hauptverband des österreichischen Buchhandels). Since 1859, the organisation has represented the interests of booksellers, publishers, distributors, publishers' representatives and antiquarians in Austria.

The aim of this research is to help understand the shopping preferences of digital natives who are an important future target group for the book market.

This research addresses the following two questions:

- How can brick-and-mortar bookstores offer an attractive retail experience for digital natives?
- What is the potential role of digital in-store services in the provision of experience in a brick-and mortar bookstore?

Research approach

In a first step, an exploratory brainstorming session was held in April 2021 with overall 28 digital natives. In breakout sessions, seven teams discussed trends in the field of reading and book-buying as well as current marketing strategies of book retailers. A focus was put on in-store marketing activities in brick-and-mortar bookstores in Austria. Furthermore, digital services and innovations for physical retail were analysed. In a follow-up joint session of all the teams, ideas were presented and discussed. The results were summarised using the software Mural and a list of potential digital service offerings for brick-and-mortar bookstores was compiled.

Based on the results of the brain storming session a survey was conducted using a convenience sample of 772 digital natives in three age groups (14 to 19, 20 to 25, and 26 to 30). The main topics were reading habits, book-buying patterns and channel preferences, attitudes towards different online and offline store formats and the respondents' take on the in-store experience when it comes to purchasing books. Special emphasis was put on service innovation, concerning both analogue and digital services offered by brick-and-mortar bookstores.

The data was gathered online with Qualtrics. SPSS and Excel were used for data analysis.

Findings

Looking at reading habits, e-books and audio books cannot compete with physical books, as most of digital natives, albeit having been socialised with digital media, still prefer reading the old-fashioned way. The majority of the respondents do not engage in e-reading (52%) or listening to books (61%) at all. When it comes to visiting store formats post-pandemic, digital natives will at least occasionally buy their books in physical outlets of bookstore-chains (86%) or independent bookshops (68%). As many also intend to shop at Amazon (71%), online shops of bookstore-chains (68%) and online shops of independent retailers (43%), digital natives plan to hop between online and offline channels, depending on the occasion. The top priorities when shopping in brick-and-mortar bookstores are the selection of books, service-orientation and expertise of the sales staff.

In the exploratory brainstorming session, potentially attractive digital services were identified. Those were then introduced to the respondents in the main study. The results show that overall interest in digital services is rather low (see table 1).

	not at all interesting			very interesting			
	1	2	3	4	5	6	mean score
<i>Click & collect</i>	7.5%	9.3%	12.2%	17.4%	21.6%	32.0%	4.32
<i>Self-checkout counters</i>	13.5%	12.3%	13.5%	18.7%	16.6%	25.5%	3.89
<i>QR-codes in books with additional information or reading suggestions</i>	15.9%	10.5%	13.7%	17.5%	18.5%	23.8%	3.84
<i>Interactive information screens</i>	17.0%	12.2%	16.8%	24.5%	13.7%	15.8%	3.53
<i>Augmented reality trail through the store (similar to Pokémon go)</i>	34.1%	13.0%	14.0%	13.1%	9.8%	16.1%	3.00

<i>Social media for interacting with other readers</i>	27.9%	17.4%	17.5%	17.7%	11.0%	8.7%	2.93
<i>Book club app</i>	29.9%	16.3%	18.3%	16.8%	11.5%	7.1%	2.85
<i>Online platform for interacting with other readers</i>	27.3%	16.8%	21.5%	18.4%	10.9%	5.1%	2.84
<i>Podcasts on reading and book-related topics</i>	37.7%	19.0%	16.1%	11.0%	9.6%	6.6%	2.56
<i>Book-themed online games</i>	48.8%	18.8%	12.6%	9.5%	4.9%	5.4%	2.19

Table 1: Interest for potential digital service-offerings by bookstores

Only four of the potential digital services have a mean score of above 3.5 and evoke more interest than disinterest among digital natives. Yet, compared with non-digital services they are still more popular: subscription services (3.00), a book exchange (2.97), late-night book events (2.9), themed-weeks (like crime week) (2.85), author's talks, book signings and meet & greet (2.56) or a traditional book club (2.5) all have an average score well below 3.5.

With click & collect services and self-checkout counters at the top of the list, the results indicate that convenience-services are by far the most popular. During Covid-19, many bookstores offered click & collect, therefore consumers may associate positive experience with it. Self-checkout also offers convenience and even if there are hardly any bookstores in Austria that already offer this service, consumers are familiar with it from other sectors of retail. Information services like QR-codes in books with additional information or reading suggestions and interactive information screens are also attractive for the majority of digital natives. The rest of the services are only appealing to some consumer segments.

The analysis also reveals that the interest in various digital services is subject to product involvement. Both of the convenience services, click & collect and self-checkout, are especially interesting for heavy readers (i.e. those who have read more than five books in the past six months). Heavy readers are on the other hand significantly less interested in interactive information screens, as they seem to know what they are looking for based on their own expertise.

Non-readers (i.e. those who have not read a single book in the past six months) and occasional readers (1-2 books in six months), on the other hand are more interested in services that provide orientation and entertainment. For example, they are significantly more interested in gamification services like book-related online games and augmented reality trails through the store.

Original value and implications

With a gradual decline in book reading over the last couple of years and new media (like streaming services and social media) competing for the audience's attention both book publishing and distribution have come under pressure. Book retail not only has to face the challenge of adapting their assortment but also of keeping up with the next generation's expectations when it comes to the shopping experience.

This study supports the idea that digital natives are the number one omni-channel target group, as respondents plan to shop for books both online and in stores. For brick-and-mortar stores this means that they have to keep up with online competition. By implementing new technologies, bookstores can improve efficiency, signal innovativeness and enrich the customer experience.

According to this research, digital services are more attractive for young consumers than traditional ones. Yet the results also reveal that not all potential services resonate with the target group. When it comes to innovative technologies, shoppers' seeing a direct benefit of the

service is essential. Digitisation for its own sake or useless gimmicks will not convince digital natives.

The study also shows that different customer segments have different interest in potential new digital services based on the benefit shoppers are looking for. Heavy readers are favouring other services than occasional readers. Consequently, bookstores should thoroughly analyse their customer segments' needs and wants and target them accordingly.

Assortment is the most important determinant for store choice. When it comes to width and depth of assortment, it is nearly impossible for brick-and-mortar stores to compete with the unlimited shelf space of online competitors like Amazon. Therefore, bookstores, especially smaller and independent ones, have to offer benefits that offset this weakness. Qualified personnel that provides assortment curation and orientation may be one of the key success factors, as the study also points out that consumers value friendly, competent and individual service.

In the future, the big challenge for brick-and-mortar retailers will be to find an ideal mix of digital and physical elements in innovative and customer-centric retail concepts.

Research limitations and outlook

This exploratory research was carried out in cooperation with the Main Association of the Austrian Book Trade with the aim of providing managerial implications for Austrian book retailers. While it can be assumed that digital natives can be surveyed using online media, a convenience sample was used, with only quota for age and gender, which may be considered problematic in terms of representativeness.

The focus of the study was on book retail, which is subject to individual conditions and faces its own challenges. Therefore, only limited conclusions can be drawn for retail in general. Future research examining other sectors of retail could provide greater insight on what types of digital services offered by brick-and-mortar retailers are appealing to tomorrow's customers.

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Keywords

In-store experience, omni-channel shopping, channel hopping, POS marketing, digital services

**Healthy influencer:
the role of personal characteristics, social relationships and communication content**

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Keywords

Food influencer, influencer marketing, healthy lifestyle, healthy influencer, content

Introduction

It has been detected that consumers prefer to seek the opinions of other consumers and influencers compared to the information communicated by companies and firm in order to make informed decisions. Thus, influencers play an important role in forming consumer opinions on a brand's product or services.

Influencers are defined as those who have the ability to influence with their opinions the decisions and the behaviours of people. Influencers communicate mainly through social media platforms (Carriero and Bellini, 2019). According to the marketing literature, this ability depends on their reputations, composed of four dimensions, namely authority, knowledge, social positioning and relationships. Authority is the ability to be recognized as reliable and expert in a given area (food, fashion, travel...). Thus, they are required to have enough knowledge and information on a certain topic. Social positioning and relationships are related to the fact that influencers must be part of a community to which spread their messages to (Carriero and Bellini, 2019). This means that their power depends on their ability to create valuable contents, to have a high reputation in specific areas, to have a large number of followers and to deliver messages that are actively consumed (Cha et al., 2010; Kim et al., 2021; De Veirman et al., 2017).

After the pandemic situation, ONIM (Osservatorio Nazionale Influencer Marketing – National Organization about Influencer Marketing) in 2021 analysed the Italian situation and identified as the most profitable influencers' collaborations those that are in the food&beverage sector, fashion and travel, where communicating with images is easier and impactful. Specifically, the engagement of food influencers has increased by 32% since 2019 with 18 mlns of social interactions. As a consequence, nutritional influencer marketing started to take place in order to promote a healthy diet.

Food and fitness are topics that have large communities of followers. The desire of people to see this content drives many influencers to focus on these topics. With a community of support waiting online, followers rely less on their self-motivation, and instead turn to social media. As a result, the role of social influencers to change individual behavior around food choices and diet is growing each day (Komiske, 2021).

Purpose

Given this scenario, the present work intends to analyse the phenomenon of healthy influencers and understand which are the main factors that can contribute to the success of a nutritional influencer marketing campaign. As reported in the next section, the authors have identified two gaps in the literature. First of all, the majority of the studies has focused the attention of personal characteristics of the influencers and characteristics of the relationships between influencers and followers, leaving out the impact of the message and the information provided. Secondly, researchers have considered as their dependent variable the intention to buy food products promoted by companies through influencers without considering the impact on individuals' intention to adopt a healthy lifestyle, not only related to the consumption of that specific brand or product.

Conceptual framework

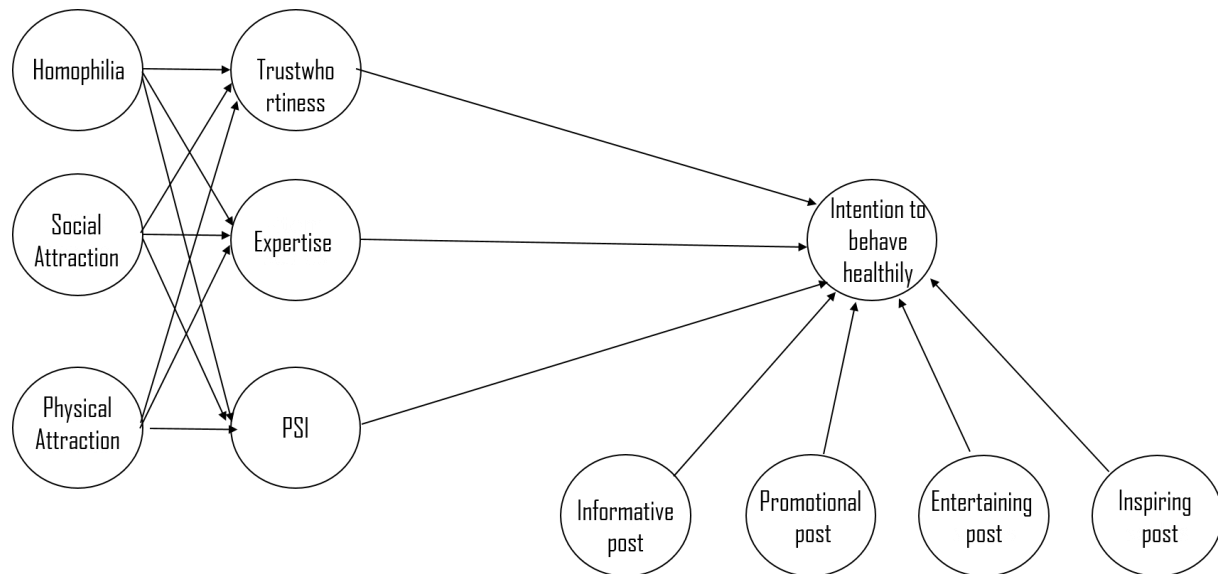
In literature, influencer marketing is 'the act of an external person who influences the consumers buying choices' (Chopra et al., 2021). The Social Learning Theory helps us pointing out the relevance of influencers. According to the theory, (Lou et al., 2019) the interaction with peers are believed to provide the context wherein the process of social learning occurs (Aker and Jennings, 2015).

As a proof, numerous studies have studied how the characteristics of the influencers and of the relationships between influencer and the followers can contribute to the success of a social campaign. Regarding personal characteristics of the influencer, according to some researchers the food purchase intention depends the concepts of trustworthiness, expertise and attractiveness (Calvo-Porrall et al., 2021; Masuda et al., 2022). Trustworthiness represents the degree to which the audience perceives the speaker's claims to be valid; expertise is defined as the degree of perceived understanding, skills, and knowledge of the endorser while attractiveness can be both physical and social. Specifically, social attractiveness refers to the likability of a speaker (Sokolova and Kefi, 2020). For what concern the characteristics of the relationship between influencer and followers, the literature identified homophilia and parasocial interaction. According to the theory of parasocial interaction (PSI) as a relationship wherein an illusion of intimacy is taken for a real interpersonal one (Dibble et al., 2016). On the other side, homophily is the degree to which people who interact are similar in belief, education, social status (Masuda et al., 2022).

For the purpose of the study, we added the perceptions about the content provided by the influencer and an antecedent of the intention to adopt a healthy lifestyle. As addressed by Lee et al. (2021), the quality of the information provided can impact the attitudes and the behaviours of individuals. Depending on how the followers perceive the communication, in terms of utility, the probability of taking that information into account increases, and then also the probability of using that piece of information and behaving in a coherent way. Given that food consumption and healthy behaviours have both a rational and an emotional dimension (Khan et al., 2005), communication delivered by influencers can leverage both aspects. Thus, we included informative, promotional, inspiring and entertaining evaluation about the messages communicated by influencers in order to measure their contribution to the intention of individuals to adopt a healthy lifestyle. The following figure represents the hypothesis

tested based on the model developed by Masuda et al. (2022). We posit all the relations to be positive.

Figure I _ Hypothesis



Methodology

In order to test the hypothesis previously presented we developed an online structured questionnaire and we obtained 674 responses. Participants were asked at the beginning of the survey to indicate whether or not they followed a healthy influencer and we considered only those who answered ‘yes’. The final sample was made of 563 respondents (96% women, 70% between the age of 18 and 33, 50% coming from the northern part of Italy). We measured all the variables considered with multiple-item scales and we asked participants to indicate to what extent they agreed with questions about expertise, trustworthiness, social and physical attractiveness of their favourite healthy influencer, then the perceived homophilia and para-social interaction. Finally, questions about the communicated posted by the cited influencers were posed. All the data were analysed using SPSS and Smart PLS statistical software.

Findings

We checked the Cronbach’s Alpha for each multiple-item scale used and we tested the measurement model before the structural one and all the requirements were met. We confirmed all the hypothesis apart from two relations, that we found non-significant. It is important to underline that we fixed a significant level of $p\text{-value} > .10$. Specifically, we did not find an impact of expertise on intention to behave healthily and of promotional post on intention to behave healthily.

Contributions

This study contributes to enriching the literature on the topic of Influencers, in particular by analyzing the role that these individuals have in influencing healthy behaviors. Most of the studies have focused their attention on the power these figures have in influencing the purchase intentions of their followers, while this study aims to understand if Influencers have

a role in stimulating intentions of adopting a more general healthy lifestyle. Furthermore, we consider the perceptions of the information provided (rational vs emotional) together with personal characteristics of the influencers and their ability to establish a close relationship with their followers as antecedents of the intention to behave healthily.

Practical implications

This study provides several insights to companies that decide to involve influencer in their communication strategy. First, companies wishing to develop collaborations with Influencers should focus on selecting figures who are reliable and able to convey trustworthy messages to their followers, since perceived honesty has proven to be a good predictor of behavioral intentions. Furthermore, interesting ideas emerge on how to formulate shareholder relations. Marketers should focus on choosing physically and socially attractive influencers and improve the degree of homophilia between followers and influencers. This will guarantee a greater probability that relationship will be strengthened. Finally, with regard to published content, marketers should focus on Influencers who convey reliable information that are at the same time communicated using emotional tone (inspiring and entertaining). Promotional communication seems less able to convince people following the healthy lifestyle promoted by influencers. Probably the reason relies on the fact that promotion is perceived to distort the information provided. Regarding the non-significant impact of the expertise of the influencers, this can be explained with the fact that skill taken for granted by the followers. The ability to create a strong relation is found to be more important than the actual competencies.

Research limitations and outlook

The results could have been biased by the characteristics of the methodology used. Apart from the limitations of the questionnaire, the majority of the participants who took part in the study (nearly the 65% of the total sample) were followers of one specific influencer who agreed to help with the study. One possible explanation of the non-significant impact of expertise can be linked to the characteristics of that influencer. More questionnaires should be sent and more data must be collected to have a deeper picture of the phenomenon.

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Keywords

Food influencer, influencer marketing, healthy lifestyle, healthy influencer, content

Consumers Going Clean but Trends Still Vague: Bridging the Gap between Perception and Behavior

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Introduction

Over the past two decades, clean foods have been an especially contentious issue as more consumers around the globe have started to pay greater attention to their food and what it contains. This consumer-driven movement, known as ‘clean food consumerism’, demands a return to real food and transparency through authenticity. The movement centers on consumer concerns regarding food manufacture and origin. Findings from previous consumer surveys point to consumers who try to avoid certain products with unfamiliar ingredients that might be perceived as artificial or synthetic chemicals, as well as products that are difficult to recognize, understand, and pronounce (Aschemann-Witzel *et al.*, 2019; Moskowitz *et al.*, 2012). Consequently, consumers today are increasingly demanding clean label products that are produced simply and grown naturally without unnecessary chemicals, processing, or cooking stages. They are looking for cues signaling ‘clean’, ‘natural’, and ‘healthy’, even though they usually don’t see the words ‘clean label’ on packs and may even be suspicious of products that use this label.

Demand for clean label is also reflected in the market share for products viewed as clean foods which have risen substantially in recent years, with global sales expected to grow from \$165 billion in 2015 to \$180 billion by 2020 (Food Business News, 2016). However, despite the increasing shift towards clean foods, it seems consumers themselves do not have a strong idea of what the ‘clean label’ term means. So far, there is no jointly agreed, commonly accepted definition or specific regulations (Asioli *et al.*, 2017; Busken, 2013; Joppen, 2006; Varela and Fiszman, 2013). In fact, it is difficult to clearly define a clean label, as the concept incorporates different trends and encompasses a broad range of themes from transparency and simplicity to being free-from artificial ingredients, non-GMO, authentic, real, fresh, and even locally grown. Yet, though no commonly accepted definition currently exists of a clean food label, several definitions or interpretations have been provided in market trend reports. These were not backed up by scientific evidence or theory, but based on consumer perceptions and manufacturer positioning from general surveys about what seems healthy and safe.

Overall, little attention has been given to date to understanding the phenomenon of clean consumerism despite its growth. Key factors driving this trend have remained largely under-researched. In most countries, there is not enough information on consumer demand for clean labels and a variety of clean foods available to consumers.

On the supply side, ‘clean label’ is a relatively well-known concept within the food industry. However, because a clean label has no agreed-upon definition, it is difficult for manufacturers to determine how these trends translate to the development of clean food products. Moreover, it is hard to translate clean foods into consumer demands, given that most food suppliers do not use the term ‘clean label’ in a standardized or similar way.

In conclusion, ‘clean consumerism’ is currently an important stream in food consumption (de Boer and Hanna, 2016; do Nascimento *et al.*, 2018). This trend will continue to grow, with the food industry evolving with it. Many consumers are actually seeking out products positioned as ‘clean label’ without exactly understanding its meaning

and despite the lack of a common definition of a clean food label. As such, food suppliers are struggling to interpret the meaning of this confluence of trends.

Purpose

The aim of the study is to identify research questions that would comprise a useful research agenda for future studies aiming to better understand the phenomenon of ‘clean food consumerism’ thus filling the gap between consumer perception and consumption decisions of clean label products.

Research Design and Methods

A systematic review was conducted by investigating online catalogs such as ProQuest, Scopus, Science Direct, and Web of Science. In addition, online market-research publishers covering food and beverage, such as “Package Facts”, “FoodNavigator”, “Nielsen”, “Ingredion”, and “Ingredient Communications” were investigated. We searched also keywords or keyword combinations such as “clean label”, “clean food”, “authentic food”, “ingredients”, “natural”, and “healthy food” in the title or the abstract. The review was restricted to English-language, peer-reviewed empirical studies, review papers on the topic, and research reports examining consumers’ perceptions and preferences for clean foods.

Publication date: Articles published since 2010. The decision to limit the search to the last decade comes from the need to offer an overview of the latest studies. In order to achieve a common way of identifying and categorizing the influencing factors, we applied the approach proposed by Köster (2009) which identifies the key drivers that influence clean food consumerism.

Findings

The following research questions and propositions were identified:

- 1) What is the most common clean label? What do consumers think clean labels must include (ingredient list)?
- 2) What is the most important ingredient/additive that determines whether a label is clean? In this regard, it has been suggested that a single ingredient perceived as positive (accepted) might lead to an exaggerated positive assessment of the food as a whole, even though they share and the role of the accepted ingredient does not merit such a change in perception. The same is true with regard to avoided ingredients.
- 3) Identifying differences across countries: most previous surveys have focused on developed countries. However, there might be cultural differences that impact consumers’ perceptions and preferences in emerging and developing countries. Therefore, research incorporating non-Western developed (and developing) regions would be beneficial.
- 4) What affects consumer buying decisions of clean label products? Identifying and assessing the influence of key factors.
- 5) Back to the future? According to a recent report (Koe, 2018), many food producers have moved into the clean label eating space. In order to meet consumer demand for clean label products in Asia-Pacific countries (Australia, New Zealand) and South East Asia (China, Japan), food preparation methods and home-style cooking of different ethnic groups are explored, along with ethnic cooking and eating habits. This is then provided to customers, thereby manufacturing clean food products. If this is the case, is the future of clean foods ethnic and traditional? Would clean labels replace conventional food products?

Original/value

The study findings add a new academic meaning to research related to “clean consumerism”. The research questions identified herein can be tested in a variety of settings worldwide

which in turn can provide useful insights for consumers, food manufacturers, and retail executives.

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Keywords

Clean food, Healthy food, Natural ingredients, Clean label, Consumer perception

THE RELATIONSHIP BETWEEN SATISFACTION AND LOYALTY IN COVID ERA: THE MEDIATING ROLE OF WELL-BEING

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Keywords

Satisfaction, loyalty to the retailer; well-being, perceived risk; Covid-19

Introduction

Customer satisfaction and loyalty have always been crucial issues for retailers to succeed in their competitive environment. Most of the research tend to suggest a linear and positive relationship between both constructs (Olsen, 2002). However, moderators, mediators and other antecedent variables, like well-being can be better predictors of loyalty than the sole customer satisfaction (Kumar *et al.*, 2013, Troebs *et al.*, 2018). Up to now, few academic studies have explored the potential of the retail experiences in improving the customer well-being (El Hedhli *et al.*, 2013, 2016; Gardiazabal *et al.*, 2020; Maggioni *et al.*, 2019). Moreover, the pandemic has changed consumption and shopping behavior (Mason *et al.*, 2020) that could be maintained after the pandemic (Roggeveen and Sethuraman, 2020).

Purpose

The present study aims to investigate how perceived risk from Covid-19 reduces the customer loyalty directly or indirectly via the mediation of the customer satisfaction and shopping well-being.

Conceptual framework

Well-being and its mediation effect on loyalty

Consumer well-being is “a state of objective and subjective well-being involved in the various stages of the consumer/product life cycle in relation to a particular consumer good” (Sirgy and Lee, 2008, p. 378). Recent contributions have extended the general well-being concept to

shopping well-being which stems from experiences linked to a shopping experience (El Hedhli *et al.*, 2013, 2016, 2021; Maggioni *et al.*, 2019).

Customer well-being can potentially be an effective mediator amongst other business measures (Troebbs *et al.*, 2018). Mediation effect of shopping well-being between customer satisfaction and loyalty has been studied in Latin American context by Gardiazabal *et al.* (2020). Results showed that customer satisfaction has a significant impact on customer well-being which in turn significantly affects customer loyalty. Considering previous studies, we can assume that:

H1: Customer satisfaction has a positive direct and indirect effect on customer loyalty intention through the mediation effect of shopping well-being

Perceived risk

Scholars have recently identified the perceived risk of the Covid-19 as a key variable to understand consumer behavior (Rosenbaum and Russell-Bennett, 2020; Yu *et al.*, 2021). It has been demonstrated that perceived risk for Covid-19 has a negative influence on customers' attitude towards traveling (Sánchez-Cañizares *et al.*, 2020), revisit intention (Yu *et al.*, 2021) and on pleasure during the shopping (Szymkowiak *et al.*, 2021).

Some consumers disregard health risks, while other look for precautions that an organization is taking to reduce virus transmission risk amongst customers and also employees (Rosenbaum and Russell-Bennett, 2020). Maher *et al.* (2022) highlight that employee safety compliance amid the Covid-19 outbreak influences consumer's approach intentions. Thus, we can suppose:

H2: The perceived risk of being with Covid-19 when shopping is higher for customers who consider that the practices adopted by the store to protect them (H2a) / to protect its employees (H2b) from Covid-19 are not sufficient.

The indirect effect of perceived risk on loyalty

The results concerning the impact of perceived risk on loyalty intentions are divergent : some authors like Grewal *et al.* (2007) and Yuksel and Yuksel (2007) show a strong negative link while others like Tuu and Olsen (2009) and Zhang *et al.* (2021) highlight a negative but non-significant impact on loyalty intention. Perceived risk of Covid-19 can also influence well-being (Zheng *et al.*, 2021) and reduce the feelings of pleasure (Szymkowiak *et al.*, 2021).

Considering the previous studies, we can suppose that perceived risk of Covid-19 has a direct negative impact on customer satisfaction, shopping well-being as well as loyalty. It can also buffer the effect of satisfaction and well-being on loyalty. As a result:

H3a: The more the perceived risk of Covid-19 is higher, the more it has an indirect negative effect on the loyalty intention via the customer satisfaction.

H3b: The more the perceived risk of Covid-19 is higher, the more it has an indirect negative effect on the loyalty intention via the shopping well-being.

H3c: The more the perceived risk of Covid-19 is higher, the more it has an indirect negative effect on the loyalty intention via a double mediation of the customer satisfaction and shopping well-being.

Methodology

A total of 551 consumers took part in an online survey enquiring about their shopping activity. The research context of this study is grocery retailers in France. We used previously validated scales to measure each construct.

Findings

Mediation role of well-being on satisfaction-loyalty relationship

To test H1, we performed a mediation analysis. The results showed that the satisfaction was significantly related to well-being ($B = 0.642$, 95% CI = 0.557; 0.727). After including the mediator in the model, the direct effect of satisfaction on loyalty intention was still significant ($B = 0.723$, 95% CI = 0.648; 0.798). There was a significant indirect effect of satisfaction on loyalty intention through shopping well-being ($B = 0.050$, 95% CI = 0.006; 0.096), suggesting a partial mediation. H1 is supported.

Perception of retailer's practices to reduce health risk

To test H2, we performed two one-way independent ANOVA comparing the means in the two groups with each other.

Perceived risk of Covid-19 is higher for participants who considered that the store did not adopt sufficient practices to protect them to Covid-19 ($M = 3.96$, $SD = 1.86$) than for those who considered these practices satisfactory ($M = 3.13$, $SD = 1.72$). This difference is significant: $F(1, 512) = 22.128$, $p < 0.001$. Thus, H2a is supported.

Perceived risk is also higher for participants who considered that the store did not adopted sufficient practices to protect its employees ($M = 3.88$, $SD = 1.87$) than for those who considered these practices satisfactory ($M = 3.19$, $SD = 1.74$, $F(1, 512) = 13.423$, $p < 0.001$). Thus, H2b is supported.

Mediating role of satisfaction and well-being on perceived risk-loyalty relationship

Results suggested that perceived risk had no significant direct effect on loyalty intention ($B = 0.008$, 95% CI = -0.052; 0.036). As for the indirect effects, the mediating effect of satisfaction achieved significance ($B = -0.075$, 95% CI = -0.118; -0.028), indicating that H3a is supported. However, because the mediating effect of the well-being did not attain significance ($B = 0.003$, 95% CI = -0.001; 0.010), H3b is not supported. Finally, the serial mediating effect of satisfaction and well-being achieved significance ($B = -0.005$, 95% CI = -0.012; -0.001). H3c is supported.

Contributions

Our research contributes to the literature which investigates the relationship between satisfaction, well-being, and loyalty. This relationship is still relevant in the Covid-19 context.

Findings confirm that perceived risk has a negative indirect effect on loyalty. Consistent with previous studies (Tuu and Olsen, 2009; Yuksel and Yuksel, 2007) perceived risk has a highly negative effect on satisfaction which in turn affects loyalty. The mediating effect of well-

being was found to be invalid because of the absence of significant negative relationship between perceived risk and well-being. Finally, the empirical results indicated that satisfaction explains loyalty intention and that this effect can be slightly improved by integrating the mediating role of well-being.

Practical implications

Retailers are advised to improve their practices towards both their customers and their employees in order to reduce perceived risk of the Covid-19 and communicate on their practices to reduce risk. Our results invite retailers to make their customers happy during their in-store shopping experience in order to improve their loyalty.

Research limitations

The research was conducted using self-reports from consumers which may be viewed as a weakness of producing common method variance. Future studies are suggested to verify the robustness of the model by examining the impact of perceived risk in others retail context such as Click-and-Collect or non-grocery shopping. Future studies are also advised to investigate the role of several emotions for groups' comparisons of responses to perceived risk.

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Towards a new age of management in retail – Customer deviance, interpersonal emotion management and frontline employees' wellbeing

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Keywords

Retail employee job demands, Customer deviance, Interpersonal Emotion, Management, Employee Wellbeing

Introduction

The frontline employee in the retail and services industry is within the customer – retail exchange dyad more challenged than ever before. Job demands for frontline employees are increasing and more defiant as customers and their behavior pose additional strains on employees in the retail sector (Yin et al., 2021). For example, in 2021, UK's fifth biggest trade union (Union of Shop, Distributive and Allied Workers, 2021) revealed that 90% of retail workers have experienced verbal abuse and 64% were threatened by a customer. It is evident, that such negative customer deviance (NCD) threaten employee's wellbeing (Baker & Kim, 2020; Groth & Grandey, 2012), making working in retail unattractive (Sánchez-Cardona et al., 2021). It therefore comes as no surprise, that the retail industry faces the highest turnover rate across all sectors globally with 49 % of retailers seeing hiring and retaining employees as their biggest challenge (Shopify, 2022).

While the retail environment and its inhibiting tasks in view of frontline employees' roles and crisis situations change (Garbe et al., 2020) with frontline employees as multi taskers and boundary spanners facing multiple differing demands which impact their affective wellbeing negatively (Yang et al., 2019), the correspondence of NCD to employees' ill-being along with their intention to leave the job remains academically unexplored. Currently, research approaching NCD examines either triggers, targets and consequences of such behaviors in varying sectors and discusses preventive managerial strategies (Fombelle et al., 2020). However, effective managerial strategies to mitigate negative effects of NCD on employees fail (Gaucher & Chebat, 2019; Reynolds & Harris, 2006) as research falls short in discussing emotional components concerning management in retailing.

Considering the negative effects of NCD on retail employees and its correspondence with their emotions and affective states (Baranik et al., 2017), the affective caring behavior in retail management seem more crucial than ever before (Boekhorst et al., 2021).

Building on the job demands resources model (JD-R) (Jackson & Rothmann, 2005), this research aims at the identification of NCD dimensions and its impact on employees' emotional states including its correspondence with their intention to leave the job in order to infer effective managerial strategies.

Purpose

The purpose of this paper is to investigate NCD dimensions in retail stores, to explore its effects on the affective states of frontline employees and to examine the role of support structures and interpersonal emotion management in retail as resources to counteract NCD's negative effects. This paper expands and contributes to existing research on NCD and its management by (1) identifying NCD dimensions in retail stores, (2) examining its impact on employees' emotional and attitudinal states linked to employees' intention to leave the job and by (3) providing practical implications for retail store management to mitigate NCD's negative effects on employees as well as retailers.

Conceptual frame

The conceptual frame of this research is based on the job demands and job resources model, referring to NCD as a job demand, various mediating factors (emotional exhaustion, job related affective ill-being, job satisfaction and employees' intention to leave the job) referring to employees' reactions to NCD and job resources (trust in supervisor, supervisor support and interpersonal emotion management) functioning as moderators within NCD and its effects concerning employees emotions (emotional exhaustion, job related affective ill-being) and their attitudes (job satisfaction) (see Fig.1).

Job demands and employees' reactions as mediators

Research on NCD in the retail sector emphasizes the norm deviation and the targets of negatively behaving customers in retail (Fombelle et al., 2020; Lugosi, 2019). This research defines NCD as any observable customer behavior perceived by a frontline employee within physical retail stores that deviates from a commonly accepted social norm (non-law breaking) in interaction with either the customer, the employee or the environment such as products or financial assets.

Employees' reactions to forms of NCD range from emotional exhaustion representing a psychological threat (Goussinsky, 2015) to employees' job dissatisfaction (Alola et al., 2019) and consequently employees turnover (Tian- Foreman, 2009). The affective well-being of employees receives limited attention within academic research and is associated with poor employee – customer interactions (Groth & Grandey, 2012) which have varying causes and concern multiple sectors. Building on existing research, within this study academically known employee reactions to negatively behaving customers are examined as mediating factors of the relationship of specifically NCD perceptions and employees' intention to leave the job. The hypotheses are therefore as followed:

Hypothesis 1, 2, 3, 4 and 5. H1: NCD perception directly impacts employees' emotional exhaustion. H2a: Emotional exhaustion directly correlates with employees' job-related affective ill-being. H2b: The higher the feeling of emotional exhaustion within employees, the lower their job satisfaction. H2c: The more emotionally exhausted employees feel the higher their intention to leave the job. H3a: Employees job related affective ill-being relates directly to their satisfaction in the job. H3b: Employees job related affective ill-being directly relates to their intention to leave the job. H4: The lower employees' job satisfaction the less likely they intend to stay in the job. H5: Emotional exhaustion, the job-related affective ill-being and job satisfaction significantly mediate the association of NCD perceptions and employees' intention to leave the job.

Job resources as moderators

According to the JD-R model (Jackson and Rothmann, 2005) two sets of variables, namely job demands and job resources, are present in every job. They refer to physical, psychological, social or organizational aspects of the job. This research considers NCD as a qualitative job demand as it relates to emotions and tests the moderating role of two sets of job resources (Trust in supervisor and supervisor support; interpersonal emotion management) in relation to the organizational and interpersonal level.

Organizational job resources

Trust in supervisor is linked to ethical leadership (Chughtai et al., 2015) in which employees perceive their supervisor as trustworthy inhibiting positive expectations. Supervisor support describes the degree of employees support (Babin & Boles, 1996) provided by supervisors. It is linked to directing, encouraging and displaying concern (Knight et al., 2006) along with valuing employees contributions and caring for them (Gordon et al., 2019).

Interpersonal job resources

Interpersonal emotion management strategies (IEM) represent behaviours which target the regulation of negative emotions in others aiming at the improvement of affects (Little et al., 2012). It is based on four strategies (Williams, 2007) targeting either the situation modification (SME), the cognitive change (CCE) or the attentional deployment (ADE) or the modulation of the emotional response (MERE).

Hypothesis 6, 7 and 8. H6a: Trust in supervisor moderates the effects of NCD perceptions on emotional exhaustion. H6b: Supervisor support moderates the effects of NCD perceptions on emotional exhaustion. H6c: IEM strategies moderate the effects of NCD perceptions on emotional exhaustion. H7a: Trust in supervisor moderates the effects of job-related ill-being and employees' job satisfaction. H7b: Supervisor support moderates the effects of job-related ill-being and employees' job satisfaction. H7c: IEM strategies moderate the effects of job-related ill-being and employees' job satisfaction. H8a: Trust in supervisor moderates the effects of emotional exhaustion and employees' job satisfaction. H8b: Supervisor support moderates the effects of emotional exhaustion and employees' job satisfaction. H8c: IEM strategies moderate the effects of emotional exhaustion and employees' job satisfaction.

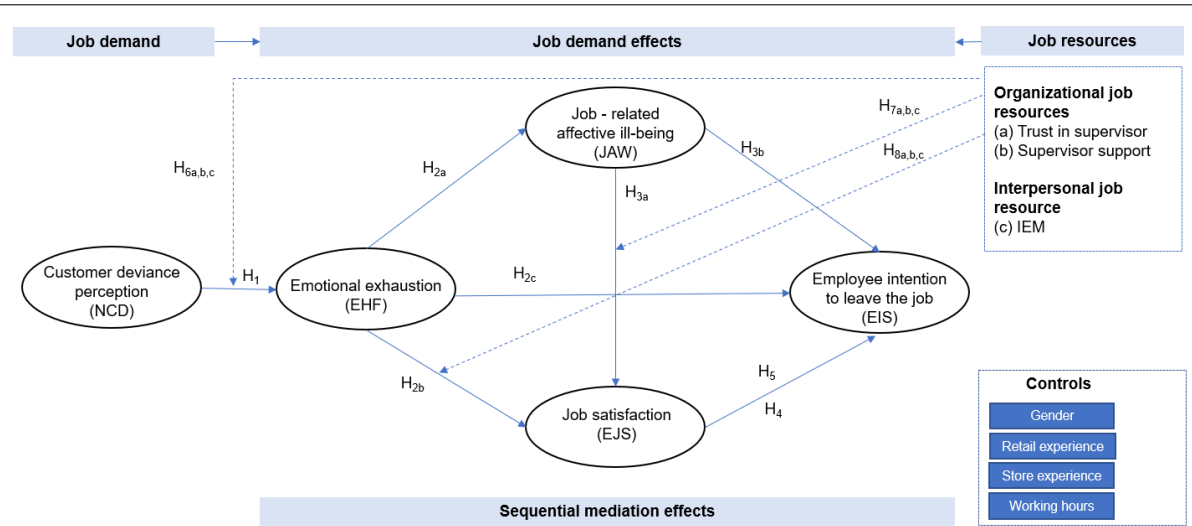


Figure 1: Conceptual frame

Research design

Establishing a quantitative research design using web based surveys, data were collected from 108 frontline employees above 18 years, working for at least 6 months and for a minimum of 20 hours per week in retail stores. Path coefficients of the research model along with its reliability and validity measures were tested using structural equating modeling. To assess the proposed research model with its associations among all outlined constructs, partial least squares (PLS) path modelling was used applying SmartPLS3 (Hair et al., 2021) as it represents the best suitable approach for component based modelling (Chin, 1998; Lohmöller, 1989; Tenenhaus & Tenenhaus, 2011). VBSEM tests contrary to overall goodness-of-fit tests, the strength and direction of individual paths relying on statistical significance (Henseler et al., 2014). This is of importance for studies with small sample sizes like the following one.

Findings

Structural equation modeling upon data collection, confirmed the indirect impact of deviating customer behavior on frontline employees' intention to leave mediated through emotional exhaustion, job related affective ill-being and job satisfaction. Further, it confirmed the moderating role of various affective support factors such as interpersonal emotion management approaches (Little et al., 2012; Williams, 2007) as a resource to foster employees' emotional wellbeing and their job satisfaction.

Originality

The findings of this research close research gaps within customer deviance research and retail management by developing a customer behavior – interpersonal management framework which confirms the correspondence of customer deviance and its negative psychological effects on frontline employees. It displays that interpersonal emotion management represents a resource for employees to deal with challenging customer behavior and further provides practical implications for human resource management targeting employees wellbeing as mediator for their intentions to remain in the job.

Research limitations

The results of this research remain within the scope of retail stores. To broaden the view of customer deviance (Fombelle et al., 2020; Lugosi, 2019), testing the research model within online shopping is recommended. Human resource managerial approaches as a resource in view of customer deviance as a demand for frontline employees are reduced to interpersonal emotion management. Future research could include additional managerial support factors.

Practical implications

The identified job demands in correspondence with customer deviance including its dimensions and psychological effects on frontline employees in retail stores, threaten their affective wellbeing and pose indirect financial risks for retailers concerning human resources which are difficult to find (Imna & Hassan, 2015; Lai et al., 2022). Addressing frontline employees affective wellbeing, applying emotional managerial approaches, this research contributes practically by reducing retailers' risks of employees turnover.

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Keywords

Customer deviance, interpersonal management, employee wellbeing, retail job demands, retail job resources

A systematic review of the impact of retailers' online product review systems

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Keywords

Online reviews, Online review system, Design of review system, Online retailing, Consumer behaviour, Systematic literature review.

Introduction

Online product reviews play an important role in defining the social presence of online retailers (Yin et al., 2017) as well as attracting more consumers (Mudambi and Schuff, 2010). Additionally, online reviews are also perceived as a source of information (Mudambi and Schuff, 2010) that gives consumers the power to make better purchasing decisions (Park et al., 2021). As a result, online retailers that are perceived to have more credible and useful product reviews, are seen as offering greater value to customers (Chevalier and Mayzlin, 2006) thus, also increase sales of retailers (Floyd et al., 2014).

When looking into previous literature, Zhu and Zhang (2010) argue that design of review system is a construct that affects consumers' purchase decision (Zhu and Zhang, 2010, p. 135). Previous research has also argued that credibility and usefulness of reviews have effects on consumer purchase decision for online trading (Anderson and Simester, 2014). Hence, a question raised among the authors was if we design online review systems properly, would that affect the way consumers perceive online reviews as credible. First, we need to differentiate between different types of online review systems.

There are two main types of review systems which are the third-party platforms (Luca and Zervas, 2016; van Laer et al., 2019) and online reviews directly written on websites of retailers. Previous studies have not paid much attention in making a distinction between these two systems. Yet, both of them are proven in literature to have impact on sales and consumer purchase decision (Babić Rosario et al., 2016). The reviews from third-party websites were originally used when consumers need to assess the credibility of a brand (Chen et al., 2012; Chen and Xie, 2005). Nowadays, consumers can also find some product reviews available in some websites such as Trustpilot. However, the majority of online product reviews are still available on the websites of retailers.

A meta-analysis by Ismagilova et al. (2020) argues that the perceived usefulness and credibility of eWOM are affected by source expertise and trustworthiness (Ismagilova et al., 2020). In addition, according to source credibility theory (Hovland et al., 1953), how people adopt information and behave accordingly is strongly influenced by the trustworthiness of sources. Therefore, the authors make an assumption that reviews from retailers' websites have different effects on credibility and usefulness of reviews, thus, also having different effects on consumer purchase intention compared to the ones from third-party platforms. In this paper, the authors mainly focus on the internal review systems of retailers since they are more relevant for retailers.

In other to fill in the need to synthesize relevant literature that has addressed these issues, in this systematic review, we aim to address the two following research questions.

- RQ1: How have the impact of online product reviews on consumer behaviour and retailers' performance been addressed in previous literature?
- RQ2: How have the design features of different retailers' review system been addressed in previous literature?

Purpose

The purpose of this literature review is to systematically synthesize relevant papers that have covered the aspects addressed in the two research questions above. This is not the first conceptual paper in this field. Some prominent papers are the three meta-analysis papers from Babić Rosario et al. (2016), Floyd et al. (2014) and You et al. (2015). However, these three papers either only focused solely on sales of e-commerce platforms (Floyd et al., 2014) or covered a wide range of different types of online Word-of-Mouth or online review system from third-party reviewers and not focus only on online product review systems operated internally of online retailers (Babić Rosario et al., 2016; You et al., 2015). Therefore, it is necessary for us to conduct a systematic review to synthesize what have been done and also to identify relevant research gaps in the field.

Methodology

Review protocol and guideline

The Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) protocol was adopted as the guideline for this system review (Page et al., 2021a). The review was conducted through three steps according to the new PRISMA protocol 2020, i.e., identification, screening and inclusion (Page et al., 2021a) (as depicted in Figure 1).

For the identification stage, a literature search was conducted in twelve leading Marketing and Retailing journals during the months October, November 2021 and January, February 2022. The time span adopted for the literature search is from 2000 to 2021. Some keywords were developed after pre-reading including "online consumer review", "consumer reviews", "review systems", "online reviewing", "online product reviews", etc. We also decided to collect all papers that have keywords related to online Word-of- just to be sure that we are not missing any papers. A total of 175 were identified.

In the screening stage, some exclusion criteria were developed as follows.

- The papers that cover eWOM types that are not online reviews
- the topic of the papers is not related to consumer behaviour
- the papers cover the online review system that cannot be controlled by retailers

After the screening stage, 92 papers were finalized for the review process.

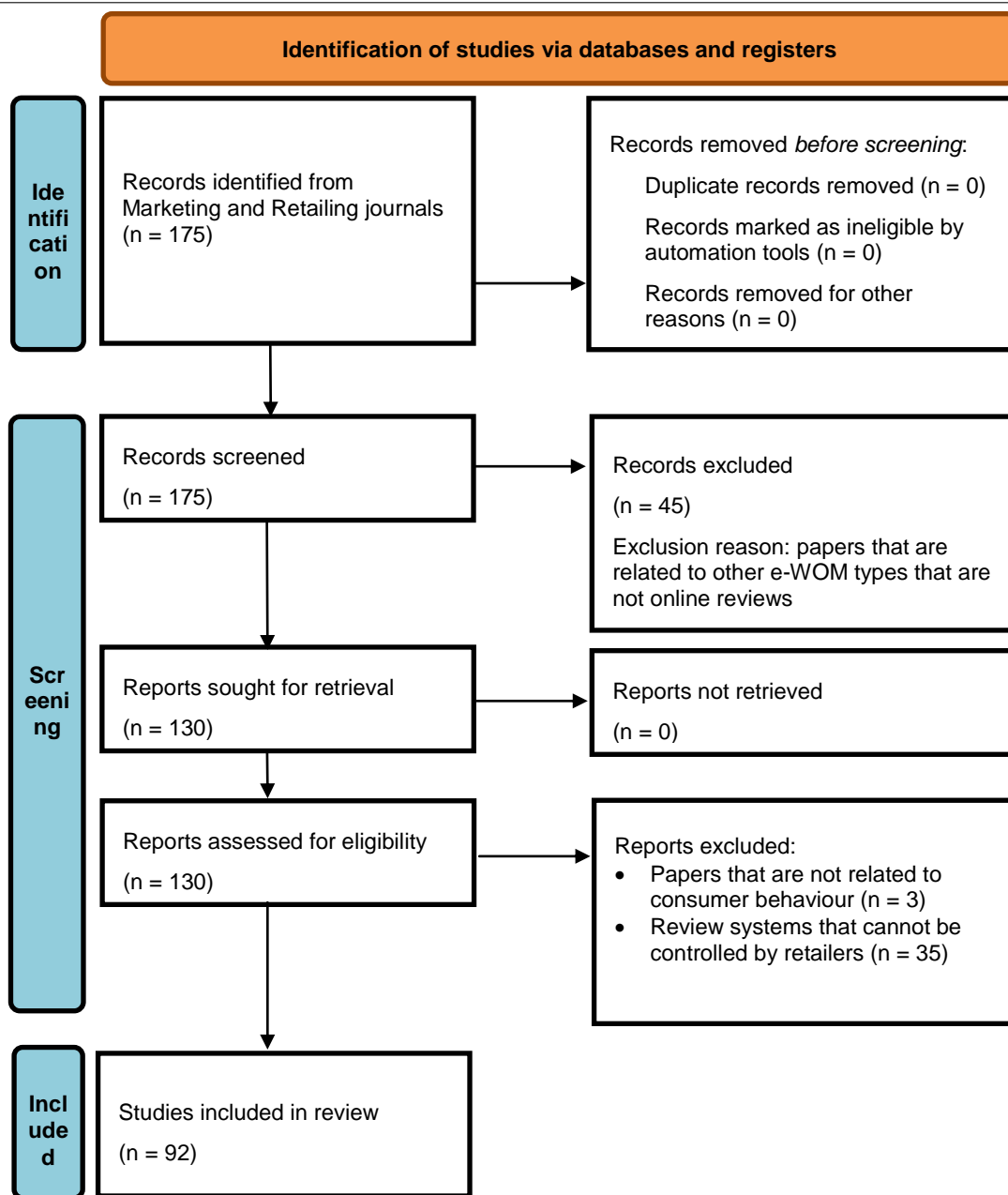


Figure 1. Literature search process based on PRISMA Protocol 2020

Categorizations of included papers

The 92 included papers are classified into different classifications. The research questions for this paper clearly state that there are two separate parts. In the first part, the papers will be allocated into different groups as follows.

- Impacts on retailers include impacts on sales and impacts on reputation
- Impacts on consumers include impacts on consumer behaviour and review formation

For the second part, we attempt to make a synthesis of individual design features. In the literature review by Dominik Gutt and colleagues (2019), the authors came up with ten design features that can be used in an online review system (check Appendix 1). Even though this paper was not published in a Marketing or Retailing journal, this design feature category is by far the most complete one that has been developed in literature. Therefore, the authors

decided to use the categorization developed by Gutt et al. (2019) as classifications. However, sub-classifications are also own-generated along the reading journey (see Table 1).

Classification	Subclassification
Review templates	Including template and guidelines for reviews
Review presentation	Filter options of reviews Including sub-categories for ratings Including photos or videos for reviews
Adapted metrics	Volume/Valence/Variance
Ratings dimensions	Distribution of ratings
Management responses	
Review elicitation	Ask past customers to provide reviews Provide non-monetary or monetary incentives for writing reviews
Review reputation	Ranking of reviews (helpful or not) Ranking of reviewers (Top 100 reviewer, etc.)
Mutual reviewing	
Recommender system	
Different platforms	Reviews from different devices (mobile, PCs, etc.)
Dishonest behavior	Fake review filter Verified review mechanism

Table 1. Classification for the different design features of online review system.

Findings

Descriptive statistics

The figures and tables below provide an overview of descriptive statistics of included papers. Figure 2 depicts that the number of papers significantly increased from 2010 and still have a tendency to increase in recent years. Table 2 showcases the number of papers collected from all twelve journals. Journal of Retailing and Consumer Services is the journal with the highest amount of papers collected. Table 3 shows that this field is highly dominated by quantitative research methods. Out of the 92 papers included, 4 papers are considered as conceptual papers and only one paper uses in-depth interview. In addition, lab-experiment is the most common research design.

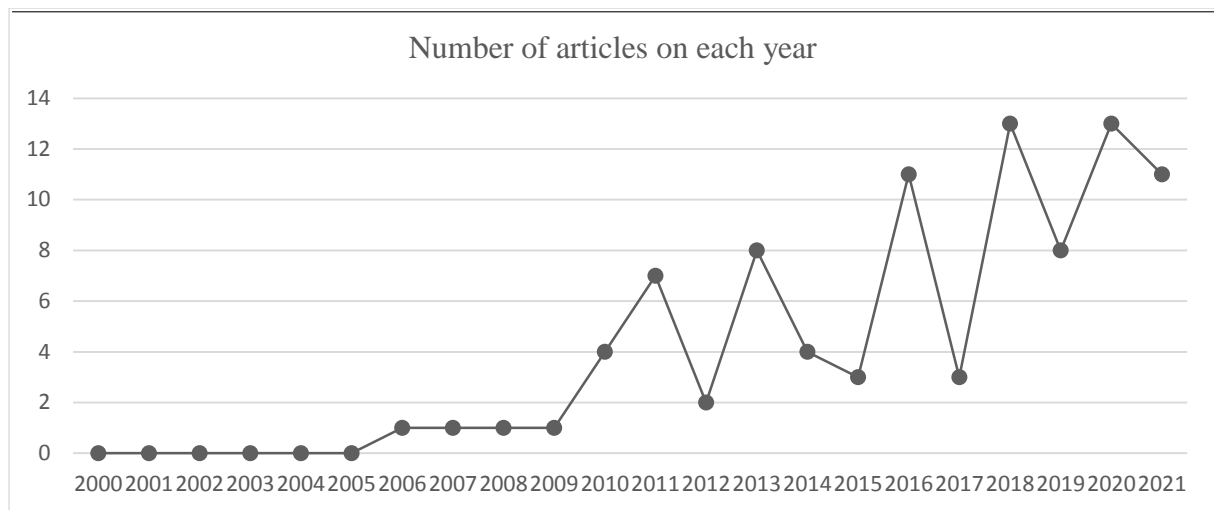


Figure 2. Year wise distribution of papers

Journal	No. papers	ABS 2021 Rank
Journal of Consumer Psychology	0	4*
Journal of Consumer Research	6	4*
Journal of Marketing	7	4*
Journal of Marketing Research	12	4*
Journal of the Academy of Marketing Science	2	4*
Marketing Science	7	4*
International Journal of Research in Marketing	5	4
Journal of Retailing	7	4
European Journal of Marketing	9	3
Journal of Interactive Marketing	16	3
Journal of Retailing and Consumer Services	21	2
International Journal of Retail and Distribution Management	0	2

Table 2. Number of papers based on journals

Type of method	No. papers
Meta-analysis	4
Lab experiment	43
Survey	4
SEM	8
Quantitative content analysis	6
Text mining	4

Conjoint analysis	3
Regression analysis	8
Econometric techniques	7
Difference-in-difference approach	1
Regression discontinuity	2
Qualitative text analysis	1
Interview	1

Table 3. The methods used in the included papers

The impact of online product reviews

Several of previous literature have addressed the importance of online product reviews on sales (Chevalier and Mayzlin, 2006; Floyd et al., 2014; Zhu and Zhang, 2010). However, the view on whether positive or negative reviews have more impacts on sales is still inconclusive. On the one hand, various studies argue that positive reviews will have positive impact on sales (Zhu and Zhang, 2010; Ho-Dac et al., 2013; Floyd et al., 2014). On the other hand, some authors also argue that negative online reviews have much bigger impacts in consumer purchase decisions than positive ones (Berger et al., 2010) or neutral-rated reviews actually have more impacts than the bimodal ones (Tang et al., 2014).

Online product reviews also play an important role in defining the reputation and image for retailers (Ahmad and Guzman, 2021). By using useful and credible online product reviews, consumers can overcome the challenge of information asymmetry in online trading (Yin et al., 2017), thus increasing their willingness-to-pay. Nevertheless, while examining the usefulness and credibility of online product reviews, consumers could suffer from various issues such as social influence (Risselada et al., 2018), reviewer ambiguity (Naylor et al., 2011) and recently an emerging amount of fake and irrelevant reviews (Munzel, 2016).

In order for reviews to be perceived as useful, a large volume of reviews is needed (Ifie, 2020). However, the formation of online reviews suffers from a free-rider problem (Reimer and Benkenstein, 2016). By voluntarily contributing to the system, the whole community will be better-off, yet, it is difficult to realize as an individual (ibid.). In addition, if consumers want to contribute to the online review system, they will have to invest specific amount of time and effort (Reimer and Benkenstein, 2016). To overcome this problem, some suggestions have been made by previous scholars such as offering monetary incentives (ibid.) or non-monetary incentives (Woolley and Sharif, 2021). However, how to apply these incentives in the design of review system is still a research gap that needs to be fill.

The individual review system design feature

There is no paper in these 92 included papers talking about the design of review system. However, by allocating the papers into classifications as in Table 1, we find that some design features have received much more attention compared to others. Among 92 papers included, 60 papers focus on adapted metrics (volume, variance and valence) while other design features are mostly neglected. On the other side, single-dimensional review systems do not provide consumers enough information to help them diminish uncertainty and evaluate products in their decision-making process while multidimensional rating system can (Chen et al., 2018). Therefore, it is necessary to consider to include more design features in the system apart from the original adapted metrics. For the findings of this part, several research gaps have been identified in order to have a useful and credible review system such as the use of

photos and videos in reviews, “verified purchase” mechanism, providing monetary or non-monetary incentives for review formation, etc.

Contributions

This systematic review is aimed at synthesize relevant research papers in the field of Marketing and Retailing and identify research gaps that have not been filled by other scholars. By far, this review is the first research that has ever differentiated between the internal review systems from retailers with the ones from third-party platforms. Furthermore, this review also serves as the state-of-the-art for a bigger project in digitalization of retailing and a cornerstone for follow-up empirical papers.

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Keywords

Online reviews, Online review system, Design of review system, Online retailing, Consumer behaviour, Systematic literature review

Appendix

Appendix 1. Design feature categories (Source: Gutt et al., 2019, p.107)

Design feature category	Description
Review templates	Provide reviewers with templates and guidelines to improve the reviews they produce
Review presentations	Influence the order in which reviews are presented; provide ranking and filter options of reviews for review readers; change the appearance of individual reviews (e.g., introducing information on the reviewer)
Adapted metrics	Adapt existing metrics like valence, volume, or variance
Rating dimensions	Represent the numerical rating of a review (e.g., multi- vs. single-dimensional, binary vs. 1–5 rating scale)
Management responses	Enables sellers to publicly reply to online reviews
Review elicitation	Asks past customers to provide a review; provide non-monetary and monetary incentives for writing reviews
Reviewer reputation	Introduces concepts to describe the status of a reviewer in the reviewer community (e.g., ranking of reviewers, friendships between reviewers)
Mutual reviewing	Enables both buyers and sellers to review each other, and adjustments to be made to the mutual reviewing process (e.g., double-blind reviewing)
Recommender systems	Introduce a system that provides consumers with product or service recommendations, adjust recommender systems based on their relationship with online reviews
Dishonest behaviour	Detects and mitigates fraudulent reviewer and seller behaviour (e.g., fake review filters, verified review mechanisms, measures to punish dishonest sellers)

The Relevance of perceived Incongruity in Product Presentation in Customers' Response

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Keywords: Incongruity, Product Presentation, Retailing, Involvement, Healthy Food

Introduction

Even though some general work on incongruity in terms of product communication can be found, the sensitive field of food is barely touched in this context. In fact, one area that has seen large gains in the wake of the COVID 19 pandemic is the food sector (Dannenberg et al., 2020). An increasingly important aspect in today's retailing landscape is the relevance of healthy food and its marketing, especially also via online shopping platforms. However, the marketing of these products within the online market also presents the corresponding retailers with ever new challenges against the backdrop of intensifying competition. Therefore a key challenge for retailers in this competitive environment is to get the attention of customers. In particular, stimulating the cognitive processes of customers is a proven method to generate attention and get customers to engage not only with the retailer, but especially with the product itself. In addition, the promotion of healthy foods, like organic differs from conventional food as customers pay more attention to their intangible values, such as health, nutritional content, environmentally friendly production (Torjusen et al., 2001).

However, there is no clear study on whether and to what extent contradictory advertising communication increases attention and thus also encourages the customer to make a purchase-related decision, or whether such communication can also have a counterproductive effect in terms of food. In fact, healthy food, like organic food is characterized by having credence attributes. On the other hand, additional benefit is expected from healthier products through the customer, what could be further emphasised by presenting them as contradictory (Mahmoud et al., 2017). We assume that such a contradiction in product communication does stimulate

customers' information processing about the product, and that the healthier a product is perceived, the stronger this information processing takes place, but that this intensification does not necessarily have a positive effect on customers' purchase-related behaviour. Consequently, this paper asks to what extent the incongruent interplay of product and communication in the digital context can generate attention among customers and what influence this in turn has on the purchase-related behaviour of customers.

Purpose

Overall, contradiction in advertising is mostly caused by combining two or more opposing characteristics. The information often cannot be processed as usual because it does not fit into the familiar schema. It cannot simply be incorporated and sorted into the expected schema, but rather must be perceived and processed quite consciously on customers' site (Sinha and Foscht, 2016). For this reason, more intense attention is automatically paid to this advertisement. This incongruity in advertising and the resulting increased perception is a recurring phenomenon in advertising effectiveness research and, on the other hand, also offers numerous potentials for companies and retailers to bring products to consumers through targeted communication.

Conceptual Framework and Hypotheses

Consistent with the information processing paradigm, Holbrook and Hirschman (1982) relate the importance of the type of communication to customers' consumption decisions. In this regard, literature shows that factors such as the congruence and correctness of information and the way information is conveyed are critical predictors of customers' perception (Everard and Galletta, 2005). However, in our study, a product presentation with a higher incongruity could be seen as a product presentation which does not fit customers' expectations and therefore seen as less informationally comprehensive. Following the theory of cognitive dissonance (Festinger, 1962) customers perceive such situations of experienced non-confirmation of expectations as dissonant. Whenever two information do not fit together psychologically dissonance occurs. In the case of contradicting information's, dissonance arise and people strive to reduce it and thereupon avoid further dissonance. Accordingly, customers' information processing on the reception of the presentation might differ resulting in an immediate adjustment of customers' behaviour (Chang and Wildt, 1994).

Moreover, as we see an increase of customers' involvement as a reaction of readjustment on the underlying dissonance caused by the incongruity of the product presentation and as customers' involvement has shown to be a decisive predictor of customer behaviour (Prebensen et al., 2012) we assume a mediating effect of customers' involvement on the corresponding relationship between the level of perceived incongruity and customers' purchase-related behaviour. Finally, we see customers' level of perceived product health as a moderator as studies have shown that customer expectations with regard to a potential additional benefit in terms of product health is an important factor for customer purchase-related behaviour (Mahmoud et al., 2017). The resulting research model is shown in Figure 1.

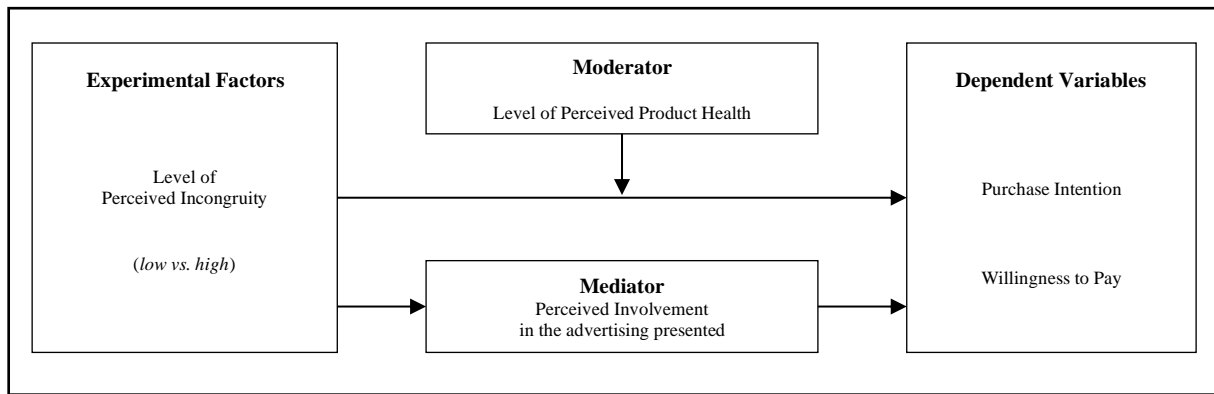


Figure 1: Theoretical Model

- H1: The level of perceived incongruity (low vs. high) impacts (a) customers' purchase intention as well as (b) customers' willingness to pay negatively.*
- H2: The level of product health moderates the influences of customers' perceived incongruity on (a) customers' purchase intention as well as (b) customers' willingness to pay.*
- H3: The relationships between the level of perceived incongruity (low vs. high) and (a) customers' purchase intention as well as (b) customers' willingness to pay are mediated by customers' perceived involvement in the advertising presented.*

Methodology

We conducted a 2 (level of perceived inconsistency: low vs. high) x 2 (level of perceived product health: low vs. high) quasi-experimental online between-subject study. To investigate the level of perceived incongruity we manipulated the design of a product. All scenarios were extended by an additional slogan above the product. In case of low level of incongruity, the slogan says: "These smoothies are/are in danger of being drunk out of!" respectively, "These chocolates are in danger of being eaten!". In case of high level of incongruity both slogans say: "Attention, luxury food! limited edition, no. 11" (see Figure 2). Respondents were randomly assigned to one of the scenarios

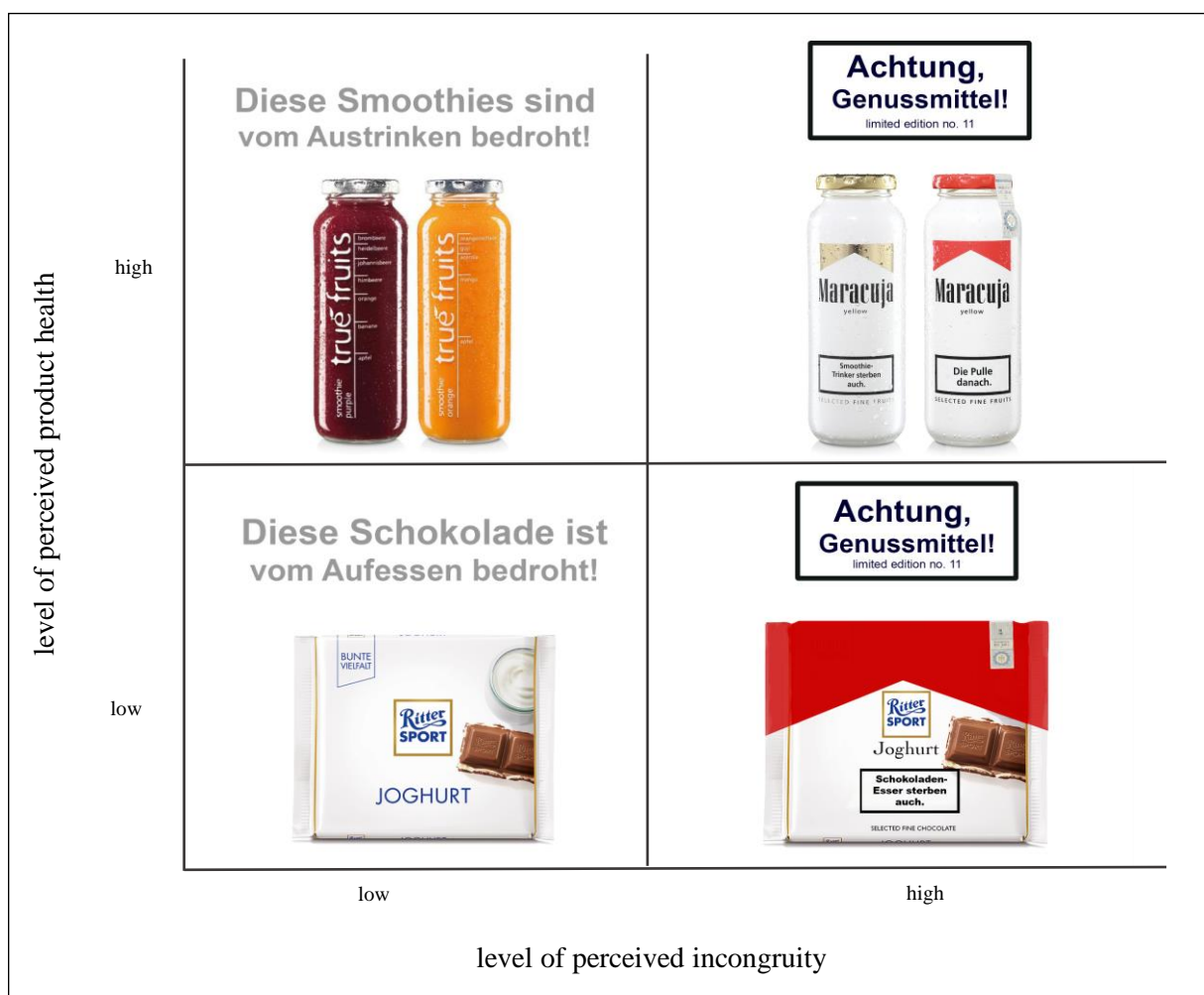


Figure 2. Experimental Scenarios

In total, 154 subjects (women: 63.64%) with an average age of 31.38 (SD = 13.53) years took part in this study. We conducted ANOVA tests to show that the intended manipulations of the level of perceived incongruity as well as the level of perceived product health were successful.

Findings

We conducted several ANOVA tests to analyse our hypotheses. Results show that the level of perceived incongruity within a product presentation have a negative influence on customers' purchase intention of food products. Furthermore, we analysed the role of customers' involvement and found support for a mediating effect of customers' involvement on the corresponding relationship between the level of perceived incongruity and customers' purchase intention. Moreover, a significant difference between a low and high level of product health was observed with respect to the impact of the level of perceived incongruity on customers' purchase intention and willingness to pay.

Contribution

In line to the information processing paradigm and the theory of cognitive dissonance, findings suggest that incongruity within the product presentation influence customers' perception and behavioural outcomes significantly. In detail, we point out that a higher incongruity within the product presentation is accompanied by a higher level of involvement and thus attention on the part of customers. Due to the higher level of incongruity the information of the product

presentation cannot be processed as usual on customers' site because it does not fit into the familiar schema. It cannot simply be incorporated and sorted into the expected schema, but rather must be perceived and processed quite consciously on customers site (Sinha and Foscht, 2016). For this reason, more intense attention is automatically paid to this advertisement. Accordingly, customers' information processing on the reception of the presentation might differ resulting in an immediate adjustment of customers' behaviour (Chang and Wildt, 1994). Even if the results for the investigated influence of the level of incongruity within the product presentation on costumers' willingness to pay are not significant, there is nevertheless a tendency that customers' willingness to pay is affected in dependency to the level of product health.

Practical Implications

The findings of this study offer both scholars and retailers valuable practical and theoretical insights as our results show that product presentations with a higher level of incongruity that creates a link between two brands that deliberately do not fit together and cannot be perceived by the customer as a matching entity could lead to positive as well as negative effects for online retailers. Form a positive point of view and as our results show that product presentations with a higher level of incongruity positively influence customers' involvement with the product presentation and increase customers' attention, online retailers may consider the findings of our study to prevail against intensifying competition by enhancing the virtual product experience. In this context, our study has shown that a higher level of incongruity within the product presentation is a promising approach to increase customers' willingness to pay in the case of a low level of product health. As assumed, results show that such a contradiction in product communication does stimulate customers' information processing about the product, and that the healthier a product is perceived, the stronger this information processing takes place, but that this intensification does not necessarily have a positive effect on customers' purchase-related behaviour. In fact, results indicate that a higher level of incongruity within the product presentation weakens customers' purchase decision, especially in the case of a high level of product health.

Research Limitations and Outlook

Besides that, the study also offers various approaches for future research. As the results of the mediation show that the relative direct path on the dependent variable due to the addition of the mediator is significant and pointing in the opposite direction as the indirect effect, indicating a competitive mediation, possible mediators should be considered in future research. Lastly, our study was only conducted on the German market.

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Gamified Promotions in Shopping Apps: Their Impact on Consumers' Purchase Intention

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Keywords

Shopping apps, mobile apps, gamification, purchase intention, anticipated regret

Introduction

Practical relevance

The topic of gamification has received more attention in recent years (Huang *et al.*, 2019), particularly in the marketing context (Bauer *et al.*, 2020; Berger *et al.*, 2018). Gamification means implementing “game design elements in non-game contexts” (Deterding *et al.*, 2011, p.9). Such contexts are, for example, education (Toda *et al.*, 2019), health (Johnson *et al.*, 2016), sustainable behavior (Whittaker *et al.*, 2021) and also shopping. Gamification in the shopping and mobile app context is a relatively new approach and prior research is sparse (see Aydınlihyurt *et al.*, 2021; Bauer *et al.*, 2020; Wen *et al.*, 2014). As prior research has shown that gamification has a positive influence on consumer behavior in general (Yu and Huang, 2022; Zhang *et al.*, 2021), we assume that it also can have a positive impact on consumers' purchase intention. One option to use gamification in shopping is the promotions context. As previous literature recommends to use new advertising formats (Stipp, 2018), gamification might be a suitable solution. Instead of using traditional banner ads, retailers can promote discounts after consumers successfully completed a game. The gamification gives the discount the character of a prize rather than a promotion. The gamified nature could increase consumers' intention to redeem the discount and consequently purchase a product.

Theoretical relevance

Previous gamification literature focuses on the flow theory (e.g., Berger *et al.*, 2018; Waiguny, Nelson and Terlutter, 2012) and self-determination theory (e.g., Bauer *et al.*, 2020; Feng *et al.*, 2018; Hollebeck *et al.*, 2021). For our context of gamified promotions, we use regret theory to explain the effects on customer behaviour. According to regret theory, consumers should feel stronger anticipated regret when they do not redeem the discount of a gamified promotion compared to a traditional push message or banner ad promotion. Consequently, the anticipated regret should lead to a higher purchase intention.

Purpose

Previous literature addresses different monetary and nonmonetary promotion opportunities for retailers (Buil *et al.*, 2013; Büttner *et al.*, 2012; Palazon and Delgado-Ballester, 2009). Monetary incentives have mostly a positive impact on customer behaviour (e.g., Alvarez-Alvarez and Vázquez-Casielles, 2005; Dickinger and Kleijnen, 2008), particularly in short-term (see Yi and Yoo, 2011). We consider this prior insight and investigate the promotion of a discount in different scenarios. As consumers receive numerous traditional promotions every day (Forbes, 2017), retailers should rethink their strategy and become more creative. One option for being more creative, new and trendy is integrating gamification elements in shopping apps to encourage consumers to use discounts. Therefore, our study aims to reveal if a gamified promotion has a greater effect on consumers purchase intention compared to a traditional ad promotion and which psychological mechanism mediates this effect.

Conceptual framework

Monetary incentives such as a simple discount usually have a positive short-term impact on consumers' behaviour (see Yi and Yoo, 2011). We propose that a discount in a gamified advertising context has a greater impact than a traditional banner ad. Gamification gives the discount the character of a prize rather than a simple promotion. As gamification enhances positive emotions (Harwood and Garry, 2015; Koroleva and Novak, 2020), we assume that the gamified promotion triggers such emotions in the consumer, which in turn lead to increased purchase intentions (Nasermoadeli *et al.*, 2013). In addition, consumers had a higher effort to obtain the discount due to the game they played. Therefore, consumers are more likely to regret not redeeming the discount (Liao *et al.*, 2017).

Methodology

The study uses a scenario-based online experiment with a between-subjects design (gamified promotion vs. traditional banner ad). The promotion includes a 10% discount. Respondents in the gamification scenario receive the 10% discount promotion after successfully playing a gamification game. Participants in the traditional banner ad scenario receive a pop-up advertisement with the 10% discount. Data from 96 respondents were collected in Germany in March 2022. The study was conducted in the apparel context. Data was analysed with M/ANOVA in SPSS. Further, for mediation analysis Hayes' PROCESS with 5,000 bootstrapping subsamples is used.

Findings

Findings suggest that a gamified promotion has a greater effect on consumers' purchase intention than a traditional banner ad. The gamified promotion compared to the traditional banner ad also has a greater effect on consumers' happy emotions, perceived effort for getting the discount and on consumers' anticipated regret. The relationship between the type of advertisement (gamified promotion vs. traditional banner ad) and anticipated regret is mediated by consumers' happy emotions and perceived effort for getting the discount. Further, anticipated regret has a positive impact on consumers' purchase intention.

Contributions

This research is novel, as it analyses the impact of a gamified promotion compared to a traditional banner ad. Prior research on promotions mostly concentrates on the comparison of monetary and non-monetary incentives (e.g. Büttner *et al.*, 2015; Sinemus and Zielke, 2022). Further, prior research in the gamification context rarely addresses the shopping app context (Aydınlıyurt *et al.*, 2021; Bauer *et al.*, 2020; Wen *et al.*, 2014) and mostly focuses on other topics such as health (Johnson *et al.*, 2016) or education (Toda *et al.*, 2019). Further, this study considers regret theory to explain why consumers have a greater purchase intention for gamified promotions.

Practical implications

Results show that gamified promotions in a shopping app seem to be an attractive way of stimulating consumers to redeem the discount and make a purchase. Consequently, retailers should use gamified promotions instead of traditional banner ad promotions.

Research limitations and outlook

Firstly, our scenarios focus on the apparel industry. A cross-industry analysis could test the generalizability of results. Secondly, we analyse the effect at one time point. Further research could test long-term effects of gamified promotions. It could be possible that the effect of gamification decreases over time. Moreover, future research could examine different time spans in which the game can be repeated and find out whether fatigue effects occur. Finally, as we conducted a scenario-based experiment, further research could examine our findings in a real setting.

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References are available upon request.

AI REACTANCE WHEN PEOPLE ARE UNDER EVALUATION

Introduction

Advances in artificial intelligence (AI) have opened up new possibilities to enhance the way we live, work, play, and interact. Nowadays, AI has been used in various areas and plays important roles in many organizations. For example, the COMPAS, a nationally recognized AI tool in USA, has been used to assess and predict an individual's risk of recidivism (Tashea, 2017). In business domain, Unilever has partnered with HireVue, an AI software company, to screen the video interview using AI technology. This is among the first steps of selection process applying to all entry-level employees for the past year (Feloni, 2017). However, not as optimistic as stated by the software provider company that how much AI helps to enhance hiring's efficiency, people have quite mixed views of AI's decisions. Quoted from a YouTube comment under the video showing how the AI interview works: "This seems wrong and kind of unethical... Like you can possibly be denied a job because of an app says so...".

People who hesitate to adopt AI in daily services may be affected by a few factors, such as unfamiliarity with this new technology, feeling of uncertainty and risk, or feeling of being controlled by a machine (Chandy & Tellis, 1998; Krishnan & Ulrich, 2001; Luca & Atuahene-Gima, 2007). A lot of researches have talked about the first two factors and the solutions (Arndt, 1967; Mahajan, Muller, and Bass, 1991; Smith, Collins, and Clark, 2005). For example, we can elevate people's knowledge about AI by education and ease their feeling of uncertainty and risk by providing previous data and advancing the technology continuously (Im, Mason, and Houston, 2007). Chiara, Andrea and Carey demonstrated that the concern of AI less capable to account for consumers' uniqueness makes consumers resistant to medical AI (Chiara, Andrea, and Carey, 2019). However, little research has studied how the third factor, the feeling of being controlled by a machine, may affect people's attitude towards AI and the organization using the AI. As Yuval Noah Harari famously pointed out in his bestselling book "Homo Deus: A Brief History of Tomorrow", AI will be used to evaluate and even take charge of some people (Harari, 2016).

Purpose*

The aim of this research is to study people's reactions to AI when it is in the position of evaluating people. Whether people get more offended by the results compared with when the decision is made by human beings? What we can do to mitigate the negative impact so as to increase the adoption rate and the satisfaction level, and make better use of AI technology? As more and more organizations are using AI to evaluate their staff or members, the answer of this question is of important empirical as well as theoretical contributions.

Conceptual framework

H1: In the situation where AI (vs. person) is in the position of evaluating people, if people are negatively evaluated, they would be less likely to accept the evaluations when the evaluations come from AI compared with a person, which will lead to a more negative attitudes to the organization which employs AI.

H2: In the situation where AI (vs. person) is in the position of evaluating people, if people are negatively evaluated, the salient information about accurate rate of AI (vs. a person) will not mitigate the gap of the negative attitudes between AI and a person.

H3: In the situation where AI (vs. person vs. AI and person) is in the position of evaluating people, if people are negatively evaluated, their attitudes in AI/person scenario are significantly improved compared with when they are in pure AI scenario.

Design/methodology/approach*

Experiment 1: Unilever job application survey on Mturk

In this experiment, we test our primary hypothesis that AI is less favoured than person when people are evaluated and receive negative feedback. 210 participants were recruited to answer the survey questions based on two different conditions. Under the person condition, the students were told that a person from the HR department of Unilever emailed you that you didn't match the required profile of the position. The HR told you that (s)he decided to reject you after (s)he analysed your submitted materials. For both conditions, the students were asked to answer a list of questions regarding the fairness of the decision and their attitudes towards Unilever and its products.

Experiment 2: Unilever job application survey with control of accuracy rate on Mturk

Experiment 2 tests our H2 that accurate rate does not help to ease the reactance to AI when people are under evaluation. Similar to experiment 1, we have the case scenario of AI versus person, but we add an extra information of the accurate rate, and construct the 3(no rate & low rate & high rate)*2(AI & person) design. The experiment was run on Mturk. 355 participants joined the 6 conditions. In the condition of no rate, there is no accurate rate reported. In the condition of low rate, the sentence of "an ordinary HR/AI is 95 percent accurate when predicting whether a job applicant is suitable for a position" was added to the scenario. In the condition of high rate, the sentence of "an ordinary HR/AI is 99.5 percent accurate when predicting whether a job applicant is suitable for a position" was added. Below is the summary statistics.

Experiment 3: Unilever job application survey with AI and person condition with students from autonomous universities in Singapore

Experiment 3 tests our H3 that in AI and person scenario, people's reactance is mitigated significantly compared with in pure AI condition. The experiments were conducted with 300 undergrad students with 60.1% female from Singapore's public universities. We targeted at 100 participants per condition and there are 3 conditions in total: AI & Person & AI/Person design. Research assistant randomly distributed the questionnaires of the 3 conditions with the participants she came across on campus of the public universities in Singapore. In the survey, they were asked to imagine that they you have applied for a job position at Unilever. After that, participants in the Person condition were told that they get rejected by an HR after the HR analyses their materials, meanwhile participants in the AI condition were told they get rejected by AI after the AI analyses their materials, and participants in the AI/Person condition were told they get rejected by HR after HR looked at the AI's report on the candidates. Next, participants were asked How (un)fair do you think that the HR rejected your application? How likely would you buy Unilever's products in the future?

Findings*

In experiment 1, ANOVA analysis shows that participants in the AI condition reported feeling significantly more unfair ($M = 3.14$, $SD = 1.47$) than those in the Person condition ($M = 4.45$, $SD = 1.51$), $F(1, 209) = 24.91$, $p < .001$. Participants in the AI condition reported less willing to purchase from Unilever ($M = 3.53$, $SD = 1.28$) than those in the Person condition ($M = 4.12$, $SD = 1.36$), $F(1, 209) = 8.98$, $p < .01$.

In experiment 2, the results establish that with the same accuracy rate, people still less favour evaluations made by AI. The differences in terms of fairness, willingness to purchase, etc. are all significant. Thus we ruled out the explanation that the reactance to AI is because people worry about the accuracy of AI's decision.

In experiment 3, participants in the AI condition reported feeling significantly more unfair ($M = 4.11$, $SD = 1.91$) than those in the AI and Person condition ($M = 5.04$, $SD = 2.07$), $F(1, 198) = 10.93$, $p < .001$. However, the willingness to purchase was not significantly enhanced in AI and person condition. Participants in the AI condition reported willing to purchase from Unilever ($M = 4.33$, $SD = 1.86$) were not significantly different from those in the Person condition ($M = 4.59$, $SD = 2.00$), $F(1, 198) = 1.03$, $p = .31$.

Original/value*

To sum up, the research takes the first step to specifically look into the scenario where AI is used to evaluate people and put people into an inferior position. We conducted experiments to demonstrate that under this scenario, people less favour the evaluation result than when the judgement was shown to be done by a person. We further ruled out the explanation that the more negative attitude is due to the concern about AI's capability of decision making by reporting the accuracy rate. In the end, we find a solution to improve people's attitude towards the evaluation decision when it is done by AI, which is adding a human's role in the evaluation process together with AI. However, the negative attitude towards the organization and product is still not fully mitigated. The implication from our results show that in order to reduce people's reactance to AI technology when they are evaluated by AI, the evaluation decision should be conveyed in the way that certain human touch is incorporated into the procedure.

Research limitations and outlook

In the future study, we plan to dig deeper into the mechanism when AI is put in the position of evaluating humans, for instance, the sense of "loss of control" and the psychological reactance consequently. From there, we will develop a better understanding of how to boost up the adoption rate of AI technology by mitigating the negative impact.

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Keywords*

artificial intelligence, evaluation, reactance, autonomy, accuracy, AI vs human

How the pandemic containment measures affect frontline employees: a mixed-methods study in grocery retailing

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Keywords

Frontline employees; Job Demands-Resources model; Grocery retailing; Pandemic; Transformative Service Research

Introduction

The COVID-19 virus affected the world-wide society in economic, financial and social terms (Finsterwalder and Kuppelwieser, 2020). This crisis caused detrimental effects on both mental health and the well-being of people (Cosic et al, 2020), and especially workers in what public authorities classified as ‘essential sectors’ (Di Porto, Naticchioni and Scrutinio, 2022), like frontline employees (FLEs) in supermarkets (Pantano and Willems, 2022).

In the battle against the pandemic, retailers implemented diverse protective measures to safeguard the health of their employees and customers. Facial masks, social distancing, hand sanitizers, plexiglass screens at checkout desks are only a handful of the COVID-19 containment measures that we in the meantime have gotten used to (Pantano and Willems, 2022). At the advent of the pandemic however, the reactions were mixed. While to some people, these were welcomed measures allowing them to fill-up for essential needs, others strongly opposed against their freedom being restricted. The legal obligations combined with additional precautions taken by retailers caused quite some tensions on the shopfloor, which often made it to the newspaper headlines. Whereas some customers admired retail personnel as heroes in the frontline (Bennett, 2021; Bhattarai, 2020; Midgley, 2020), others were rebellious and even personally offensive and aggressive (Lyall, 2022).

Purpose

The impact of crises, such as the coronavirus pandemic, on the service industry, specifically FLEs, has been of great interest recently. However, empirical research on how FLEs have coped with this new reality remains scarce. The scant existing knowledge moreover tends to take a one-sided view, focusing on the negative effects of the COVID-19 pandemic on retail FLEs. The present study aims to take a more balanced perspective and focuses particularly on how the pandemic containment measures were experienced by FLEs. We particularly aim to improve the understanding on how these measures affected FLEs’ daily jobs, both positively and negatively, and how it contributed to (or detracted from) their overall job satisfaction and

well-being. By focusing on the latter, our work contributes to the stream of transformative service research.

Conceptual framework

Essential FLE in the eye of the pandemic storm

Even though the impact of the COVID-19 pandemic has been studied quite elaborately on consumers and their shopping behaviour (Sheth, 2020), less is known on its effect on frontline employees. May et al. (2021) examined the psychological and social impact of the pandemic on UK frontline keyworkers, and Valtorta, Baldissarri and Volpato (2021) studied burnout among Italian supermarket employees. Mayer et al (2022) studied the effect of workspace safety and customer misbehaviour on supermarket workers' stress in Arizona.

In the present study, we focus on how retail FLEs of the most essential sector, grocery retailing, that has never been locked-down during the pandemic (regardless of the virus spread numbers and death rates), experienced the outbreak. Essential sectors are the ones that kept operating during the recent COVID-19 crisis. These sectors were deemed necessary to sustain citizens' livelihoods and to produce and deliver necessary goods (e.g. grocery shops, manufacturing plants building medical equipment, and banks (Di Porto, Naticchioni and Scrutinio, 2022).

JD-R model

To study employee well-being and how it was affected by the COVID containment measures, it is necessary to understand the typical FLE job characteristics in the first place. Drawing from organizational psychology, we reside to the JD-R model for this purpose (Bakker and Demerouti, 2007). Within the JD-R theory, it is argued that job demands and -resources are driving two rather opposing processes, namely, a process of health problems, and a motivational process (Bakker, Demerouti and Sanz-Vergel, 2014).

Job demands, according to the JD-R model, are job characteristics that tend to be at the basis of employee stress and job strain. In contrast, job resources tend to provide workers with motivation, energy, and commitment to the job. As job demands and job resources impact on workers job satisfaction and well-being, they have also been found to indirectly affect organizational outcomes (Demerouti & Bakker, 2011).

Methodology

Guided along the Job Demands-Resources (JD-R) model, our study examines whether (and to what extent) the COVID-19 crisis and the containment measures were experienced as impacting on supermarket FLEs' job demands and -resources. Finally, the effect on well-being and job engagement is explored. This research uses a mixed-methods approach and sequentially integrates an exploratory qualitative study (Study 1) and a quantitative study (Study 2) (Harrison and Reilly, 2011). The relevant findings of both studies are integrated to harness the synergies between the depth and breadth of both methods (Johnson, Onwuegbuzie and Turner, 2007).

The qualitative approach of Study 1 was chosen to explore the specific job characteristics of supermarket FLEs and how they experienced working under COVID containment measures at the outbreak of the pandemic. The interviews were conducted between 24 February 2021 and 7 May 2021. The aim was not to build hypotheses, but to provide a contextual understanding of retail FLE jobs and valid JD-R operationalizations for Study 2 (both in terms of wording and in terms of job specifications; Bryman, 2006; Harrison and Reilly, 2011).

The JD-R model was used as a guide to identify specific job resources and -demands that characterize frontline jobs in grocery retailing. Moreover, we particularly asked the interviewees about how working during the pandemic changed these aspects, and whether the pandemic containment measures alleviated the strain (or rather posed an extra burden). A total of sixteen in-depth personal interviews with supermarket FLEs across four different supermarkets in Belgium (Colruyt, AD Delhaize, Carrefour and Okay), took place. The interviews were audio-recorded and the corresponding transcripts were content analysed in NVivo. A deductive approach was taken, whereby the JD-R model served as framework to classify the quotes under existing job demands or -resources, or to create new ones if the general conceptualization did not suffice (Mayring, 2019). The analysis was conducted by a single coder. To minimize subjectivity and bias, the coding manual was discussed among the co-authors and updated based on the feedback.

In Study 2, we examine to what extent the insights from our interviews are supported among supermarket FLEs, addressing a larger group of respondents in this population. The data collection took place via Facebook Groups via online surveys in July-August 2022. At this point in time, the pandemic is more or less under control. This timing allows for the respondents to already share some hindsight reflections. Study 2 uses the grocery retail specific job demands and resources (cf. Study 1) as input, focusing on whether and how the implementation of pandemic containment measures affects their job characteristics and well-being.

Findings

Study 1: In-depth interviews

The JD-R model has proven a useful theoretical framework to use for a balanced and comprehensive analysis of frontline grocery retail workers' job demands and -resources were affected during the COVID-19 crisis. The content analysis shows that the majority of all COVID-19 containment measures in the supermarket frontline, are considered as extra *demands* by the FLE. In particular, the additional work that comes along, gives them the frustrating feeling that much other (regular) work stays unfinished. Furthermore, having to reprimand customers who do not abide by the rules, causes emotional tensions in the job. There are however some interviewees that mentioned how certain measures were considered to be a source of motivation (i.e., job *resource*). A containment measure that was mentioned by almost half of the interviewees as comforting in their job during the pandemic, is the face mask requirement for visiting customers. Furthermore, every interviewee considered hand sanitizers, which must be available everywhere, as a resource to safely continue performing their job. The same goes for in-store signage, such as markings to assure social distancing, and posters to remind customers of the prevailing safety measures of the store. A striking finding was that, even at a peak period of the pandemic, when these interviews took place (Spring 2021), most of the supermarket FLEs we interviewed (i.e., 14 out of 16), indicated that the containment measures already felt like a second nature, and that they quickly habituated to working under these conditions. This finding is another proof of these retail FLEs' adaptive capacity (cf. also Kao and Chen, 2016). Despite their resilience and adaptability, there were contamination fears and tensions on the workforce, affecting their personal well-being. What seemed to buffer against high work pressure, were a degree of autonomy in the job and having good relationships at work both with colleagues and customers.

Study 2: Online survey

In Study 2, we asked grocery retail FLEs on the one hand to what extent the COVID-19 containment measures have been (and are) perceived as an additional demand that causes

tension and detracts from their well-being. On the other hand, we examine whether these precautions are considered a resources that keeps them going and adds to their job satisfaction. As the data collection of Study 2 is foreseen to close by mid August, we will only be able to present the results of the survey at the 2022 CERR conference in September.

Contributions

To be able to cope with crises and disasters, retail managers and scholars still lack sufficient understanding on how the measures they implement may affect frontline FLEs' job demands, -resources. The present study is – to the best of our knowledge – the first to take a JD-R perspective on how the COVID-19 crisis impacted frontline FLE jobs in essential sectors, and whether containment measures had a positive or negative effect from the stance of the frontline FLE's well-being.

Practical implications

The insights from this study illustrate how retail managers can use the JD-R model when considering alternative measures to deal with crisis situations. Managers within the service industry were challenged to design the servicescape in such a way that both FLE and customers in essential sectors would feel safe enough to keep society's basic needs fulfilled. In the case of the COVID-19 pandemic, many essential retailers even went the extra mile beyond what public authorities required from them. Despite well-intended, some of these extra actions however did not advance the FLEs' well-being – rather on the contrary. Involving FLE upfront, prior to implementing such measures, and eliciting their reflections about how they would expect them to impact their job demands and resources, would provide an actionable approach to transformative decision-making.

Research limitations and outlook

Further research can investigate whether there are notable differences in how employees experience certain matters as compared to how storekeepers or managers. Other potential contingency factors that have not (yet) been examined in detail are subgroups of employees. This could be based on age, gender, years in service, possibly even on how satisfied they generally are (also in normal times) in their job. These elements can provide a buffer for how much extra a supermarket FLE can tolerate and/or take on.

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Keywords

Grocery retail, food waste, picking behaviour, expiration date, customer behaviour

Introduction

Reducing food waste is a grand societal challenge. While in 2020 more than 10% of world population faced hunger [FAO, 2021], approximately one-third of all food produced is lost or thrown away [Gustavsson et al., 2011]. Next to the social injustice, food waste induces severe economical and ecological issues and therefore the United Nations targets to halve food waste by 2030 [United Nations, 2015]. Food production, processing and transportation is responsible for about a quarter of global greenhouse gases [Poore and Nemecek, 2018]. Food waste globally costs a total of \$2.6 trillion per year with about economic costs of \$1 trillion, environmental costs of \$700 billion and social costs of \$900 billion [FAO, 2013]. Almost two-thirds of total food waste in Europe originates in the consumer sector. In this respect grocery retail takes a central role within the food supply chain as it connects supply and demand. Grocery retail business focuses predominantly on increasing sales by ensuring high availability and product proliferation. Retailers usually target for high inventory levels to avoid out-of-stock situations and associated revenue losses. To compensate for short-term demand fluctuations in case of inaccurate demand forecasting and to create an enjoyable shopping experience with full shelves for the customer, a strategic oversupply is created. The shift towards ever fresher, but highly perishable products as a value proposition and sales opportunity created a dilemma for grocery retailers. Satisfying customers' expectations on high product variety and high availability on the one side, and overstocks converting into food waste on the other side.

Purpose

A side effect of high inventory levels combined with high shelf-fill rates are multiple expiration dates of the same product in the shelf. This allows an undesirable customer picking behaviour. Retailers counteract this by executing a strict First Expired – First Out (FEFO) shelf arrangement at stores. Products with shorter expiration dates are placed at front before products with longer expiration dates, with the purpose that customer withdraw the units in the front rows. However, when customers still tend to withdraw the freshest or rearmost item, products with shorter expiration dates remain in the shelf. The more customers are following this pattern, the higher the risk of remaining products exceeding the expiration date and converting into food waste over time. As studies quantifying the phenomenon so far are solely survey or interview-based, several crucial questions remain unaddressed from a retailer's perspective:

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- (i) To what extent do customers face the situation of multiple expiration dates in the shelf?
 - (ii) Why do customers pick a more distant expiration date?
 - (iii) How does customer picking behaviour impact retail food waste?

Methodology

Research on food waste reduction in retail is a nascent area and complex subject [de Moraes et al., 2020]. This study follows an exploratory approach. As we aim at generating a holistic understanding, we rely on a multi-method approach which is imperative in such research settings [see Flick et al., 2004; Boyer and Swink, 2008]. First, we conduct a systematic literature analysis to lay the foundation. We rely on accepted definitions and relationships and generate a common understanding across the related research domains in food waste, operations research and consumer studies. Second, we generated field data through periodic stocktaking in cooperation with a large grocery retailer operating in Germany. In total we spent more than 700 hours in six different retail outlets and collected hourly stock and expiration date data over 14 different product categories. Hereby we also recorded potential influencing factors, e.g., shelf location, price or package size. And third, we analyse point of sales (POS) data provided by the cooperating retailer. The comprehensive dataset includes more than 200 retail outlets and so far covers the period from May 2021 to February 2022.

Findings

Our study reveals that a picking opportunity was created in half of the observed cases, meaning that the customer could choose between two or more expiration dates in the shelf. When customers had the chance to pick a more distant expiration date, they did so in every third case in average. The picking tendency is higher for more perishable products (e.g., milk), compared to products with longer shelf lives (e.g., cheese). Various further product- and market-specific factors intensify the picking behaviour, such as convenient shelf location, brand and larger package sizes. Furthermore, initial results from the ongoing POS data analysis indicate a strong connection between customer picking behaviour and retail food waste. As we are striving to analyse data for a whole year, we are still adding new data points to our model on a monthly basis.

Contributions and Implications

Prevailing empirical literature related to food waste in retail mainly focuses on the quantification of food waste or its causes [see e.g., Mena et al., 2011; Lebersorger and Schneider, 2014; Teller et al., 2018]. Customer instore picking behaviour is occasionally mentioned as a side aspect [see e.g., Horoś and Ruppenthal, 2021], but not recognized as systematic food waste driver. A first indication of the implications of the phenomenon can be found in operations research. Some more recent studies investigating in replenishment models take customer behaviour and the differing demand for fresher and older products into account [see e.g., Janssen et al., 2016; Qiao et al., 2021]. Mostly constant LIFO (Last In – First Out) and FIFO (First In – First Out) shares are estimated, but not further justified or backed-up with related literature [see e.g., Li et al., 2017; Mahato and Mahata, 2021; Gupta et al., 2020]. The phenomenon is so far rather best described from a consumer perspective. Selected consumer studies investigate in date label checking and consumer understanding of different labels [see e.g., Zielińska et al., 2020; Samotyja and Sielicka-Różyńska, 2021]. We contribute to research as first study to quantify customer picking behaviour in grocery retail based on collected field data and reveal insights on influencing factors. Moreover, we connect the phenomenon to food waste occurrence and conflate our findings to managerial implications for incorporating it into retail operations. Retailers willing to proactively reduce food waste

should include product specific picking factors into their replenishment systems or consider the picking behaviour in refilling operations at stores.

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Retail brand management

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Keywords

CSR communication, franchise networks, corporate social responsibility

Introduction

Corporate Social Responsibility (CSR) is a subject of great importance to managers and researchers (Chen and Lin, 2020). It corresponds to all the moral responsibilities that a company has towards its stakeholders and the society to which it belongs (Kent and Taylor, 2016). Certain modes of business development could seem to be more consistent with the spirit and philosophy of CSR. Franchise networks, for example, represent one way of developing a brand through a strategy of geographical coverage. This provides closer geographical proximity with customers, thereby contributing to reducing their environmental footprint and creating jobs in the regions. It also enables them to have a better insight into local issues and to actively contribute to civic life in the regions. The values of the mode of development through franchising referred to in this definition bring us back to the definition of Corporate Social Responsibility (CSR) whereby CSR represents a company's commitment to minimising or eliminating any harmful effects and maximising its long-run beneficial impact on society (Mohr et al., 2001). The franchise therefore embodies the values of CSR and could advertise the fact by highlighting it in its communication with the different stakeholders including its customers.

Knowledge of the CSR activities undertaken by a company often has a positive impact on customer behaviour (Louis et al., 2019). Customers might reward a company with a strong CSR commitment by perceiving it in a positive light. Furthermore, consumers may punish a company if they consider that its CSR activities are not sincere (Sen and Bhattacharya, 2001). This would explain the choice of certain franchise networks to communicate very little, or not at all, on the CSR initiatives implemented. The question of whether or not to communicate on CSR therefore remains a topical issue. It is even more topical in franchise networks characterised by the franchisor-franchisee-customer relationship, where it is not simply about asking oneself the question, but also about knowing how to do so.

In spite of a growing interest in the CSR issue in franchise networks, very few researchers have looked into the subject (Jeon and Gleiberman, 2017; Jell-Ojobor, 2019; Le Bot et al., 2022). This can probably be explained by the complexity of the franchisor-franchisee relationship and the principle of the franchisee's autonomy which leaves them "free" to follow the franchisor's CSR orientations or not (Le Bot et al., 2022). Research on the issue of CSR communication by franchises is even rarer. The few earlier studies that do exist are mainly descriptive (Kaufman et al., 2008, Meiseberg and Ehrmann, 2012; Perrigot et al., 2015) and do not attempt to understand why franchises choose to communicate, or not, on their CSR policy. They also overlook the consumer's point of view on brands' CSR communication and often limit themselves to a particular business sector (Perrigot et al., 2015) or a particular cause (Jell-Ojobor, 2019).

Purpose

To address the identified theoretical gaps, we propose to understand the points of view of franchisors, franchisees and franchise customers on the value of CSR communication, its limits and the conditions required for it to be effective. Thus, the aim of this research work is to consider the relevance of CSR-related communication in franchise networks, with a focus on the perceptions and expectations of franchisors and franchisees and their customers.

Methodology

To better answer our central research question, we have prioritised the triangulation of different investigative methods and points of view. We have conducted three large studies: a qualitative survey of franchisors and franchisees in 27 franchise networks (including some multi-brand networks), an online ethnography study of customer comments on the CSR communications of the 27 networks studied (32 brands/retailers in total) and a qualitative survey of 13 customers of these franchised brands/retailers.

Findings

Results of Survey 1 with franchise networks

The qualitative study of the franchisors and franchisees revealed that several franchise networks remain reluctant to communicate on CSR activities, in spite of the benefits it could have for the firm and its stakeholders. The respondents are unanimous in not wanting to communicate, especially in the case of CSR activities in the social or societal field, either out of a wish to be discreet or to avoid blurring the image of the outlet, whose function is first and foremost to sell things.

The results of the thematic analysis of the franchisor-franchisee corpus show also that there are three main factors that can impact the effectiveness of CSR communication: providing proof of CSR activities before communicating about them, the commitment of internal stakeholders (especially franchisees) and the physical store (a local touchpoint between the franchise and the customer that offers an opportunity to get across simple and clear messages about the network's CSR promises and activities).

Survey 2 with franchise network customers

The online ethnographic data collection phase resulted in our collecting 871 customer feedback items relating to the CSR communications of the brands studied. The customer feedback data was collected in a table where the different comments were anonymised. First results show there are wide disparities in the communication on CSR and in consumer engagement according to brand and business sector. CSR communication is not a subject that appeals to all the franchises, and it does not necessarily generate much more engagement on the part of the consumer. In addition, the analysis of the relative engagement of customers by business sector shows that some sectors generate more customer engagement with CSR communication than others: these sectors were hairdressing and personal grooming, followed by the personal goods sector, household goods and food. Some business sectors therefore appear to be monitored more closely by consumers and to be more likely to engage them. On the other hand, the descriptive analysis does not allow the meaning of the customers' comments to be expressed. This is therefore completed by a lexical analysis.

The computerised lexical analysis concerned all the comments gathered by the online ethnographic study. All the results generated show that consumers' reactions to the CSR communications of the franchises studied are very variable. On the one hand, the analysis showed a substantial wave of words of thanks and appreciation that translate the alignment of the companies' practices with customers' expectations. Some consumers may well not be sensitive to the firms' CSR activities. Even so, it seems that CSR communication can encourage them to endorse the CSR commitment presented and to prefer the brand/retailer in question.

The purchase/consumption decision might not take place directly after the exposure to CSR communication. However, when the consumer is faced with a choice between two franchise networks, the messages on one or the other's CSR commitment could help them to decide.

Survey 3 with franchise network customers

The qualitative survey was conducted by telephone with 13 customers of the franchises studied in the online ethnographic study conducted as part of this research. The respondents were asked to choose a brand that they are in the habit of frequenting from a list of brands proposed.

Among the 27 franchises proposed to the respondents in our qualitative survey, it is important to note that they mainly chose 2 brands that have adopted a more pronounced CSR positioning than the other brands, especially through their CSR communication. This finding is a result in its own right. The franchises with a stronger CSR commitment would appear to be better known and chosen more often by consumers.

Behind the term "responsible brand" there is a whole set of criteria that consumers often have difficulty citing. Even if consumers are not able to express everything that they think about the firms' CSR efforts, the CSR communication, through testimonials, labels and certifications, public relations, etc. does seem to have a subconscious effect on the choice of brand or retailer or to reassure the consumer about their choice. To achieve this, it is important to play the transparency card with the customer, explaining all the efforts the brand has already made and all those that remain to be put into practice, in order to protect against any flaws or inconsistencies in the CSR policy implemented.

Contributions

This study focuses on a topic that has received very little attention, particularly in franchise networks. The various studies conducted allow us to better understand the particularities of CSR communication, particularly in the context of tripartite franchisor-franchisee-customer relations.

Practical implications

This research has sought to understand the point of view of franchisors, franchisees and customers of franchise networks with regard to the communication or lack of it on CSR activities. The results show that there are trade-offs between its advantages and disadvantages, which are summarised in the following diagram:

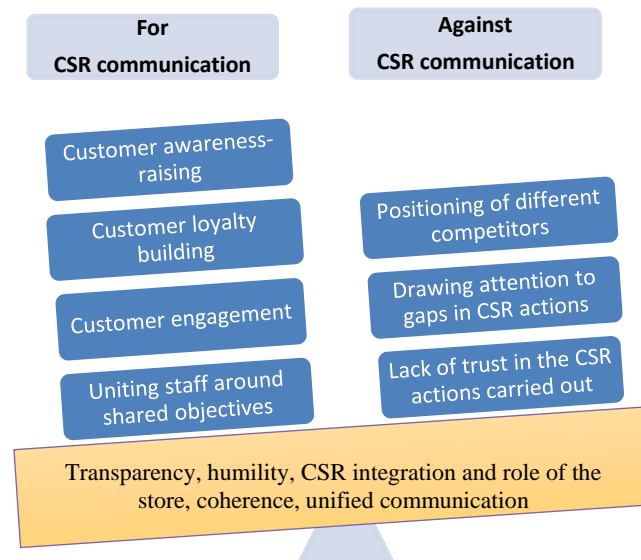


Figure 1: Advantages, disadvantages and conditions of success of CSR communications

The advantages of CSR communication being more numerous and more significant than its disadvantages, the scales tips towards the use of CSR communication. It seems to be unavoidable in a context characterised by a growing need for clear, detailed information on a subject that has become very important for consumers.

Social implications (*where applicable*)

Communication around CSR must be implemented within franchise networks, even if a lot of effort remains to be made in this direction. Combined with transparency and humility, it improves the feeling of belonging to the franchise network and encourages positive word of mouth to the outside community. Communication also simplifies the consumer's decision-making process by sending signals in favour of CSR efforts within the franchise network. At the same time, it helps to foster the consumer's pride in actively contributing to environmental and social benefits.

Research limitations and outlook

The networked organisations have wholeheartedly committed to putting CSR management and communication into practice. However, we note that there is still some way to go to achieve a holistic, homogenised and balanced vision of the activities and standards. That would necessitate repeating this study in a few years' time in order to monitor developments in the practices of the franchises in the area of CSR communication, as well as the expectations of their customers on this subject

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Keywords

CSR communication, franchise networks, corporate social responsibility

Reviving the experiential store: the effect of scarcity and perceived novelty in driving word-of-mouth

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Keywords

experiential stores, scarcity, perceived novelty, interpersonal Word-of-Mouth, electronic Word-of-Mouth, need for uniqueness.

Introduction

Experiential stores and perceived novelty

Brands like Nike have long used the flagship store concept to generate positive word-of-mouth (WoM) and promote long-term brand-related goals, such as loyalty or brand salience (Klein *et al.*, 2016; Jahn *et al.*, 2018; Robertson *et al.*, 2018). However, recent developments in practice show that while brands like IKEA are currently launching experiential stores across Europe (Mayer, 2021), Amazon has recently shut down all of its pop-up stores (Palmer, 2022). Despite all the promising impacts attributed to experiential stores, this does not seem to be true without exception. One reason for the failure of an experiential store is provided by Robertson *et al.* (2018), who considers a pop-up store's ability to create a novel experience as critical to its success. Novelty, which encompasses the concepts of originality and uniqueness (Moldovan *et al.*, 2011), can therefore be seen as a defining dimension for consumer interest in an experiential store. According to Robertson *et al.* (2018), the life cycle of a pop-up store is linked to its novelty value and the novelty decay function can be considered as quite steep. In order to positively influence the perceived novelty of an experiential store, it is obvious to first tackle the product level, since changes on the store level are more difficult to implement and are associated with higher costs. In line with Brock's (1968) commodity theory, a scarce good is considered more valuable and thus more desirable by the consumer than a comparable good that is available to everyone. Therefore, the implementation of scarce products seems to be a promising means to influence the perceived novelty of an experiential store in an efficient way.

Need for uniqueness and word-of mouth

According to Robertson *et al.* (2018), need for uniqueness (NFU) is a particularly relevant personality trait in the context of experiential stores. People with a high NFU, deliberately want to distinguish themselves from others through their consumption. The unique and original character of an experiential store is therefore especially appealing to people with a high NFU (Robertson *et al.*, 2018; Henkel and Toporowski, 2021). Research has already uncovered a link between high NFU and decreased WoM behavior, which can be attributed to the fear of losing personal uniqueness (Cheema and Kaikati, 2010). We therefore question whether high perceived novelty reduces intentions to produce positive WoM among

individuals with high NFU, as they want to preserve the novel experience for themselves (Moldovan *et al.*, 2015).

A distinction is also made between two types of WoM: electronic WoM (eWoM) and interpersonal WoM (iWoM) (Hennig-Thurau *et al.*, 2004.). While eWoM unfolds via online platforms and is usually directed to many unknown others, iWoM is usually directed to people who are known or close (Hoffman and Novak, 1996). Since people adapt their communication behavior depending on the situation, we also wonder if the degree of closeness has an impact on the two types of WoM behavior. Whereas eWoM can satisfy the desire to increase one's self-worth without endangering personal uniqueness, the closeness between communicators poses an obstacle that possibly inhibits iWoM behavior.

Purpose

The purpose of this research is threefold. *First*, we seek to contribute to the paucity of literature on scarce products and exclusive assortments in experiential stores. *Second*, research has overlooked perceived novelty as a defining dimension of consumer interest towards experiential stores. The results contribute to extending the life cycle of an experiential store and operating it as efficiently as possible. In addition, we want to discover whether positive perceptions of products can spill over and influence not only general brand perceptions, but also visitors' overall perceptions of a brand store. Thus, we also contribute to research on the spill-over effect. *Third*, we aim to extend the existing literature on NFU and WoM by differentiating between two different forms of WoM and by including perceived novelty, which is highly related to NFU.

Methodology

The authors conducted an experiment with a Qualtrics online survey in Germany. Seemingly unrelated regression (SUR) was used to test for direct effects. To test the indirect effects, a bootstrapped SUR with 5000 repetitions was employed.

Findings and contributions

This research is the first to investigate and include perceived novelty as an explanatory factor in the context of experiential stores. To reignite the perceived novelty of an experiential store, our study includes a design element at the assortment level - the integration of scarce products. The results show that the positive attributes associated with scarce products can spill over into perceptions of the store as more novel. Our results therefore provide further insight into the spill-over effect and show that positive perceptions are not only transferred on the meta-level in relation to the brand, but also to perceptions on the store level, at least if the store is strongly linked to the brand.

Experiential stores primarily attract individuals with a high NFU (Robertson *et al.*, 2018). This ultimately leads to a dilemma, which is evident in our results. On the one hand, we were able to demonstrate a positive effect on eWoM for individuals with a high NFU. This can be attributed to the desire for self-enhancement in a particular social setting, in this case, a setting of people with low interpersonal connectedness, which does not compromise personal uniqueness. On the other hand, individuals with a high NFU decrease their intention to produce iWoM. Instead of displaying their uniqueness as they do on online platforms, they avoid sharing their positive experiences to prevent others from having similar experiences or imitating them. This shows that intrinsic psychological motives have to be considered with respect to the generation of WoM. Whereas the perceived novelty in the course of integrating scarce products is seen as consistently positive at first glance, a different picture emerges when this personality variable is taken into account. This is shown to be particularly problematic, as individuals with a high NFU are especially attracted to experiential stores.

Our results therefore confirm the relevance of interpersonal proximity in the investigation of WoM.

Practical implications

Broadly speaking, our findings show how brands can use scarce products in their experiential stores to contribute to the novelty value of the store and thus operate it as efficiently as possible. Scarce products offer a promising means to provide the experiential store with additional positive attributes and intensify the consumer's emotional connection to the brand. Brands are therefore encouraged to include limited products in their experiential store and actively promote and highlight them. While changing the store design or the whole in-store experience requires a certain amount of time and money, the integration of limited products is an attractive option at product level to enliven the perceived novelty of the store and extend its lifecycle. Our findings also uncover a communication dilemma related to word-of-mouth generation that brands should consider in their experiential store strategy. Since eWoM is produced by individuals with a low NFU as well as those with a high NFU, brands are increasingly encouraged to push the generation of eWoM. For this purpose, an environment should be created in which interaction and communication among consumers is encouraged (e.g., through photo sharing or embedding hashtags). To increase iWoM, brands should implement loyalty programs and promotions to motivate customers to share positive information with their friends and acquaintances.

Research limitations and outlook

Manufacturer brands are increasingly turning to experiential stores to be more independent of retailers and closer to customers. Further studies could investigate whether limited editions of consumable goods have an equally positive impact. In our study, we found that the creation of iWoM is mitigated for individuals with a high NFU. With reference to the "share and scare" strategy mentioned by Moldovan *et al.* (2015), it is even conceivable that not only less iWoM is produced, but possibly even nWoM (i.e., negative WoM). Further studies could therefore address the extent to which individuals with high NFU are even willing to produce nWoM to preserve their uniqueness from close acquaintances and discourage imitation.

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References are available upon request.

Servicescape and atmospherics

Determinants of self-recovery after tech-based service failure

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Keywords

Self-service technology (SST); SST failures; SST recovery; self-recovery; self-determination

Introduction

With the widespread use of self-service technologies (SSTs) in service delivery, issues regarding SST failures and corresponding service recovery have captured increased attention of academics and practitioners. Notably, encouraging customers to recover from SST failures on their own should be at the core of service companies' recovery strategies. However, gaining acceptance from customers for self-recovery remains a challenge.

Purpose

Understanding how service companies and customers respond to SST failures is of great interest to academia. Based on the extent to which customers participate in the service recovery process, extant literature has identified three types of recovery from a service failure: (1) *firm recovery*, i.e., the firm's employees resolve service failures and customers do nothing; (2) *joint recovery*, i.e., both the firm's employees and customers cooperate to resolve failures; and (3) *customer recovery* or *self-recovery*, i.e., customers predominantly resolve service failures on their own without any support from service personnel (Bagherzadeh *et al.*, 2020; Dong *et al.*, 2008). Notably, most existing studies have focused on firm recovery (Hess Jr *et al.*, 2003; Maxham III and Netemeyer, 2002; Swanson and Kelley, 2001) and joint recovery (Dao and Theotokis, 2021; Heidenreich *et al.*, 2015; Roggeveen *et al.*, 2012). Meanwhile, there has been little discussion on self-recovery, wherein customers are the main actors in the recovery process. To address this gap, this study examines associations among customers' motivations, attitudes and intentions to perform self-recovery when an SST failure occurs.

Conceptual framework

Drawing upon self-determination theory (Deci and Ryan, 1985), we propose a conceptual model with three independent variables (i.e., intrinsic motivation, identified regulation, external regulation) and two dependent variables (i.e., attitude and intention to perform self-recovery). In addition to this, the research model includes the moderating effect of self-

efficacy on the relationships between different motivations and behavioral intention. This leads us to the following hypotheses:

H1. Customer's attitude towards self-recovery is positively associated with their intention to perform self-recovery.

H2a. Intrinsic motivation is positively associated with customers' attitudes towards self-recovery.

H2b. Intrinsic motivation is positively associated with customers' intention to perform self-recovery.

H3a. Identified regulation is positively associated with customers' attitudes towards self-recovery.

H3b. Identified regulation is positively associated with customers' intention to perform self-recovery.

H4a. External regulation is positively associated with customers' attitudes towards self-recovery.

H4b. External regulation is positively associated with customers' intention to perform self-recovery.

H5a-b-c. The effects of intrinsic motivation (a), identified regulation (b), and external regulation (c) on customers' intention to perform self-recovery is stronger when customers have higher levels of self-efficacy.

Methodology

A questionnaire survey was conducted among 330 multimedia kiosk users of the 7-Eleven convenience stores in Taiwan. 7-Eleven is the largest convenience store chain in Taiwan, with more than 5,600 outlets as of 2019 (Statista, 2020), and each store offers various services (e.g. ticketing and payment services) through its multimedia kiosk called iBon. 293 valid responses were retrieved, achieving an effective response rate of 88.8%. Data were analysed using structural equation modelling (SEM). Partial Least Squares Structural Equation Modeling (PLS-SEM) was employed as the main data analysis method for this study. PLS-SEM was used because it is appropriate to examine the path coefficients between the latent variables of structural models (Hair *et al.*, 2017), and it does not require large sample sizes or assumptions about data distributions (Pavlou and Fygenson, 2006). We followed the two-step approach (Anderson and Gerbing, 1988; Hair *et al.*, 2017) to examine both the measurement (outer) model and structural (inner) model. The SmartPLS software, version 3.3.3 (Ringle *et al.*, 2015), was used for data analysis.

Findings

The demographic variables gender, age, education, monthly income and SST experiences were included as control variables to limit their confounding effects on the dependent variable. The influence of these control variables on intention to perform self-recovery was not significant. Next, we applied a bootstrapping approach (bootstrap resamples $n=5000$) to examine the significance of all path coefficients. Attitudes positively and significantly influence intention to perform self-recovery ($\beta = 0.116$; $t = 2.534$), supporting H1. In addition, the effect of intrinsic motivation on both attitude towards self-recovery ($\beta = 0.302$; $t = 4.225$) and intention to conduct self-recovery ($\beta = 0.328$; $t = 4.791$) is significant and positive, confirming H2a and H2b. Similarly, identified regulation was found to positively influence attitude towards self-recovery ($\beta = 0.172$; $t = 2.578$) and intention to perform self-recovery ($\beta = 0.459$; $t = 7.282$), supporting H3a and H3b. Finally, the effect of external regulation on

attitude towards self-recovery was significantly positive ($\beta = 0.285$; $t = 3.847$), whereas the effect on intention to perform self-recovery was insignificant ($\beta = 0.080$; $t = 1.938$). Hence, H4a was supported, while H4b was not supported. In sum, the inner model explained 67.2% of the variance of intention to perform self-recovery. This study employed path analysis and Sobel test to examine the mediating role of attitude towards self-recovery in the proposed model. The Sobel test was used to obtain z-values and estimated p-values to identify potential indirect effects. The z-values of all indirect paths were higher than 1.96, and p-values were lower than 0.05, confirming that attitude significantly mediates the effect of intrinsic motivation, identified regulation, and external regulation on intention to perform self-recovery. A significant and positive effect of the interaction IM x SE on IT was found ($\beta = 0.098$; $p < 0.05$), supporting H5a. On the contrary, the effect of IR x SE on IT was insignificant ($\beta = -0.156$; $p > 0.05$), indicating that self-efficacy does not moderate the relationship between identified regulation and intention to perform self-recovery. Thus, hypothesis H5b could not be supported. In addition, R^2 for intention to perform self-recovery (72.6%) in the model with the interaction terms was higher than the value without the interaction terms (67.2%), indicating that the inclusion of the moderating variable created the better model with higher explanatory power.

Contributions

First, intrinsic motivation was found to significantly and positively influence both attitude and intention to perform self-recovery. The findings concur with existing studies suggesting that motivation to achieve self-interest can lead to positive attitudes towards the target behavior (Feng *et al.*, 2016; Tandon *et al.*, 2020). Second, the results demonstrate the significant and positive effect of identified regulation on attitude and intention to perform self-recovery. These findings suggest that self-recovery may offer benefits or values for customers, inducing them to inculcate a positive attitude towards performing self-recovery. Moreover, among the three types of motivation, identified regulation had the most substantial effect on customers' intention to conduct self-recovery ($\beta = 0.459$). Third, our study found no support for the relationship between external regulation and intention to perform self-recovery. This finding is unexpected and contradicts several recent studies in different contexts, such as healthcare service (Osei-Frimpong, 2017), education (Jiang *et al.*, 2021), and organic food consumption (Tandon *et al.*, 2020). Finally, the moderating effect of self-efficacy on the relationship between motivation and self-recovery intention was partially supported. We found that self-efficacy significantly influences the relationship between intrinsic motivation and intention to perform self-recovery.

Practical implications

To stimulate the intention to undertake self-recovery, service providers should educate customers about the values or benefits of such behaviors. Marketers can also converge attention to connecting self-recovery with a feeling of personal achievement. This can promulgate the intention to highly engage in SST recovery as an outcome with personal value to the consumer, impacting their intrinsic motivation and the need to express themselves to others. Additionally, service providers can leverage social media platforms. Service providers are encouraged to offer reward mechanisms (e.g., incentives, price discounts, tangible gifts) to boost customers' positive attitudes towards self-recovery and thus increase their intention to perform self-recovery. Service providers can also offer training or practice sessions for first-time SST users to enhance customers' basic knowledge, skills, and ability to use the SST and resolve errors.

Research limitations and outlook

Our study employed the scenario-based approach in which the multimedia kiosk was used as a representation of SSTs. Since customer's reactions may vary depending on the types of SSTs, future research should examine the proposed framework with other types of tech-based services.

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Supply chain management/partnering

Grocery retail chain induced collaboration towards reducing food waste

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Purpose

According to FAO (2013), one-third of perishable food produced is never consumed. In Europe, approximately 88 million tons of food are wasted annually (Scherhaufer et al. 2018). The current food waste figures are a major environmental and social concern for which retailers are held largely responsible in addition to end consumers. According to Flash Eurobarometer 425, (2015) in the EU28 countries, consumers are perceived as the most responsible entity for food waste generation. However, as grocery retailers influence customer preferences and product flow in the supply chain, they are considered the main stakeholder for initiating interventions for food waste prevention (Gruber et al. 2016). However, the grocery retail tendency to deploy food waste prevention practices is challenged by competition. As their service performance is product availability based (Hübner 2017), the food waste issue is outweighed by the product obtainability assurance to stay competitive (Cicatiello et al. 2017). Volatile demand patterns, quality standards, service level expectations, and constrained in-store replenishment policies, have a notable impact on food waste volumes (Teller et al. 2018).

Collaboration in information sharing to ensure operational synchronization among supply chain members is an enabler for food waste prevention activities (Mena et al. 2011; Halloran et al. 2014; Aschemann-Witzel et al. 2017; Dora 2019; de Moraes et al. 2020; Bhattacharya & Fayezi 2021; Annosi et al. 2021). In addition to economic benefits, collaboration between food retailers and suppliers also leads to environmentally friendly practices (Petljak et al. 2018). As collaboration initiatives request investments, challenges arise by competition in the industry (Ha & Tong, 2008; Srivastava et al. 2021), information opacity, and goal conflict (Eisenhardt 1989). Equifinality when assessing the profitability of such collaboration initiatives therefore remains a paradigm (Cao et al. 2010).

Under this premise, this work investigates the perceived enablers and challenges of collaboration enabling investments towards food waste prevention. This work is an outgrowth of a conference article (Imeri et al. 2021) and aims to validate the previously known reasons why the use of food waste prevention collaboration initiatives remains unconventional in the grocery industry. Specifically, focus remains on vertical collaboration for developing information sharing based decision support systems and technical solutions to induce freshness keeping efforts. The current ways of assessing the impact of collaboration are explored.

Based on the elaborated problem setting, this work tends to levitate the food waste prevention theoretical domain by contemplating the following research questions:

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- RQ 1: What are the current barriers for initiating collaboration from grocery retailers for food waste prevention?
 - RQ 2: What confronts the evaluation of collaboration-based initiatives for food waste prevention?

The consensus seeking steps of collaborative planning, forecasting and replenishment (CPFR) (Fliedner 2003) are deployed as the deductive framework for the exploratory case study (Voss et al. 2002). CPFR tends to integrate all members of a supply chain by synchronizing their plans (Danese 2007). Assessing the grocery retail operations that are supplier-dependent is foreseen as a focal point towards expanding in collaboration opportunities to prevent food waste. Simultaneously, as managing the flow of unsalable products is challenged by the complex process of identifying them between operational decisions in a grocery retail store (Holweg et al. 2016), the relationship between customer behavior and grocery supply chain operations is evaluated, especially from the perspective of digitalization in the in-store experience (Vojvodić 2019). Further on, as the trade-off between food loss from deteriorating quality and transport valuation is profound (Leithner & Fikar 2019), the impact of collaboration in facilitating network planning is embraced. Further on, the potential of automatic replenishment policies to prevent food waste as presented by Hauck et al. (2020) & Kiil et al. (2018) is investigated in the study.

Methodology

To match the research strategy with the current theory developed in this direction, a case study based exploratory research is deployed (Voss et al. 2002). The framework of the case study protocol follows the CPFR process framework. Initial deductive coding is based on identified propositions for collaborative practices in the grocery retail supply chain for each step in the CPFR process. The approach is based on the falsifiability criterion towards theory building, where the empirical propositions derived are rejected or accepted in regard to collaboration initiation and evaluation in the grocery retail (Popper 2010). In a cross-country case analysis, different settings in Europe are investigated. The settings differ according to the legal provisions that apply to each geographic area. When considering collaboration initiatives from a legislative point of view, the case studies essentially differ in the way the act on prohibition of unfair trading practices (UTPs) (European Commission. JRC. 2017) is applied. In a food supply chain, rules and regulations are established on effective mechanisms to eliminate UTPs.

Expected findings

By investigating supplier-dependent operations via collaboration, the presented study identifies interdependencies between food waste and grocery retail operations. This will contribute to explore the causality between supplier-dependent grocery retail chain operations and food waste. It is foreseen that transparency and reducing information bias are at the core of collaborative initiatives and can contribute to reduced food waste by facilitating optimization of grocery retail processes and increasing agility in supply operational planning to extend the distribution stage toward donation centres. Transparency can further expand the scope of the approach by quantifying the environmental impact of food waste.

Yet, in the investigated settings collaboration initiatives are challenged by the legislative aspects that drive operational practices, unstructured frameworks of benefit evaluation, and manual efforts as sales drivers in the grocery industry.

Relevance

Retail chain operations are a key success factor in the grocery industry, substantially impacting costs, profits, and service quality (Reiner et al. 2013). As food companies constantly seek cost-efficiency in their processes, assessing the monetary impact of food waste is decisive when awareness is to be made (Dora et al. 2020). Besides awareness, measuring food waste can be a lever to ensure the evaluation of collaboration initiatives. The contribution of this work is threefold: (i) it explores the challenges of initiating supply chain collaboration, (ii) and the barriers when evaluating collaboration-based initiatives towards food waste reduction, (iii) it derives managerial insights and implications to facilitate sustainable grocery operations in the future.

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On The Impact Of River Satellites In Two-Echelon Urban Distribution Systems

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Keywords

Last-mile delivery, Urban logistics, Vehicle routing, Sustainability, River logistic

Introduction

More than 50% of the world's population lives in urban areas (Bac and Erdem, 2021) and this trend is increasing. This induces an increase in product deliveries in urban areas. The recent COVID-19 pandemic outbreak and associated lockdowns have further accentuated this phenomenon as many companies are forced to operate virtually (Cortez and Suzuki, 2021). Parcel delivery service companies are faced with the challenge of handling large numbers of packages. For this reason, the transportation and mobility sectors are critical to meeting these demands, despite the high costs.

Parcel delivery activities in urban areas have important traffic and parking implications. On the one hand, it contributes significantly to congestion and the emission of particulate pollutants in urban environments. Urban freight transport accounts for 25% of CO₂ emissions and between 30 and 50% of other transport-related pollutants in urban areas (Muñoz-Villamizar et al, 2020). On the other hand, pick-up and delivery operations generate an invasion of public space, mainly in city centers. This is since vehicles remain parked during the delivery activity.

To address the externalities associated with delivery vehicles, the European Commission has set some targets to achieve CO₂-free city logistics in city centers by 2030. Cities are also restricting the access of delivery vehicles to city centers or central districts, for example by limiting the time of day when access is restricted or the type, emission class or size of delivery vehicles that cannot enter. All of this is to ensure sustainable living conditions. To meet these challenges, more environmentally friendly solutions, and different alternatives for delivering parcels in their distribution systems despite restrictions in urban areas must be considered and studied.

Purpose

This paper proposes two scenarios for urban parcel delivery systems using multimodal transportation to design delivery routes in two-echelon distribution networks with the aim of achieving more sustainable deliveries. We combine inland waterways transportation mode in the first echelon and e-cargo bikes in the second echelon of the distribution network and we compare the results with a road transportation. We assessed the efficiency of scenarios through performance indicators. The inland waterways transportation mode is under studied.

Within the scope of this research, these attributes are not previously addressed in the literature about urban parcel delivery systems.

Methodology

The two-echelon distribution networks are very common in last mile delivery and is known to be computationally difficult to solve. The problem consists of delivering goods from one depot to a set of satellites and from there to a group of customers (Ramirez- Villamil et al, 2021). A three-stage decomposition heuristic. In the first stage, the non-supervised machine learning clustering method 2D- k -means is applied to allocate the customers to the closest satellite, the second and third stages comprises the second and first-echelon routing. We solve the last two stages using a heuristic based on the well-known Nearest Neighbor procedure.

Findings

Inland waterway transport is one of the least polluting transportation modes and its costs are particularly competitive. The fixed costs and the cost of energy consumption are cheaper than those performed by the delivery van. Results show a reduction of 41% in terms of fixed cost and 92% in terms of energy consumption when applying an inland waterways transportation mode in the first echelon and e-cargo bikes in the second echelon of the distribution network.

Contributions

The consideration of a multimodal alternative based on a barge in an inland waterway infrastructure for parcel delivery activities in a city that has complicated road traffic conditions. There are scarce studies that use barges in an urban context. Also, the application of a machine learning method that is a 2D- k -means clustering algorithm to allocate customers to the closest satellite.

Practical implications

Companies are increasingly pushed by public policies, for example, to use soft modes for their transportation. It is therefore essential to conduct thorough studies on the different modes of transport so that companies can make the right decisions and public authorities can push for the right solutions.

Social implications

Using the river for last mile delivery has very large societal impacts. Indeed, it reduces congestion and therefore has an impact on the quality of life of residents and workers. Secondly, it reduces pollution, especially greenhouse gases.

Research limitations and outlook

For future research, several lines are still open. Indeed, the instability of last-mile logistics actors shows that this activity is complex, and that research needs to be reinforced in this field. First, the various load breaks and constraints linked to river logistics must be studied. If our study gives first elements, the study of costs must be studied further. Secondly, the application of these scenarios in the original real-life case study with the real capacity of the vehicles to evaluate if Scenario 1 remains a sustainable and efficient option when dealing with a big-size instance. Moreover, parameters such as service times can be considered, we are aware that in practice the service time is stochastic because the driver does not take the same time at every delivery point, so the consideration of this parameter could have very interesting results.

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Supply chain coordination under customized cap-and-trade and consumers' environmental awareness

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Keywords

Supply Chain Coordination, Sustainability, Cap-and-Trade, Consumer Environmental Awareness, Government Incentives.

Introduction

One of the major threats to human life, climate change, and global warming is greenhouse gas emissions. Carbon emissions are reported as a prevalent part of atmospheric pollution caused by human activities and attracted a lot of attention around the world. To control and restrict such pollution in order to preserve sustainable development, various emissions abatement regulations have been established throughout the world based on the conditions of each country and region, such as carbon tax rules, carbon capacity level rules, and cap-and-trade policies (Toptal et al., 2014). In this latter type of regulation, a set of policies and a certain amount of pollutant emission capacity are assigned to companies in a certain period of time, and firms can buy and sell this allocated capacity in the emission trading market.

Different coordination mechanisms have been developed in the literature to enhance the performance of the supply chain (SC) under carbon-trade emission abatement constraints, see e.g., Dong et al., (2016), Xu et al., (2016), and Bai et al., (2019) that developed a revenue-sharing contract with cap-and-trade constraints; Toptal and Çetinkaya (2017) that proposed carbon credit-sharing and quantity discount contracts; Yang and Chen (2018) that explored the impact of revenue-sharing and cost-sharing contracts on carbon emission abatement; Ji et al. (2020) that investigate the emission level and social welfare under wholesale price and revenue-sharing contracts; Wang et al. (2021) who discussed the cost-sharing contract under the cap-and-trade mechanism.

This paper aims to analyse a two-echelon green SC including a manufacturer and a retailer under governmental incentives and supervision policies to mitigate carbon emissions and promote the sustainability of the chain. Different from previous research on cap-and-trade strategies and the current practice that considers a fixed emission capacity (see e.g., Hua et

al., 2011; He et al., 2015; Xu et al., 2016; Ji et al., 2020), we propose a customized cap-and-trade mechanism considering government incentives to reduce carbon emissions. In particular, under the proposed policy the manufacturer is allowed to choose its emission quota according to the ceiling set by the government. The government provides subsidies to the manufacturer for selecting a less emission capacity and incentivizes consumers to use green products. Our mechanism is a proposal to governments to protect their industries and comply with EU rules on annually reducing emission ceilings allocated to industries.

Purpose

The purpose of this work is to propose a customized cap-and-trade mechanism along with incentive mechanisms of the government to reduce carbon emissions.

Conceptual framework

In this paper, we consider a two-echelon green SC including a manufacturer that manufactures products generating carbon emissions in the production process and a retailer that sells products to the customers. The SC operates under the customized cap-and-trade mechanism along with an incentive mechanism by the government to reduce carbon emissions. The end consumers have environmental awareness and prefer to choose a greener product. The consumers' demand is affected by the level of sustainability decided by the manufacturer and by government activities in incentivizing customers to consume products with fewer carbon emissions (such as green advertising). The government plays a key role in the proposed green SC whose decisions affect both the market and production in some way. To encourage the manufacturer to carbon emission abatement, government subsidies are given per unit of production and their amount is affected by the selected emission quota. Therefore, the government has a restrictive role in selecting the amount of carbon emission quota and it also provides incentives to produce and consume greener products.

The following main assumptions are considered to develop the model:

- We investigate a single-period two-echelon green SC.
- The manufacturer has the authority to decide on the sustainability level of the products and the carbon emission quota according to the emission ceiling set by the government.
- The end consumers have environmental awareness and prefer greener products. Product demand is deterministic and linearly influenced by two variables: the level of sustainability and the selected carbon emission quota.
- The carbon price in the emission trading market is a linear function of the carbon emission quota selected by the manufacturer.
- The unit production cost of each product is deterministic and linearly affected by the level of emission quota selected by the manufacturer.
- Unit wholesale and retail prices are assumed constant.

Methodology

Traditional decision-making structure

In the traditional (decentralized) decision-making structure, the decision-makers act to maximize their own profit functions (see e.g., Cachon, 2003, Xu et al., 2016). Similarly, we present such a structure under a customized cap-and-trade mechanism, customers' environmental awareness, and government initiatives. Note that in this context, the main (the only) decision-maker in the SC is the manufacturer who aims to determine the level of sustainability and its carbon emission quota to maximize its profit (i.e., the profit obtained from selling green products to the retailer and the amount of revenue or cost resulting from

the exchange of carbon capacity in the emission trading market minus the investment cost of improving the technology to achieve a greater level of greenness/sustainability). The retailer profit function is simply calculated as a difference between the revenue gained from selling the products and the costs of purchasing the products from the manufacturer.

Cooperative decision-making structure

We propose a novel combination of consignment and zero wholesale price contracts (C&ZWP) to coordinate the supply chain i.e., to enhance the whole channel's sustainability and profitability, mitigate carbon emissions, and allocate the optimal supply chain profit to the two actors in the channel. In the proposed C&ZWP contract, the retailer applies the revenue- and cost-sharing system with a side-payment scheme to persuade the manufacturer to enhance the sustainability level of the product and alleviate the carbon emission; in return, the manufacturer promises to use a zero wholesale price scheme under which the retailer purchases the product for a zero unit wholesale price (Choi and Guo, 2020). Therefore, under a revenue-sharing scheme, the retailer shares a portion of the selling price with the manufacturer; under a cost-sharing scheme, the retailer pays a fraction of the manufacturer's greening investments costs to the manufacturer; under a side-payment scheme, the retailer offers a side-payment to the manufacturer based on the selected carbon emission quota to the manufacturer for the greening investments.

Findings

As the manufacturer's profit function is concave with the sustainability level and carbon emission quota under the traditional structure, we derive their optimal values. We then show analytically that, under the introduced contract structure, the optimal value of the selected carbon emission quota is lower and the sustainability level is greater than the optimal values obtained in the traditional structure.

Our numerical study shows that the developed contract clearly outperforms the traditional structure in all numerical experiments and eventuates greater profitability for both channel members and the total SC profit. Moreover, under the proposed cooperative structure, the manufacturer selects a lower carbon emission quota and a higher sustainability level for the product. All in all, the proposed coordination contract not only guarantees the profitability of the channel participants and enhances the whole channel profit, but it also creates greener and more sustainable SC by alleviating the carbon emission.

Contributions

Zero wholesale price (ZWP) contract, under which the wholesale price is set to zero and the supplier is compensated by other means, is a common coordination scheme in various industries such as the fashion, electricity market, agricultural industry, and among entrepreneurs and start-up designers (see e.g., Qiu and Xu, 2015; Zhao and Zhu, 2017; Choi and Guo, 2020). However, to the best of our knowledge, we first implement a novel combination of consignment and ZWP contract (C&ZWP) in a green SC under a cap-and-trade policy.

Another contribution with respect to the current literature is that, in this paper, the upstream member (decision-maker) is allowed to select its emission quota according to the ceiling set by the government. As already stressed, our mechanism is a proposal to governments as our analytical results demonstrate that such a mechanism outperforms the mechanism currently implemented in practice with a fixed emission quota.

Lastly, the contribution of this research lies in modelling the incentive and restrictive role of government. In particular, on the demand side, the government, by supporting less carbon

emission products, incentivizes consumers to use green products. On the production side, the government, by providing subsidies for producing less carbon emission products, incentivizes the manufacturer in the carbon abatement process.

Practical implications

The practical insights are summarized as follows:

Applying the proposed C&ZWP contract meets the environmental goals of the channel and establishes a win-win situation for both members. Moreover, in the introduced cooperative scheme the manufacturer selects a lower carbon quota than in the traditional decision-making structure, which means the proposed contract makes the greener/more sustainable channel.

The sustainability level of the product under the proposed cooperative scheme stands higher than under the traditional structure; so, the end consumers' demand increases, and the retailer can earn more profit due to the consumer's sensitivity to environmental issues.

The model presented in this research can be implemented in different industries such as the fashion industry, clothing, electronic components, and the electricity market to reduce pollutant emissions and the harmful effects on the environment.

Social implications

Implementing our proposed customized mechanism under which the carbon quota is set by the manufacturers, environmental bodies and governments can ensure greener/more sustainable channels with lower carbon emissions compared to the currently used mechanism with a fixed emission capacity.

Research limitations and outlook

The proposed model can be extended to take into account the demand or supply uncertainty. Another directions of future research are to extend the proposed mechanism for hybrid manufacturing systems with green and non-green manufacturing facilities, and for supply chains that produce and sell several types of products with different environmental quality.

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Keywords

Supply Chain Coordination, Sustainability, Cap-and-Trade, Consumer Environmental Awareness, Government Incentives.

Multi-/Omni-channel marketing and operations

The role of artificial intelligence in omnichannel experience

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Keywords

Omnichannel, Artificial intelligence, Customer experience, Technology in retail, Retail

Introduction

During the last years, the retail sector has witnessed a dramatic evolution with the rapid digitalization of systems and a significant growth of online shopping. Besides, COVID-19 has pushed the retail industry to new ways to fulfill consumer needs through omnichannel strategies, making retailers more dependent on technology to engage and serve consumers (Euromonitor.com; Gereá *et al.*, 2021). However, to date, studies on omnichannel customer experience (OCE) are still fragmented and mainly focused on the conceptualization of the shopping experience and the experiential nature of shopping, leaving aside the integration of technological systems and their impact on the integrated omnichannel experience (Gereá *et al.*, 2021; Shi *et al.*, 2020; Verhoef *et al.*, 2015). In that sense, advances in digital technologies, as machine learning, virtual reality, big data, and artificial intelligence (AI), have led to a revolution in the retail industry, integrating multiple channels to create a seamless omnichannel customer experience and where physical stores are evolving to be more integrated with online channels improving the consumption experience (Shi *et al.*, 2020; Miquel-Romero *et al.*, 2020; Roggeveen and Sethuraman, 2020). AI leads the set of technologies that are expected to have an impact on business in the next five years (Euromonitor.com).

AI is considered a disruptive innovation that has provided momentum for digital transformation in the retail industry with rapid advances over the last years, such as robots, chatbots, augmented reality, virtual reality, machine learning, among others (Pillai *et al.*, 2020). For the next years, AI in retail will play a disruptive role as AI-based systems and automation continue to boost efficiency in service and customer engagement leading to an enhancement of the consumption experience (Kaur *et al.*, 2020; Pillai *et al.*, 2020). However, literature on AI has mainly focused on AI systems application in core retail tasks or by individually focusing on specific systems, mainly related with service, leaving a blank space for the relationship between AI and

omnichannel customer experience (Pillai *et al.*, 2020; Weber and Schüte, 2019; Grewal *et al.*, 2017).

Purpose

This study aims to investigate the managers and consumers' perspective regarding the relationship between OCE and AI systems. More specifically, to explore convergence points through perspectives and associated interpretations regarding perceptions about how AI technologies could be integrated across the OCE dimensions based on individuals' beliefs, experiences, and thoughts.

Conceptual framework

OCE antecedents

Accelerated digital systems advancements and technology investments in the retail environment have led to the integration of multiple channels to create a seamless OCE that properly engage and serve consumers, lifting the omnichannel experience (Euromonitor.com; Shi *et al.*, 2020; Frassetto *et al.*, 2017).

Omnichannel retailing is defined as “a set of integrated processes and decisions that support a unified view of a brand from product purchase, return, and exchange standpoint irrespective of the channel (in-store, online, mobile, call center, or social)” (Shi *et al.*, 2020). However, even when omnichannel has been a relevant topic of study in the last decade and customer experience (CE) has been researched for many years (Joshi, 2014; Belk, 1989), OCE is still rarely explored (Gerea *et al.*, 2021). Nonetheless, a recent study from Shi *et al.* (2020) proposed a model that presents five dimensions necessary to create successful OCE: Connectivity, Integration, Consistency, Flexibility, and Personalization. Definitions and examples for each dimension are presented in Appendix Table A1.

The Integration of AI in retailing context

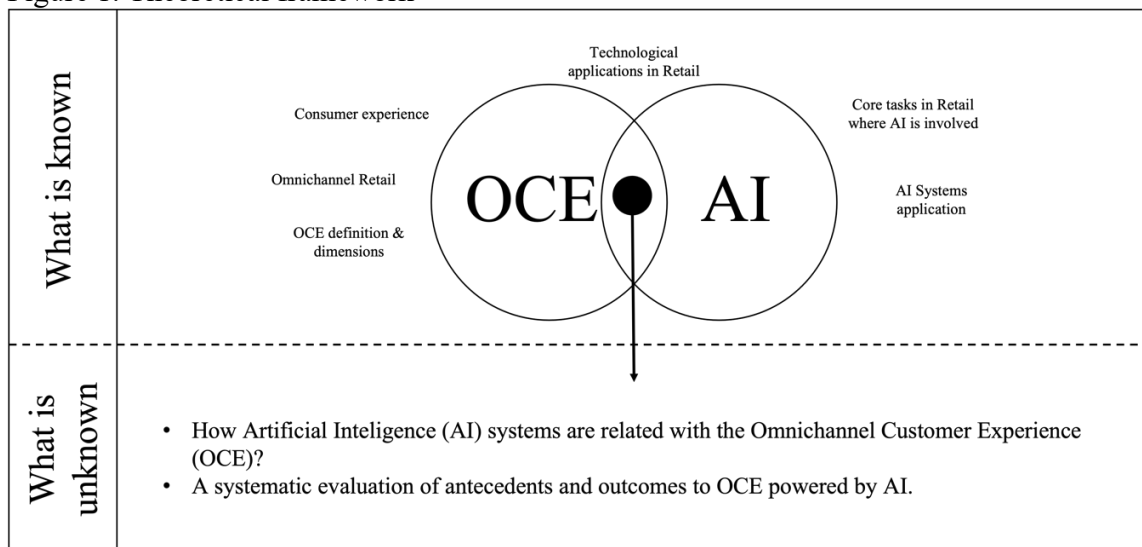
AI systems used by retailers could function as questions solvers and be used to optimize the value chain, improving the consumption experience at the different points of contact and can help to anticipate customer demand, to automate store operations, customer engagement, customer personalization, and price optimization (Pillai *et al.*, 2020). Classic examples of digital personalization include “recommended for you” sections, like the ones used by Amazon, Spotify, and Netflix (Kumar *et al.*, 2019). Another example of AI systems implementation is Amazon Go shop, an AI-Powered Automated Retail Store (AIPARS) that integrates AI systems and robotics along with advanced software systems to deliver a fully automated and customized shopping experience (Pillai *et al.*, 2020; Weber and Schüte, 2019).

AI is continuously offering retailers the opportunity to both increase gains in productivity throughout the business and to enhance the consumption experience (Kaur *et al.*, 2020) on the different sale channels. However, AI is still a new type of technology that has not been deeply tested on the retail environment, particularly on its impact in OCE (Verma *et al.*, 2021; Weber and Schüte, 2019).

Methodology/approach

As this study aims to pave the way in the poorly explored intersection between OCE and AI systems, a qualitative approach was used, adopting exploratory inductive research. Qualitative methodology was considered suitable for exploring perspectives and associated interpretations regarding perceptions about how AI technologies could be integrated across the OCE based on individuals' beliefs, experiences, and thoughts (McCusker and Gunaydin, 2015; Venkatesh *et al.*, 2013). Theoretical framework is presented in Figure 1.

Figure 1. Theoretical framework



Data was analyzed using grounded theory methodology from in-depth interviews composed of four guiding topics which were chosen a priori based on literature review: The first topic analyzed was general aspects regarding OCE concept (1). Then, the OCE dimensions (2) were introduced for general discussion using the five dimensions proposed by Shi *et al.* (2020) to understand and contrast literature review with managers and consumers' perceptions and interpretations regarding each dimension. After this discussion, AI systems (3) questions were introduced to analyze the level of understanding regarding the implementation of this technologies on their omnichannel shopping experience. Finally, a discussion regarding the convergence between OCE and AI systems initiated, including an analysis of examples, provided by interviewees, of AI systems implemented in omnichannel retail that play a major role on each OCE dimension (4). In addition, the interviewer developed ad hoc questions during the interview, which allowed the participants to analyze the topic in greater depth.

The final samples were composed of 12 managers and 26 consumers. Each in-depth interview was performed using an online conferencing tool lasting from 45 to 90 minutes. The interviews were video-recorded, transcribed and analyzed the transcriptions through content analysis. Subsequently, similar concepts were coded and grouped into categories and first-order themes were identified. Finally, data was categorized and interpreted in second-order themes (Luborsky, 1994).

Findings

At present, most the studies on OCE are mainly descriptive and don't provide empirical framework to deeply comprehend critical factors associated (Kazancoglu and Aydin, 2018; Li *et al.*, 2018; Shen *et al.*, 2018; Burford and Resmini, 2017). This study identified that both interpretations, managers and consumers, concerning OCE are mostly in line with the definitions find in literature (Verhoef *et al.*, 2015; Lewis *et al.*, 2014). Nonetheless, when OCE dimensions (Shi *et al.*, 2020) were presented, discrepancies between interpretation and literature arose. Particularly regarding Integration and Connectivity dimensions, as managers and consumers found it difficult to articulate interpretations for them and/or confuse one for the other. Respondents highlight that Connectivity lacks context and could be interpreted from several perspectives, including network availability, and that can be confused with Integration's definition. Connectivity plays an important role, not only as part of the infrastructure of the channels themselves but as a relevant factor on the customer behaviors before and after the purchase of the product (Tyrväinen and Karjalouto, 2019; Gecti and Zengin, 2013). Otherwise, regarding integration interpretation, managers stated that they conceptualize Integration as an internal attribute that has to be present in the omnichannel experience, while consumers struggle to come with a proper definition for this dimension. Even though integration has proven to be important, it is also one of the hardest aspects to achieve by the omnichannel strategy. There are two aspects that are significantly important: process and product availability (Tyrväinen and Karjalouto, 2019).

Additionally, this study presents the order of importance of the five OCE from consumers and managers', resulting in significant differences. While Personalization is considered as the most important dimension for managers, Consistency is consumers' top choice; Integration ranks second for managers, while is considered the least important for consumers; finally, both agree on Flexibility's ranking position, placing it in fourth place.

The results from data analysis regarding consumers' previous omnichannel shopping experiences exposed differentiations on the omnichannel consumer journey associated with the product category that the consumer is purchasing. The resulting four paths included a general journey, and specific purchase journeys for the following categories: Clothes, technology, and furniture. Further, this study presents five themes that seem to have a significant role in AI systems implementation in omnichannel retail, according to managers. First, three themes that are previously associated with AI in retail: core tasks, marketing activities, data analytics (Verma *et al.*, 2021; Weber and Schütte, 2019). Second, two emerging themes: consumer understanding and relationship management, and specific applications.

Finally, an allocation of AI systems examples related with each OCE dimension is presented, connecting OCE and AI by capturing impressions from managers and consumers. Results are presented in Appendix Table A2. The best-known AI systems, for managers and consumers, include chatbots, recommenders, personalized marketing, and virtual assistants. This finding is in-line with literature as most of these systems are associated with serving customers (Weber and Schütte, 2019); however, this finding adds to literature by connecting each AI system with the OCE dimensions. Moreover, most AI systems were related to the Personalization dimension, which was also recognized as the most important dimension in terms of AI implementations according to consumers. Personalization is about creating a tailor experience and discount, or points offers for their customers, and can be met through personalized messages and content through technology (Tyrväinen and Karjalouto, 2019).

Contributions

This study answers the call for more research into OCE and contributes to the knowledge base in AI systems by explaining the managers and consumer interpretation about the connection between them. Moreover, the present research contributes to the existing literature by developing a conceptual framework that describes top retail managers' perspectives of antecedents and outcomes for OCE powered by AI systems and to explore dimensions for OCE powered by AI systems.

Practical implications

From a managerial perspective, AI is transforming the way retail stores operate, providing different alternatives to add value to core retailing tasks. The current study detects five significant themes that seem to play a major role in the managers' minds with AI systems implementation in omnichannel retail: core tasks, marketing activities, data analytics, consumer understanding and relationship management, and specific applications. This study also presents information regarding product categories differentiations on the omnichannel customer journey when AI systems are implemented in the omnichannel retail, showing that product category could be an important factor in the omnichannel customer journey.

Research limitations and outlook

This exploratory qualitative research study contributes to existing knowledge by providing a theoretical window for conducting future research. Notwithstanding, as all empirical research, this study has certain limitations that suggest further investigations. First, the study adopted a qualitative method. Thence, future research should continue the presented analysis by adopting quantitative methods and explore possible relationships with constructs that could be linked with OCE and AI as satisfaction (Berry and Bendapudi, 1997; El-Adly, 2019; Li et al., 2018) and loyalty intention (Giovanis and Anthanasopoulou, 2018). Second, the data in this study was collected from only one country. Thus, it would be useful to extend the study to a larger sample from different geographical locations to understand if interpretations and relationships between OCE and AI changes from group to group in different social contexts.

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Appendix

Table A1. Definition of omnichannel experience dimensions (Shi et al., 2020)

Dimensions	Definition	Example
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<i>Connectivity</i>	The extent to which the cross-channel service content and information are linked and interconnected.	When a customer is browsing a product on mobile devices, a nearby physical store is recommended for him/her.
<i>Integration</i>	The extent to which customer perceives all information systems and management operations are unified and integrated well across channels.	The launch of new products is synchronized across different channels.
<i>Consistency</i>	The extent to which customers experience both content and process consistency of interactions across channels.	The price and sales information of products are consistent across all channels.
<i>Flexibility</i>	The extent to which customers are provided with flexible options and experience the continuity when migrating tasks from one channel to another channel.	A customer can purchase the product online and receive the after-sales service in a physical store.
<i>Personalization</i>	The extent to which a customer perceives that the omnichannel retailer provides its customers with individualized attention.	The salesperson can offer personalized recommendation based on a customers' online purchase history.

Table A2. Relations between AI systems in omnichannel retail, second-order themes and related first-order issues

Theme	Issue
Core tasks	Demand prediction Supply/value chain management Sales process Delivery processes Human resources management Merchandise purchase process
Marketing activities	Dynamic Pricing and Price Optimization Communication strategies management Digital marketing strategy Management of promotions Marketing standardization
Data analytics	Leveraging data to improve KPIs Centralized practice of analytics

Consumer understanding and relationship management	Analytics solution governance
	Generation of business hypotheses
	Data-driven decision making
	Customer segmentation
	Identification of customer needs
	Support in customer core processes
	Analyze and build loyalty
	Support the user experience related processes
	Customer interactions management
	Customer Lifetime Value Analysis
Specific applications	Assistance in the Customer Journey processes
	Personalization of the customer experience
	Computer vision (Point-of-sale cameras)
	Natural Language Processing (LNP)
	Geo-statistics with predictive modules for the store
	A/B tests
	Understanding abandonment
	Intellectual Property Generation

Operations and in-store logistics management

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Purpose

Increasing packaging waste – in particular related to plastic packaging – has a detrimental effect on the environments around the world. Hence, its reduction has become a key focus in the pursuit of circular economies (Association of Cities and Regions 2019). Returnable packaging systems in the consumer goods industry have significant potential to mitigate this issue (Policy Department DG External Policies 2011; Mata und Costa 2001). As a result, newly introduced national and supra-national regulations determine mandatory quotas for reusable packaging in product categories of the food and beverage industry (Feber et al. 2021).

Retailing plays a key role in increasing the share of products with returnable packaging in supply chains through their listing decisions (Mahmoudi und Parviziomran 2020). Further, retail stores represent the central hubs for the distribution to as well as the recycling returnable packaging (Calabrese et al. 2021). Through offering such a recycling service to customers, retailer have to bear significant costs but also reap associated benefits (Holweg et al. 2016). Despite the wide spread introduction of returnable packaging systems in retail operations processes the question on their costs and benefits – besides the environmental one – has become of contemporary relevance.

Current research on returnable packaging systems on the retail stage of the food and beverage supply chains, however, offers limited insights (Cooper und Gutowski 2017). In particular, there is a paucity of knowledge about activities and processes that are integrated in daily operations and create hidden overhead costs for retailers. Finally, the research focus on reuseable packaging neglects potential benefits for retailers such as driving footfall and sales. Thus, both a theoretical and managerial need exist for an in-depth understanding of the

commercial side of reusable packaging systems on a retail store level. This paper adds to the limited body of knowledge related to store operations and marketing with a focus on the distribution and recycling of reusable packing.

Methodology

Through the lens of the actor-network theory and based on 30 interviews with store managers including on site observations we develop a research model that structures key processes of RPS and their input and output factors. The text data is analysed using content analysis involving two independent coders. The initial coding system is grounded in the generic in-store logistics model of Kotzab und Teller (2005).

Implications

The two key contributions of this research are as follows: First, we propose a conceptual model that describes the key operations processes and reflects the main costs and benefits associated reusable packaging systems in retail stores. This conceptualisation considers the trade-off between costs incurred as well as benefits generated by retailers.

Second, the empirical insights into RPS bear policy implications and provide an argumentation for an increase of reusable packaging shares in retail stores through emphasising the commercial benefits of RPS for retailers beyond the cost perspectives.

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Retail and service agglomeration/network marketing

Consumers' motives, attitudes and behavioural intentions toward local online retail platforms

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Keywords

Local Online Retail Platform, Retail agglomeration, Retail, Uses and gratification theory, Patronage intention

Introduction

Due to the ongoing shift from physical to online shopping, spurred on by changes in consumer purchasing behaviour resulting from the COVID-19 pandemic, the progressive rise of online retailing is a major contributing factor to the hard times that retail agglomerations are currently facing (Grewal et al., 2021; Grimmer, 2022). These changes are especially tough for small and medium-sized independent retailers as they often lack the resources to adopt and maintain an e-commerce strategy individually (Hagen, Hopman, et al., 2022; Pilawa et al., 2022). Therefore, increasingly, local retailers collaborate in Local Online Retail Platforms (LORPs) that aim to bring back multichannel buyers as online or offline patrons of the retail agglomeration (Dizdarevic et al., 2020; DNWS, 2022; Silva & Cachinho, 2021).

LORPs are digital platforms that aim to bring together local retail agglomeration retailers and consumers. LORPs provide information, allow interaction between consumers and retailers and offer the possibility of making e-purchases from local retailers. LORPs, however, do not own or possess the offered products and services; as such, LORPs resemble traditional (inter)national e-marketplaces, such as Amazon and BOL. Unlike these traditional e-

marketplaces, LORPs not only aim to increase online sales. LORPs also aim to increase the attractiveness of the physical retail agglomeration (Hagen, Hopman, et al., 2022). Examples of LORPs are warenhuis.groningen.nl, winkelen.ditisassen.nl and warenhuishoorn.nl in the Netherlands and heimatschatz.de and wiesbaden.kiezkaufhaus.de in Germany.

The potential that LORPs hold for retail agglomerations has been lauded by practitioners and in literature (Hagen, Risselada, et al., 2022). However, this far, examples of LORPs with continued popularity among consumers have remained scarce (Frishammar et al., 2018). Additionally, there is little academic understanding of consumers' motives, attitudes and behavioural intentions towards LORPs. This research aims to fill this gap.

Purpose

This research aims to contribute insight into consumers' motives, attitudes and behavioural intentions toward LORPs. To do so, we will apply the Uses and Gratification Theory (UGT) (e.g. Katz et al. 1973), which has in prior research proved to be very suited for analysing the influence of the heterogeneousness of consumer motives on consumers' use of a specific medium to satisfy their needs (Kaur et al., 2020).

Conceptual framework

The primary value proposition of LORPs consists of location-based information provision and convenience creation. Academic literature has identified hedonic and utilitarian values as central motives for using e-marketplaces (Lim & Kumar, 2019; Sung et al., 2010) and (local) online deal communities (Betzing et al., 2020). Furthermore, consumers may differ in needs when they visit retail agglomerations with a task- or experience-focused shopping orientation (Ben Mimoun et al., 2022; Mumford et al., 2020). Therefore, we expect that the hedonic and utilitarian values provided by LORPs will be central consumer motives for choosing to use a LORP for browsing and making online purchases. Furthermore, we expect that the shopping orientation with which a consumer visits a retail agglomeration has a moderating effect on the relationship between consumer motives, attitudes and behavioural intentions towards LORPs. Hence we present the following conceptual framework.

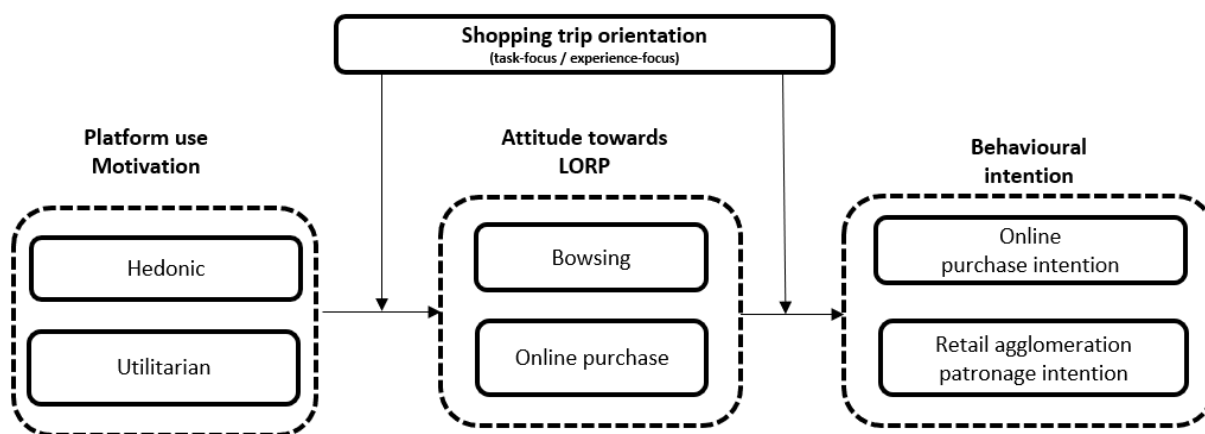


Figure 1: rough conceptual model

Methodology

An online survey was completed by over 230 respondents from a Dutch panel. A little over half of the respondents completed the survey from a task-oriented shopping trip perspective. The other respondents completed the online survey from an experience-oriented shopping trip perspective.

The survey constructs and items were derived from previous literature. The items were adapted to fit the research topic better. The survey was pre-tested to ensure that the question formats were clear and fine-tuned for further data collection. All the items were measured on a 5-point Likert scale ranging from "strongly disagree" to "strongly agree". The final section of the questionnaire focused on the respondents' demographic characteristics.

Multigroup moderation analysis via PLS-SEM was used to analyse the data.

Findings

A first analysis of the data indicates a positive relationship between consumer attitudes towards LORPs and LORP-related behavioural intentions. The analysis also indicates that the shopping orientation with which a retail agglomeration is visited influences the relationship between consumer motives, attitudes and behavioural intentions towards LORPs.

Contributions

From a theoretical point of view, this study is the first to contribute to the retail- and place management literature, empirical insights into motives for LORP patronage intention and subsequent behavioural intentions and insights into the moderating role of consumer shopping orientation.

Practical implications

This work aims to help retail marketing and place management practitioners understand consumer motives for using LORPS, consumer attitude toward LORPs and the expected effect of LORPs on perceived retail agglomeration attractiveness. These insights may guide these practitioners' decision-making related to the creation, marketing and management of LORPS.

Social implications

Retail agglomerations largely determine towns and cities' attractiveness, vitality, and livability. This research provides the first steps toward a better understanding of consumer motives, attitudes and behavioural intentions towards LORPs that aim to increase the attractiveness of specific retail agglomerations. Therefore, this paper can positively impact the vitality and liveability of towns and cities.

Research limitations and outlook

Very few retail agglomerations currently have LORPs, and the existing LORPs are mostly still in their infancy. Therefore, we chose a research setup in which the survey respondents were introduced to a fictitious LORP. The respondents were then asked to imagine this LORP for a retail agglomeration they visited for either a task-focused or experience-focused shopping trip. Due to this setup, no actual behaviour could be surveyed. Furthermore, the self-

reported expected behaviour might overestimate actual behaviour. Future research among consumers that have made use of LORPs in advanced stages of maturity may provide additional insights into actual consumer behaviour towards LORPs.

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Leadership and retail management

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Introduction

Digital transformation is a multifaceted phenomenon and has various implications for companies of all industries (Hanelt et. al., 2021; Correani et al., 2020). To face digital related challenges, companies must constantly integrate new emerging technologies thus leading to new business models and new work environments (Franken, 2016). Digital transformation not only influences organizational processes and structures but also management and leadership styles (Harwardt and Schmutte, 2020), the latter being responsible for 19% of employee fluctuation when experienced negatively (Brence et al., 2019). Due to competitive market situations, changing customer behavior and altered employee expectations, managers are confronted with new requirements and challenges as part of digital transformation (Petry, 2016). This necessitates a completely new way of thinking for managers and their leadership style must change accordingly (Hensellek, 2020).

Purpose

In line with this argumentation, modern and successful organizational structures require increased flexibility and agility, often in conflict with existing hierarchical forms and leadership styles (Harwardt and Schmutte, 2020). There is a trend towards a transformation from the ‘classic single leader’ at the top management level to a ‘new leadership role’ (Day,

2000). Managers are challenged by this transformation from ‘classic’ top-down decisions to ensure efficiency and success to leadership and motivation of interconnected and self-organized units to develop innovations and new business models (Kienbaum, 2019). The retail sector is one of the largest industries in the European economy when it comes to generated revenues and average number of employees (EuroCommerce, 2022). Brick-and-mortar retailers represent by far the largest form of appearance within the retail industry (Reinartz et al., 2019) and are characterized as a personnel-intensive sector, confronted with various new point-of-sale-technologies (Grewal et al., 2020). Retailers must evaluate carefully how to best survive and flourish in this new technology driven environment (Grewal et al., 2021). However, to our best knowledge, research on leadership in digitalized, stationary retailing settings has been of minor interest so far. Therefore, the study at hand investigates leadership related implications of digitalization in a stationary food retail setting.

Methodology

To gain access to knowledge and practical implementation on leadership in retail, we followed a qualitative approach and used semi-structured expert interviews. This interview form provided us the ability to gather information about the characteristics and attributes of digitalized work processes and associated institutional orders (Kaiser 2014). The interview guideline consisted of ten questions divided into three blocks. The first block dealt with digitalization in stationary food retailing in order to identify the status quo and obtain the associated experiences of the experts. The second block focused specifically on employee leadership in stationary food retailing. The third and last part of the interview guideline drew a conclusion, in which the experts were given room for further comments.

As a sampling procedure we used a theoretical sampling approach as described by Kelle and Kluge (2010). In this context, the definition of an expert is a major challenge in qualitative empirical research (Döring and Bortz 2016). According to Meuser and Nagel (1991) an expert has responsibility for the design, implementation, and control of a problem solution or access to information about groups of people or decision-making processes. Hitzler *et al.* (1994) see experts in company interviews as those who have knowledge about an entire company or parts of it and have direct access to the operations and processes. In line with these definitions, we defined respondents who currently hold or have recently held managerial responsibility for employees at the point of sale in a food retailing company as experts. In addition, selected experts had to have direct or indirect (such as a regional sales manager, store manager, market manager, area manager, sales manager or owner) leadership responsibility for employees at the point of sale. In total we interviewed 11 experts, before we hit a point of theoretical saturation. Table 1 provides an overview of the experts. All interviews were conducted face-to-face, recorded, transcribed, and took place in a quiet environment.

<i>Expert profile</i>		<i>Frequency</i>
Position	Managing director	4
	Regional sales manager	5
	Store manager	2
Retail format	Supermarket	9
	Discount store	2
Gender	Male	8
	Female	3

Table 1: Respondents' profiles

Transcribed interviews were analyzed using a deductive and inductive content analysis approach as described by Mayring and Fenzl (2019). A categorization scheme was developed representing the two main research areas of (i) impact of digitization on work environments and (ii) factors for successful leadership. A total of five categories representing the impact of digitalization on the food retailing workspace (i.e., work facilitation, work intensity, digital resistance, reduction of personal level, psychological pressure) were developed inductively. Afterwards units of analysis describing leadership characteristics were categorized using a deductive categorization scheme derived from literature on leadership styles. The categorization scheme consists of categories representing different characteristics of leadership triggered by the digitalization of the workplace.

Findings

Our results confirm literature-based assumptions with respect to workload reduction through digitalization as crucial in food retailing. Digital technologies can be used to work more efficiently, save costs and increase productivity. Moreover, workload reduction is achieved by better access and sharing of information due to the usage of digital technologies. However, negative impacts of digitalization were also mentioned in the interviews. Especially an increase in work intensity for employees associated with a decrease of personal interaction with co-workers and superiors were described as a threat leading to signs of resistance or skepticism towards new technologies. Furthermore, we could identify that employees have feelings of psychological pressure especially in the introduction phase of new technologies.

Regarding technology induced changes in leadership styles our findings show that leaders in a stationary retail setting use different active and passive management styles to cope with the aforementioned challenges. Some managers act as a role model and involve employees in the implementation of new technologies providing a high level of transparency and delegation of tasks. Others respond individually to the abilities of employees and form teams where they consider different levels of digital skills. Furthermore, they train employees in a simple and

understandable way, so that they can develop digital skills to effectively reduce their work load.

Contributions

The study at hand investigates for the first time leadership related implications of digitalization in stationary food retail settings. Our research provides explorative, empirical insights how digitalization is changing the role of leaders in food retailing as well as which leadership styles occur in practice. Drawing on the full range model of leadership by Avolio and Bass (1991) our empirical results show positive and negative influences of digitalization on work environments and leadership styles. The main contribution of the study in this context is an additional focus on the personal component in employee leadership. Direct, personal contact and communication typically decline in digital enhanced work environments. However, our study shows a clear relationship between the digitalization of work processes and personal communication. The more digital work processes become, the more analog leadership-related communication is required (e.g. regular face-to-face meetings with employees). Consequently, this finding represents an essential theoretical and practical contribution and affords further investigation.

Research limitations and outlook

Typical limitations of the research at hand are caused by the qualitative nature of the study and include a small sample size, potential interview bias, and the fact that no generalized statements can be made (Roebken, Wetzel 2016, 103). Future studies may follow a quantitative approach to overcome these limitations.

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Digitalisation in retailing

The Role of In-Store Self-Service Technology Acceptance in Consumer Loyalty towards Retailers

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Keywords

Self-service technology, Technology acceptance, Consumer loyalty, In-store retailing, Interactive kiosk

Introduction

Due to the COVID pandemic and the rapid digital evolution, retailers are increasingly introducing self-service technologies in their stores (Wang *et al.*, 2022). “Self-service technologies (SSTs) are technological interfaces that enable customers to produce a service independent of direct service employee involvement” (Meuter *et al.*, 2000, p. 50). In-store SST solutions include self-checkout and self-scanning technologies, interactive kiosks provided in the physical retail environment.

Many researchers investigated in-store SSTs from technology acceptance perspective and concentrated on the influence factors of the intention to use. Few studies added behavioural consequences to SST acceptance models. For example, Kallweit *et al.* (2014) predicted the intention to reuse the technology; Weijters *et al.* (2007) linked the time spent in the store and shopping satisfaction with SST use. Although in-store SSTs are part of the retail offering (Demoulin and Djelassi, 2016) influencing the overall shopping experience, there is no research on how in-store SST acceptance affects the retailer-consumer relationship.

Purpose

This paper aims to study how in-store SST acceptance contributes to consumer loyalty toward the retailer. Drawing on the theory of technology acceptance, we investigated how the adoption of interactive self-service kiosk influences consumer loyalty toward an international sportswear retailer.

Conceptual framework

We created a conceptual model (Figure 1) by combining the theory of technology acceptance developed by Venkatesh and Davis (1996) and consumer loyalty towards retailers (Zeithaml *et al.*, 1996). The TAM model captures the effects of perceived usefulness and ease of use on the intention to use an interactive kiosk. Based on the previous literature review, we added technology anxiety and perceived enjoyment as antecedents of the TAM model. More importantly, we assumed that intention to use the interactive kiosk influences consumers’

loyalty towards the retailer. To our best knowledge, this relationship has never been studied in former retail SST acceptance models.

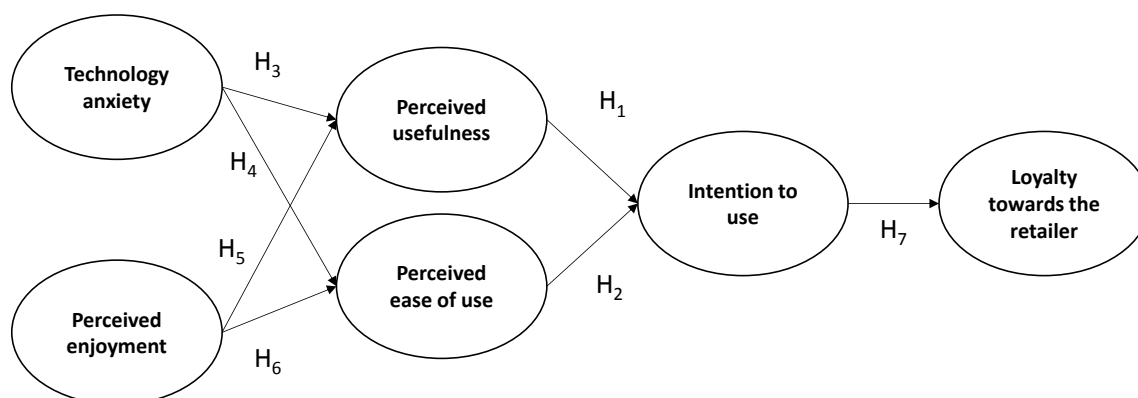


Figure 1 Research concept and hypotheses

Perceived usefulness is “the degree to which a person believes that using a particular system would enhance his or her task performance” (Davis *et al.*, 1989, p. 320). Müller-Seitz *et al.* (2009) and Oghazi *et al.* (2012) confirmed that perceived usefulness positively influences the intention to use technology.

H₁: Perceived usefulness has a positive effect on the intention to use.

Perceived ease of use “refers to the degree to which a person believes that using a particular system would be free of effort” (Davis *et al.*, 1989, p. 320). Concerning retail SST acceptance, perceived ease of use could directly increase the intention to use self-checkout technology (Gelbrich and Sattler, 2014).

H₂: Perceived ease of use has a positive effect on the intention to use.

Technology anxiety is “the fear, apprehension, and hope people feel when consumers consider or actually use a new technology” (Meuter *et al.*, 2003, p. 900). Evanschitzky *et al.* (2015) found that technology anxiety hindered trial in an early stage of technology adoption and had a negative impact on the intention to use.

H₃: Technology anxiety has a negative impact on perceived usefulness.

Previous research revealed that technology anxiety influenced negatively perceived ease of use (Demoulin and Djelassi, 2016; Gelbrich and Sattler, 2014). Thus, fear increases the perceived difficulty to use the new retail SST.

H₄: Technology anxiety has a negative effect on perceived ease of use.

Perceived enjoyment refers to “the extent to which the use of a new technology is enjoyable for the user, regardless of its performance results” (Venkatesh, 2000, p. 345). In-store technologies make customer service more fun, but also efficient that positively influences perceived usefulness (Castillo and Bigne, 2021; Lin, 2010).

H₅: Perceived enjoyment has a positive effect on perceived usefulness.

Furthermore, consumers might experience joy when using new technologies that lead to a positive perception of ease of use (Demoulin and Djelassi, 2016; Venkatesh, 2000).

H₆: Perceived enjoyment has a positive effect on the perceived ease of use.

Although loyalty towards the retailer had not been connected to technology acceptance of retail SSTs, we propose that there is a positive relationship between these two constructs. By studying the consumer acceptance of in-store SSTs, one must pay attention to the retail context where the technology is accessible to the consumers. Consumers use in-store SSTs in retail stores, so the use of the technology influences the perception of the retailer. The positive relationship between technology adoption and loyalty can be explained by new technology increasing perceived service quality and satisfaction with the retailer (Caruana, 2002), which creates a closer relationship between the consumer and the retailer (Lee et al., 2009). Consumer loyalty is characterised by a commitment to the company, low switching probability, higher propensity to spend, positive opinion, and recommendations to others (Zeithaml et al., 1996).

H₇: The intention to use has a positive effect on consumer loyalty towards the retailer.

Methodology

An online survey was conducted using Qualtrics software between 6 and 16 November 2021. The research population consisted of Hungarian consumers who purchased any product no later than six months in the sportswear retailer's stores. Respondents were selected by a non-random sampling procedure. The online questionnaire was shared on social media platforms related to the target group of the sportswear retailer.

The constructs (technology anxiety: Meuter et al., 2005; perceived enjoyment: Dabholkar, 1996; perceived usefulness, ease of use, intention to use: Park et al., 2020; loyalty towards retailer: Zeithaml et al., 1996) were measured using 7-point, multi-item scales applied in SST acceptance research. The data collection resulted in a sample of 255 respondents.

Findings

We tested the hypotheses with a covariance-based Structural Equation Modelling (SEM). The SEM estimated the model parameters by the maximum likelihood method using IBM AMOS 27 software. The model showed an acceptable fit ($\chi^2/df = 2.697$, RMSEA = 0.082, SRMR = 0.0838, IFI = 0.921, CFI = 0.920, NFI = 0.879) (Bagozzi and Yi, 2012).

The measurement model was evaluated for construct reliability, convergent and discriminant validity. The scale items of each construct had high factor weights ($\lambda > 0.7$) and high Cronbach's alpha values ($\alpha > 0.7$) that indicated a high internal consistency of the model components. The only exception is the loyalty component, where some of the statements have factor weights below a threshold of 0.7. However, we did not remove any scale items because it would decrease the content validity of the loyalty construct. Convergent validity was measured using the Composite Reliability measures, resulting in high values (CR > 0.7), and AVE indicators exceeded 0.5 for almost all constructs (Hair et al., 2017). The correlation coefficients between components were lower than the square root of the AVE values. In addition, the factor weights of the scale items in the construct were higher in the own construct than in other ones suggesting an adequate discriminant validity (Hair et al., 2017).

The structural model resulted in high explained variances (perceived usefulness: 0.461, perceived ease of use: 0.329, intention to use: 0.935, loyalty: 0.603).

Table 1 Structural model regression coefficients and t-values

Hypotheses	β	t-value
H ₁ : Perceived usefulness → Intention to use (+)	0.893	11.473*

H ₂ : Perceived ease of use → Intention to use (+)	0.171	3.609*
H ₃ : Technology anxiety → Perceived usefulness (-)	-0.171	-2.959**
H ₄ : Technology anxiety → Perceived ease of use (-)	-0.362	-5.856*
H ₅ : Perceived enjoyment → Perceived usefulness (+)	0.632	8.711*
H ₆ : Perceived enjoyment → Perceived ease of use (+)	0.394	6.104*
H ₇ : Intention to use → Loyalty towards the retailer (+)	0.777	10.790*

Note * $p < 0.000$, ** $p < 0.01$

Both perceived usefulness (H₁) and ease of use (H₂) showed a significant, positive relationship with using the interactive kiosk. However, perceived usefulness had a much stronger effect ($\beta=0.893$, $p<0.000$) on the intention to use than the perceived ease of use ($\beta=0.171$, $p<0.000$). Former retail SST studies (Weijters *et al.*, 2007; Gelbrich and Sattler, 2014) supports our results.

Furthermore, we hypothesised that technology anxiety would negatively affect perceived usefulness (H₃) and perceived ease of use (H₄). The estimated model supported both hypotheses. Technology anxiety, however, had a stronger effect ($\beta= -0.362$, $p<0.000$) on perceived ease of use than on perceived usefulness ($\beta= -0.171$, $p<0.000$). Thus, consumers with higher technology anxiety tended to perceive the in-store SST as more complicated than less anxious respondents. Gelbrich and Sattler (2014) came to the same conclusion because consumers with a high level of technology anxiety tend to feel overwhelmed and unable to use SST technologies (Wang, 2017).

In addition, we assumed that perceived enjoyment using the interactive kiosk would positively affect perceived usefulness (H₅). The perceived enjoyment significantly increased the perceived usefulness of the technology ($\beta=0.632$, $p<0.000$). Likewise, perceived enjoyment had a significant positive effect ($\beta=0.394$, $p<0.000$) on the perceived ease of use (H₆). If consumers found the in-store SST fun and entertaining, they perceived the interactive kiosk as more useful and easier to use (Castillo and Bigne, 2021).

The main aim of this research was to analyse the relationship between intention to use and loyalty to the retailer (H₇). The model estimated a strong positive relationship between intention to use and retail loyalty ($\beta=0.777$, $p<0.000$). Moreover, the TAM model explained 60.3 percent of the variance in loyalty. Thus, respondents who were more likely to try the interactive kiosk perceived themselves as more loyal to the retailer. Thus, they are also more likely to purchase on multiple occasions, form positive opinions about the retailer and recommend it to others. Finally, these consumers tend to reveal stronger preferences and emotional attachments to the retailer. Since this result is novel in the retail SST literature, we compared our findings with online retailing research. For example, Lin and Sun (2009) proved that technology acceptance factors explain consumer loyalty towards online retailers. Furthermore, Ng *et al.* (2019) highlighted a positive relationship between attitudes towards technology use and word of mouth.

Contributions

First, previous in-store SST acceptance research studied the technology isolated from the retail environment (Dabholkar and Bagozzi, 2002; Wang 2017; Park *et al.*, 2021; Kallweit *et al.*, 2014). In contrast, our research created a link between technology adoption and consumer loyalty towards retailers. Thus, the technology is part of the retail offering that improves consumers' shopping experience and satisfaction leading to behavioural

commitment toward the retailer. To our knowledge, this is the first research considering how in-store SSTs strengthen retail patronage.

Second, the literature on retail loyalty has identified several influencing factors like service quality, store atmosphere, low price levels, convenient location, fast checkout, friendliness of salespeople, and convenient parking facilities and opening hours (Pank and Zinkhan, 2006). However, it did not associate in-store technology as a possible source of consumer loyalty. The present research provided empirical evidence that acceptance of in-store SST had a direct positive impact on loyalty towards the retailer. This relationship can be supported by recognising that SSTs are part of the retailers' service quality, leading to higher consumer satisfaction and patronage of the retailer (Lee *et al.*, 2009; Orel and Kara, 2014).

Practical implications

The research findings have implications for retail companies. First, SSTs are not only efficiency-enhancing tools but opportunities to strengthen consumer relationships. Our research showed that in-store SSTs increase loyalty to the retailer. Thus, new technologies strengthen consumer relationships, leading to more frequent and higher value purchases (Reinartz *et al.*, 2000, Evanschitzky *et al.*, 2014). In addition, digital in-store SSTs may appeal to younger consumers (e.g., Generation Z), encouraging store visits.

Research limitations and outlook

Our research is based on cross-sectional data collected in Hungary, limiting the findings' generalizability to one country. Consequently, a multi-country, longitudinal sample would be able to capture the impact of technology acceptance on loyalty to a greater extent. Furthermore, the technology acceptance model could be extended towards the influence factors as well. For example, the concept of service quality (Zeithaml *et al.*, 1996) could be added to the model, including customer satisfaction.

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Keywords*

Self-service technology, Technology acceptance, Consumer loyalty, In-store retailing, Interactive kiosk

Compatible personality between voice assistant and voice user on feelings of love and loyalty

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Keywords Voice User Experience (VUX), voice assistant personality, customer personality, triangular theory of love, intention to use the voice assistant.

Introduction

Retailers integrate voice assistants (VA) on their websites for purchasing opportunities, improved customer experiences, and customer service. According to a study by Gartner, brands that redesign their websites to support voice-search will increase digital commerce revenue by 30%.

Developers are working on algorithms to give VA, social characteristics and specific personalities. VA either as smartphone apps e.g. Siri in Apple's iPhones or as components of specialized smart speakers for home use are revolutionizing consumers' consumption culture and becoming a larger part of consumers' social lives. **Will VA with compatible personality take over as personal shopper and best friend?**

In the American movie "Don't Look Up", named one of the top ten films of 2021 by the National Board of Review and American Film Institute, Mark Rylance, who plays a billionaire computer inventor for the technology company Bash Cellular inspired by Steve Jobs, Jeff Bezos, Elon Musk says that: *"my unspeakable need is to have a faithful friend who would understand and soothe me"*. To achieve this goal, he invented a phone with a VA "Bash Liif 14.3" that is one with our deepest feelings and desires without having to say a word. When the voice user feels: sad, scared and alone. The VA phone "Bash Liif 14.3" will instantly detect his mood through his blood pressure and heart rate. The VA will then respond *"Your vital signs indicate that you are sad, here is something to cheer you up! "*. And a video

appears on the phone screen showing a little puppy on the back of a crowing rooster: "*You are my friend, my best friend, I want to make my best friend happy and I love you*".

Previous literature on VA personality has three main research gaps. The first gap is that no study to our knowledge has analyzed the compatible personality between the voice user and the VA. Research in marketing field analyzed the compatible personality between consumer and brand (Mulyanegara et al., 2009; Ekhlassi et al., 2012). The second gap is that previous studies are limited to analyzing the influence of the VA personality on the consumers' perceived control, satisfaction and intention to use the VA (Poushneh, 2021) without considering the feelings of love and loyalty towards this technology. The third gap is that previous works have analyzed the feelings of love towards the technology (Hernandez- Ortega and Ferreira, 2021) without considering the personality of the VA and the compatibility between the voice user and the VA.

Particularly, this study intends to answer two questions: **1) which voice user personality best matches which VA personality? 2) How compatible personality between voice user and VA influence feelings of love and smart service loyalty?**

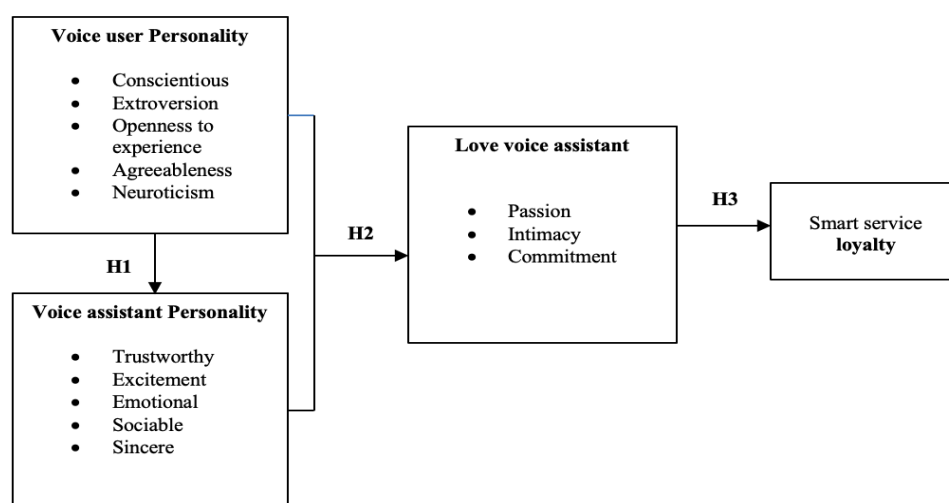
Purpose

Based on consumer personality Big Five Model (Extroversion, Agreeableness, Conscientiousness, Neuroticism, Openness to experience), Aaker's (1997) brand personality (sincerity, excitement), brand personality by Geuens et al. (2009) (responsibility, emotionally) and Poushneh's (2021) VA personality (sociable), this paper aim to understand the influence of compatible personality between voice user and VA on feelings of love and loyalty just as in love relationships (Mousavi, 2017). Evaluation of personality features in voice user by producers and developers can play as a key role in selecting the appropriate VA and prevent the incompatibility and unsatisfactory.

Conceptual framework

This paper examines that with rise of compatibility between human characteristics and VA characteristics, the feelings of love for the technology increases and smart service loyalty drives. The conceptual framework is presented in Figure 1.

Figure 1: The relationship between voice user and VA personalities on love and loyalty



Research in the context of mobile phone or fashion brand personality (Ekhlassi et al., 2012; Mulyanegara et al., 2009) have concluded that the aspects of neuroticism have positive relationships with brand personalities such as sincere and authenticity, and that personalities such as extroversion and openness have positive relationships with emotional brands. The people with extroversion personality tend to buy brands that are active. People with agreeableness personality are friendly and compassionate and are looking for sociable brands, and conscientious people choose the brands that are responsible and trustworthy. The following assumptions are made:

H1. There is a positive meaningful relationship between the voice user's personality and VA personality.

H1a. between conscientious voice user's personality and trustworthy VA personality.

H1b. between extroversion voice user's personality and excitement VA personality.

H1c. between openness to experience voice user's personality and emotional VA personality.

H1d. between agreeableness voice user's personality and sociable VA personality.

H1e. between neuroticism voice user's personality and sincere VA personality.

Research on love in the field of marketing consider that love for nonhuman targets follows analogous psychological patterns to those inherent to interpersonal relationships (Hernandez- Ortega and Ferreira, 2021). Compatible personality makes closer the distance the consumer perceives between the self and the VA, and the more prominent thoughts about the VA he develops. This can create a higher connection between the consumer and the VA and an irresistible longing in the consumer for using it, which leads him to be motivated and to feel attachment. Compatible personality makes the consumer assign high value to the VA, invoking feelings of love, that is, passion, intimacy and commitment:

H2. Voice user's interactions with VA manifesting compatible personality promote feelings of love for the technology: (a) passion, (b) intimacy and (c) commitment.

Previous research identify factors as love, attachment, involvement, or affection as antecedents that best explain the consumer's behavior loyalty (Hernandez- Ortega and Ferreira, 2021). Smart service loyalty is the intentions to continue using a technology and refer to expected future consumption or usage (Venkatesh et al., 2003). Accordingly, the present paper argues that love felt by the consumer for VA generates loyalty.

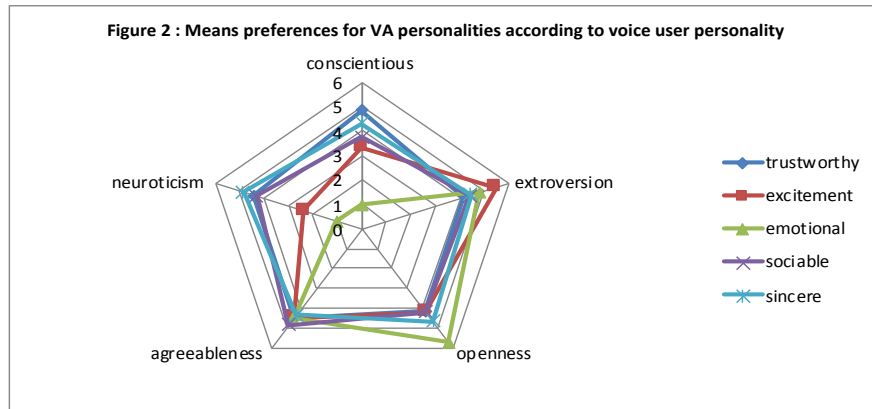
H3. The voice user's feelings of love for his VA: (a) passion, (b) intimacy and (c) commitment promotes service loyalty.

Methodology

To test our hypotheses, a quantitative study was undertaken with regular VA users. The link associated with the study was sent via email and shared on social networks (LinkedIn, Instagram and Facebook). All the questionnaires have been examined with the SPSS software and finally the conceptual model have been tested using SEM on AMOS.

We checked the means of the preferred VA personality with each voice user's personality (Figure 2). We created voice user segments according to their personality trait by splitting by the median. The analysis of the means shows that voice users prefer a trustworthy and sincere VA whatever their personality. However, some preference for VA personality have been identified based on the voice user's personality: the conscientious segment prefers a

trustworthy VA (M=4.82), extroverts prefer an excitement VA (M=5.46), voice users open to experience prefer an emotional VA (M=5.73), agreeable segment prefers a sociable VA (M=4.86) and neurotic users prefer sincere VA (M=4.84).



Findings

Correlation and regression analyses confirm that there is a positive and significant relationship between the voice user's personality and VA personality that validates all the sub-hypotheses of H1. The results show that conscientiousness trait -that indicates how goal-oriented, persistent and organized a person- is positively associated and better match with trustworthy and responsible VA personality that described as reliable, secure and confident (e.g. the need to respect privacy concerns, to protect them from being hacked or misunderstood that could lead to 'bad buys'). Extraversion which means how much a person is energized by the outside world better match with excitement personality of the VA related to being up-to-date, contemporary, and trendy (e.g. the need to be informed about the latest trends in fashion, lifestyle and decor). Openness that refers to how a person's openness to new ideas and experiences is better match with emotional VA which is sensible, affectionate and sentimental (e.g. they desire a friendly VA, kind, and caring that even consider it as a friend). Agreeableness related to how much a person puts others' interests and needs ahead of their own; better match with sociable VA perceived as talkative, social, and charm (e.g. the need to give a sense of continuity to subsequent interactions by using informal language and tell stories). Neuroticism that means how sensitive a person is to stress and negative emotional triggers, is better match with sincere VA that reflects how honest, agreeable, original and appealing the information VA provides (e.g. the need for transparency in product recommendation algorithms).

Structural equation modeling was employed to test the model and hypotheses (H2, H3). The findings presented in Table 1 confirmed all the causal effects proposed in the model except the influences of the compatible personality (openness x emotional) between voice user and VA on intimacy and on commitment, the influence of the compatible personality (neuroticism x sincere) on intimacy and on commitment and the influence between intimacy on loyalty. Hypotheses H2b and H2c are partially validated and hypothesis H3b is rejected.

Table 1: Results of SEM of direct effect of personality compatibility on love and loyalty

Path			Estimate	P	Result
Conscientious x trustworthy	→	Passion	2.04	***	Validated
Extroversion x excitement	→	Passion	3.21	***	Validated
Openness x emotional	→	Passion	3.34	***	Validated
Agreeableness x sociable	→	Passion	2.76	***	Validated
Neuroticism x sincere	→	Passion	1.97	**	Validated
Conscientious x trustworthy	→	Intimacy	2.94	***	Validated
Extroversion x excitement	→	Intimacy	2.53	***	Validated
<i>Openness x emotional</i>	→	<i>Intimacy</i>	<i>NS</i>	<i>NS</i>	<i>Rejected</i>
Agreeableness x sociable	→	Intimacy	2.25	***	Validated
<i>Neuroticism x sincere</i>	→	<i>Intimacy</i>	<i>NS</i>	<i>NS</i>	<i>Rejected</i>
Conscientious x trustworthy	→	Commitment	1.61	**	Validated
Extroversion x excitement	→	Commitment	1.37	**	Validated
<i>Openness x emotional</i>	→	<i>Commitment</i>	<i>NS</i>	<i>NS</i>	<i>Rejected</i>
Agreeableness x sociable	→	Commitment	1.24	**	Validated
<i>Neuroticism x sincere</i>	→	<i>Commitment</i>	<i>NS</i>	<i>NS</i>	<i>Rejected</i>
Passion	→	Loyalty	1.40	**	Validated
<i>Intimacy</i>	→	<i>Loyalty</i>	<i>NS</i>	<i>NS</i>	<i>Rejected</i>
Commitment	→	Loyalty	2.25	***	Validated

The results show that all forms of compatible personality between the voice user and the VA favor the love component; passion. However, not all compatible personality forms promote the components of feelings of love; intimacy and commitment. According to our results, both forms of compatible personality (openness x emotional) and (neuroticism x sincere) do not experience the feelings of intimacy and commitment towards the VA, which means that these compatible personality forms do not lead to establishing long-lasting relationships with the VA and consumers can do without its services. They only use it for fun. Finally, results show that only passion and commitment have a positive influence on loyalty and intention to continue to use the VA in the future. According to Sternberg's triangular theory love, this type of love is called *Fatuous love*; commitment and passion are present while intimacy or liking is absent. Strong attraction push for commitment early in the relationship. There is no intimacy and the commitment is premature. Partners rarely talk seriously or share their ideas. This result makes us wonder about the degree of intimacy we can have with the VA despite a compatible personality.

Contributions

Our study makes four important contributions to the literature.

First, this is one of the first empirical papers that addresses the influence of compatible personality on love brand. Research in the field of marketing limited their analyze to the relationship between brand personality and customer personality without considering the influence on love feelings and loyalty (Mulyanegara et al., 2009; Ekhlassi et al., 2012).

Second, this paper contributes to research on love VA that use for theoretical basis the triangular theory of love (Sternberg, 1986). The literature has not explored the style of love between the voice user and VA. Our results allow to identify their style of love, specifically: *Fatuous love*.

Third, against previous research on love in marketing field, mainly focused on the intimacy component, the present paper finds that intimacy with VA has no effect on loyalty and some forms of compatible personality have no effect on intimacy. This result shows the reluctance

of users to share personal information with the VA and privacy concerns. This result enriches research on “illusion of intimacy” and parasocial relationship with VA and shows that the intimacy of the voice user with the VA has its limits.

Finally, this research proposes additional psychological profiles of voice-user segments based on their personality trait and the compatible personality with VA. The other segmentation method proposed in the literature is based on functionality criteria from diffusion of innovations’ theory.

Practical implications

Contributions of the study to practice concern producers VA and VA brands.

Producers should introduce specific technical features for each personality trait and be able to develop VA with different personalities. For example, the conscientious consumer best fits the personality of a trustworthy and responsible VA. The VA must be able to inform the consumer of the latest piracy trends and the solutions in place to circumvent them in order to reassure them. The brand VA should communicate that their VA is responsible. Extroverted consumer better matches with the VA's exciting personality. The VA must be able to inform the consumer about the latest trends in fashion, lifestyle and decor and say things that make them feel good and value them in front of their guests. The brand VA should communicate that their VA is innovative and creative. Open to experience consumer better matches with the VA's emotional personality. The VA must be able to use neuroscience and tools for measuring consumers' physiological reactions (quantified self) via the mobile app (breathing, skin temperature, heart rate, etc.) to predict and understand their emotional state and adjust responses to ensure the voice user's continued well-being. The brand VA should communicate that their VA is friendly. Agreeable consumers are a better match for sociable VAs. The VA must be able to converse, to chat as if they were a person and not just answer questions. The brand VA should communicate that their VA is social. The neurotic consumer is more likely to choose a sincere VA. The VA must be able to be totally transparent when giving advice on products: customer opinions, algorithm used, etc. The brand VA should communicate that their VA is honest.

VA brands can conduct personality tests to their consumers using the measurement scales proposed in this research based on human five-factor model of personality “the Big Five”. The goal is to offer them a VA with a compatible personality to enhance the Voice User Experience and foster feelings of love and loyalty towards it. Retailers can be trained to conduct the personality test to their customers to help them choose their compatible personality with VA.

Research limitations and outlook

Alternative methods for future research could be Design thinking to suggest innovative VA proposals compatible with the specificity of each user's personality.

Future research is needed to understand, on the one hand, the degree of intimacy that does not compromise the privacy of the user and, on the other hand, the threshold of tolerance of anthropomorphism, i.e., how far can producers go in the similarity between man and machine?

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Keywords

In-store technologies, SME, Retail, Organisational resilience, Digitalisation

Introduction

Due to new technologies and changes in consumer purchasing behavior, we are amid a technological retail revolution (Grewal *et al.*, 2021, 2020). Retailers have to re-position themselves to survive and flourish in this environment (Grewal *et al.*, 2021; Alexander and Kent, 2021; Deloitte, 2020). A total of 5.5 million companies of the retail and wholesale sector are Small and Medium Enterprises (SMEs), representing one-third of all SMEs in the European Union (EuroCommerce, 2022). Surprisingly, only few scientific papers have addressed how technologies transform SMEs in brick-and-mortar retail (Lorente-Martínez *et al.*, 2020).

Purpose

Empirical studies focusing on digital strategies of small-scale brick-and-mortar retailers are rare. Lorente-Martínez *et al.* (2020) analysed the drivers of in-store technology adoption by SMEs, building on the theoretical concepts of technology organization environment (TOE) and technology acceptance model (TAM). Their results show that the attitude towards technology is the strongest predictor of the intention to adopt in-store technologies. This goes in line with the results of Bollweg *et al.* (2020), who identified manifold barriers, including

the lack of available resources for the successful implementation of digital strategies by local owner operated retail outlets. Particularly, the lack of human and financial resources (Löfqvist, 2012) forces SMEs even more to scrutinize whether and which digitalisation strategy strengthens their organisational resilience. Resilience is a key factor for entrepreneurial systems to adapt to change and still sustain its operations under new, more complex, and uncertain conditions (Potrich *et al.*, 2022). Organisational resilience describes how enterprises “[...] are able to maintain positive adjustments under challenging conditions. Resilient firms actually thrive and become better in part because they faced and overcame serious challenges.” (Lengnick-Hall *et al.*, 2011, p. 243). Thus, we identify which factors contribute small-scale stationary retailers’ organisational resilience when it comes to digital transformation.

Methodology

Drawing on the concept of organisational resilience as well as literature on retail technologies, this paper takes a qualitative approach. We conducted two studies in a western European country, i.e. (i) five focus groups with 24 owners of small-scale retail outlets and expert interviews in 2019 and (ii) a survey among 102 owners of small-scale retail outlets in urban areas in 2020. In the first study, participants discussed their digital strategy and related aspects. Moreover, they tested selected in-store digital technologies: Augmented Reality based applications (e.g., smart mirror), and a head mounted virtual reality application for kitchen aid products in a virtual shopping environment. The collected data was analysed using content analysis. In the second study, we conducted computer assisted standardised personal interviews among 102 owners of urban small-scale retailers. The measures included in the questionnaire were: digital orientation, digital competence (Bouncken and Barwinski, 2021), which and how many digitalisation projects they have implemented, and organisational resilience (Schulte *et al.*, 2016). To analyse the collected data, we applied fuzzy-set qualitative comparative analysis (fsQCA) (Ragin, 1987; Ragin, 2000) an analytic technique which combines quantitative and qualitative methodologies.

Findings

The first study revealed that ‘basic technologies’ are the primary challenge for owners and managers of small-scale stationary retail outlets. Only a few participants have already implemented advanced in-store technologies (e.g., Augmented reality application at the store window). We furthermore identified organisational-related (e.g., digital strategy, partnerships) and customer-oriented factors (e.g., barriers, hedonic and utilitarian values) that must be considered, when implementing advanced instore technologies. To give one example, several shop owners stressed that sales personnel should rather be supported than replaced by digital in-store technologies: „*This tool [note: tablet] can be used when talking with a customer. (...) But I can't and don't want to leave him alone with any tool.*” (Shop owner, female, 51 years old).

Based on a fsQCA, we identify several pathways that lead to higher digitalisations scores (i.e., number of successfully implemented digitalisation projects) and higher organisational resilience, both leading to improved competitive positions, higher markets shares, and more efficient and effective processes. E.g., high digital orientation and cooperation are a successful combination for a higher digitalisation score as well as high digital competence and cooperation.

Contributions

Our findings identify specific factors contributing to the organisational resilience of small-scale stationary retailers when it comes to digital transformation. This research thus offers

new knowledge in terms of which factors are crucial for small-scale retailers first in adopting and integrating in-store technologies and second their organisational resilience. Several practical implications for small-scale retailers are also identified.

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Keywords

Segmenting the post-Covid online shopping switching intention

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The spread of the Covid-19 pandemic has accelerated the online shopping, creating an unexpected surge for digitalisation. Due to continuous lockdowns and a greater risk of contagion from Covid-19, shoppers have begun to approach the online channel also for food purchases. Online fresh food shopping frequency raised 71.2% during the pandemic (Lu et al., 2022). Recent studies showed that although the pandemic has offered ample opportunities for retailers grappling with the implementation of the online channel, the lack of professionalism of brick-and-mortar retailers can nullify the opportunities opened by Covid-19 for their online sales (Becker et al., 2021).

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Do customers evaluate competence of SME retailers and retail chains differently in context of online product presentations?

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Keywords

SME Retailer, Retail Chains, Online Product Presentation, Competence

Introduction

Local online shopping platforms offer a virtual marketplace for physical retailers. These platforms limit their target group to local customers in order to be able to offer services such as click-and-collect or same-day delivery. While local online shopping platforms provide the infrastructure, it is the task of retailers to place their products on the market and make them accessible to consumers through product descriptions and images (Hsieh and Tsao 2013). For retailers it is important to present the information in an appealing way to attract the customer's attention because especially in modern, multi-faceted and omni-/cross-channel environments, consumers are literally overwhelmed with information about products and services (Grewal, Roggeveen, and Nordfält 2017). No study has yet addressed if the effects of inferior product presentations on consumer evaluation depend on retail format and how they affect not only outcome variables of the retailer, but also of the brand of the presented product. By investigating this, we provide information on whether customers are more likely to oversee poorly presented product presentation of big retail chains or SME (small medium enterprise) retailers. Hence, this study proposes the research question if a different quality of product presentation on a local shopping platform influences customer's perception differently regarding the retail format.

Purpose

Even though it is possible for any retailer to place products online nowadays, small retailers are facing major challenges, especially also due to the effects of the current COVID 19 crisis. Already before the Corona crisis, online retailing was on an upward trend (Doplbauer 2015). Due to the Corona crisis, shopping on the Internet became partly indispensable. Small retailers in particular have suffered greatly from the Corona crisis. Often lack the financial means or the know-how to offer products adequately online. Therefore, it is necessary to investigate which challenge is so high, especially for the smallest businesses. In this context, the retail format is argued to be a crucial factor in context of customers' perception of e.g. product presentations. In detail, the intensity, with which retail chains (e.g. Walmart, Tesco) are able to use the world wide web or new forms of technology, clearly differ from the one of an SME retailer with limited human and financial resources (Nguyen, Newby, and Macaulay 2015).

Conceptual framework

Resource advantage theory combines heterogeneous demand theories with resource-based theory of the firm (Hunt and Morgan 1995). It implies an impact of product presentation evaluation on consumer perceived retailer competence as it reflects firms' varying abilities to obtain resources needed to compete (Thoeni et al. 2016). In the retail context, RA theory suggests that retailers and consumers have imperfect information and that certain resources (e.g. the ability to present a product as professional as possible in online stores) are among the tangible and intangible entities available to the retailer (Hunt, Arnett, and Madhavaram 2006). Research shows that SME retailers can gain strategic advantages over retail chains when it comes to service quality (Barber and Tietje 2004; Ellis and Kelley 1992; Goodman and Remaud 2015). According to Zielke and Komor (2014) our paper uses the specific term of retail format in order to differentiate between the SME retailer and the retail chain. In line with resource advantage theory, we argue that the impact of the quality-level of the product presentation depends on the retail format of the retail organization (figure 1). As outcome variable, we focus on consumers' purchasing intentions at the retailer and towards the brand of the presented product as well as consumers' perceived image of the retailer and of the presented product. Additionally, we argue that perceived retailer competence mediates this relationship.

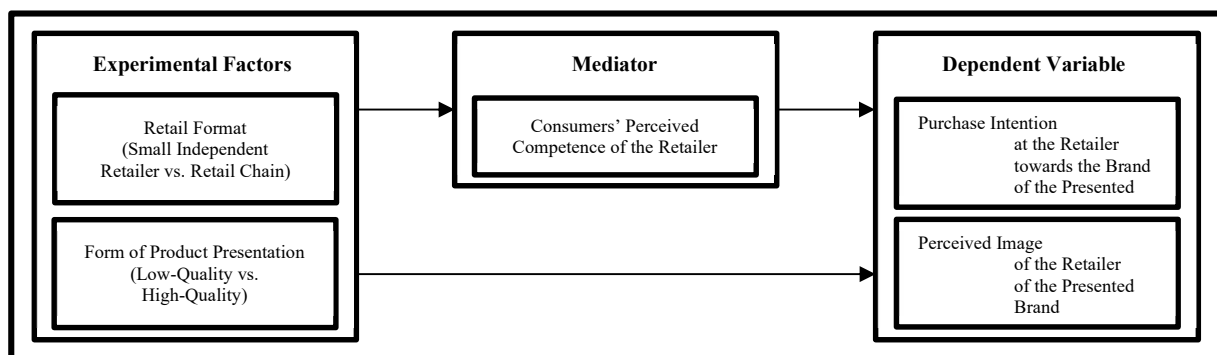


Figure 1: Theoretical Model

We conducted the following hypotheses:

H1: The impact of product presentation quality (low vs. high) on consumers' purchase intention (a) at the retailer and (b) towards the brand of the presented product is lower for SME retailers than for retail chains.

H2: The impact of product presentation quality (low vs. high) on consumers' perceived image (a) of the retailer and (b) of the presented brand is lower for SME retailers than for retail chains.

H3: The impact of product presentation quality (low vs. high) on consumers' perceived competence of the retailer is lower for SME retailers than for retail chains.

H4: Consumers' perceived competence of the retailer mediates the influence of product presentation quality (low vs. high) on consumers' purchase intention (a) at the retailer and (b) towards the brand of the presented product as well as consumers' perceived image (c) of the retailer and (d) of the presented brand.

Methodology

An experiment with a 2 (SME retailer vs. retail chain) x 2 (high vs. low-quality product presentation) between-subject experimental design was conducted online (see Figure 2). To investigate the effects of different qualities of product presentations by SME retailer vs. retail chains on perceived retailer competence, image and purchasing intentions, four different scenarios were created. They were randomly assigned to the test persons. We manipulated low-quality product presentation by showing an incomprehensible and incomplete product description on the one hand and a product image showing a product that has already been used. Retail format was manipulated via the format of the retailer (owner-managed SME retailer vs. retailer affiliated to a retail chain). Within a pre-test with 24 participants we could show the general difference between these experimental factors.

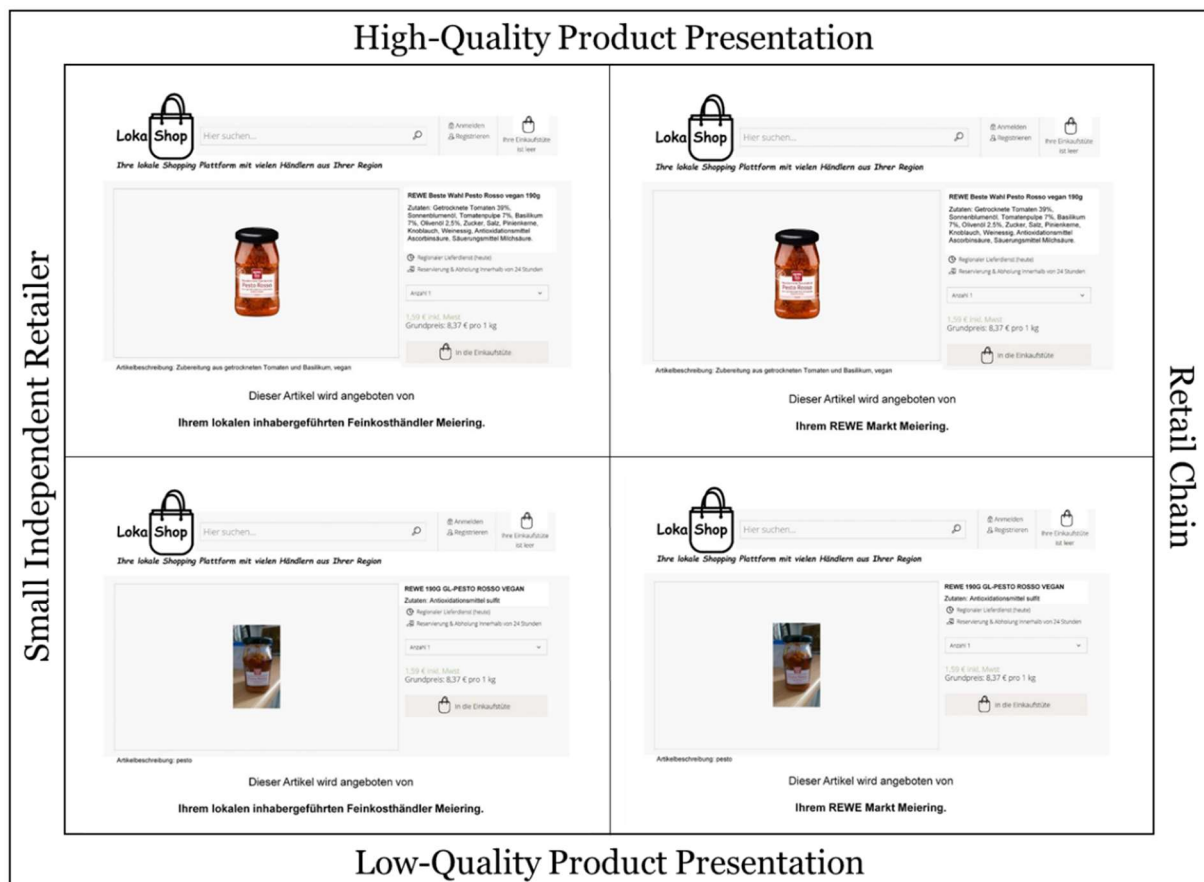


Figure 2. Experimental Scenarios

Findings

We conducted several ANOVAs to analyze our hypotheses. We can show a significantly higher mean value in case of a retail chain in comparison to a SME retailer. Even though we postulated this effect, the power of this effect is unexpectedly high. Focusing on the planned contrasts with respect to consumers' purchase intention at the retailer, the scenario with low-quality product presentation shows a by far stronger impact between the two retail formats ($t = -4.231$, $p < 0.001$) than in the case of a high-quality presentation ($t = -2.549$, $p < 0.05$). Nonetheless, an interaction effect cannot be stated, thus we cannot support H1 completely. Regarding consumers' perceived image, as before, the moderating influence of the retail format on consumers' perceived image of the retailer is significant again. However, here we can find a significant interaction effect. The same applies to consumers' perceived image of the presented brand. Moreover, the already identified stronger impact within the low-quality product presentation can be found once more for the perceived image of the retailer (high-quality: $t = 0.333$, $p > 0.05$; low-quality: $t = -3.742$, $p < 0.001$). Nonetheless, we can give full empirical support for H2. Regarding the impact on perceived retailer competence as well as a moderating effect of retail format, we first once again find a significant overall effect of retail format. For low-quality product presentation the effect is higher ($t = -2.655$, $p < 0.01$) in contrast to a more balanced mean in case of a high-quality product presentation ($t = .008$, $p > 0.05$). The interaction effect in this case is significant as well. Therefore, we can give empirical support to H3. To test the proposed mediating impact of perceived retailer competence within the relationship between quality-level of the product presentation as well as retail format and the dependent variables, we conducted multiple analyses of covariance (ANCOVAs) based on Hayes and Preacher (2013) as well as Song and Zinkhan (2008). Here, the experimental factors are included as independent variables and the potential mediators as covariates. The actual mediation is shown by a decrease of the mean square (MS) of the interaction effects (Song and Zinkhan 2008). Our findings show that, except for consumers' purchase intention of the retailer, we can give fully empirical support to H4.

Contributions

By following the research question, if a different quality of product presentation on a local shopping platform influences customers' perception differently regarding the retail format, our research contributes to the knowledge of *Retail digitalization and In store/ online promotions* in several ways. Based on resource advantage theory and the information processing paradigm we examine how product presentation quality on local online shopping platforms by different types of retailers (small retailer vs. retail chain) affects consumer evaluations of retailer competence as well as their purchase intentions and image of the retailer and the presented brand. Hence, our research contributes to the knowledge by adapting RA theory to explain if consumers perceive quality-differences within product-presentations on online shopping platforms differently with respect to retail chains vs. SME retailers. Moreover, IP theory helps to provide theoretical foundation concerning differences in online store quality (manipulated via low- vs. high-quality product presentation in our study). Results state that consumers seem to rather tolerate inaccuracies from a retail chain than from SME retailers.

Practical implications

The findings emphasize the relevance for SME retailers to make sure that low-quality product presentation does not find its way to the local online shopping platform, as consumers' perceived competence is of decisive relevance. In fact, the consequences on consumers' perception and reaction for SME retailers seems to be by far more extensive as for retail chains. A smart, high-quality product presentation might not just increase consumer's perceived retailer competence, purchase intention and perceived image in the short-run, but

also helps saving valuable monetary as well as human resources in the long-run. Furthermore, an adequate training of the employees responsible for those online store contents or even the retailer her/himself, is decisive in order to understand the mechanisms of online shopping and to prevent unnecessary and quite expensive (monetary- or perceived competence-wise) misunderstandings.

Research limitations and outlook

As, supplementary to online product presentations on local shopping platforms and retailer's websites, today's advertise and services are also processed with the help of social media, a deepen analysis in this environment seems to be important within future research. Hereby, an explicit focus on the professionalism of retailer social media sites and the impact of retailer's retail format in context of consumer's purchasing as well as overall behavioral intentions might deliver new perspectives. In this line, a differentiated analysis, e.g. to what extent Facebook- or Instagram-efforts are necessary in order not to face negative effects, is especially for SME retailers of importance as well as the question how retailers can ensure professional content in general within social media.

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Keywords

SME Retailer, Retail Chains, Online Product Presentation, Competence

NFT For NFTs? Consumers' Willingness To Pay For Non-Fungible Tokens

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Keywords

NFT, Need for Touch, Need for Uniqueness, Psychological Ownership, Customization

Introduction

Non-fungible tokens (NFT, hereafter) can be defined as “*digital assets that record the ownership of intangible, digital (e.g. videos, images, tweets) or tangible items (e.g. real-world artwork, event tickets) using blockchain technology*” (Chohan and Paschen, 2021, p. 3). NFTs are becoming increasingly popular in recent times due to their transparency and ability to univocally identify the ownership of a good (Dowling, 2021). Among the early adopters of NFTs, artists and content creators envisioned the potential of this technology to monetize and protect their masterpieces (Conti and Schmidt, 2022). Recently, the NFT of the video featuring a legendary shot by LeBron James was sold at more than \$200,000, and David Cronenberg offered the NFT of his kidney stones at the starting price of \$30,000. At the same time, NFTs are expected to receive a significant boost by the Metaverse thanks to the possibility of obtaining ownership of the digital twins of products to be used in the virtual environment. Henceforth, it appears that NFTs might have the potential to revolutionize the way people buy, and conceive the consumption and ownership of goods. On the one hand, literature has focused on the technicalities of NFTs and/or adopted the perspective of the seller. On the other hand, however, there is still a void in the extant literature on how consumers perceive the purchase and consumption experience related to NFTs. This is not a trivial issue because of some intrinsic characteristics of NFTs. Specifically, NFTs are non-fungible. This implies that each NFT possess its own unique identity and cannot be interchangeably exchanged with any similar product. For example, a \$50 banknote is fungible because it can be exchanged with any other \$50 banknote without any difference in their values. Conversely, each NFT of a luxury apparel clothing item has its identity which shapes its value. Accordingly, literature is needed to understand how consumers develop their value perceptions and, ultimately, their willingness to pay for the mere ownership of a non-fungible object.

Purpose

The present work aims at unfolding the psychological processes underlying consumers' value perceptions of NFTs and their willingness to pay. In order to accomplish this research goal,

the present work relies on the Theory of Psychological Ownership (Pierce et al. 2001) and addresses the role of individuals' Need for Touch (Kuhn, Lichters, and Krey, 2020) and Need for Uniqueness (Tian, Bearden, and Hunter, 2001) as competing forces shaping consumers' proclivity to engage in the purchase of the NFT of a good. Indeed, the Theory of Psychological Ownership has been used to describe the value consumers draw from savoring the mere possession of a good (Jussila et al., 2015). In this vein, prior studies have interpreted the consumption of digital music streaming services in the light of the theory of psychological ownership since these online services allow consumers to obtain value from listening to music that they do not possess (Sinclair and Tinson, 2017). We argue that a similar line of reasoning applies to the purchase of NFTs. Due to their intrinsic intangibility which does not entail the consumption, but just the ownership of the NFT, we advance that individuals will perceive value from the mere ownership of the NFT regardless of the actual fungibility of the good they are buying. However, some consumers might display a higher reliance on the possibility to touch and feel of the consumption. This tendency is typically referred to as Need for Touch in the extant literature (Peck and Childers, 2003). We expect that the higher individuals' Need for Touch, the lower the value they associate to the purchase of NFTs. At the same time, NFTs are unique by definition, thus providing consumers with the opportunity to derive value from the possession of such a unique object. With these regards, we expect that the higher individuals' Need for Uniqueness (Belk, 1988), the higher the value they associate to the purchase of NFTs. Results from this research might be beneficial to retailers to better understand consumers' perceptions about the purchase of NFTs, so that they might introduce new business models which would allow them to sell the ownership of NFTs in their digital stores beyond selling goods or services for consumption purposes.

Conceptual framework

In order to explain the effect of the mere ownership of a good by means of NFTs, we rely on the Theory of Psychological Ownership which defines psychological ownership as individuals' feeling of possessiveness toward a target object (Pierce et al. 2001). Accordingly, psychological ownership is distinct from the legal possession of a good, but it is rather related to an individual feeling stemming from the mere possession of the product (Fuchs et al. 2010), even in absence of legal possession or actual consumption (Shu and Peck, 2011). As a consequence, psychological ownership comes into play also when individuals psychologically perceive the possession of a product albeit not being able to consume it. Therefore, we advance that the non-fungibility of NFTs increase the level of psychological ownership since it makes each product associated with a NFT more unique and more univocally associated with the self. Given that consumers display different levels of Need for Touch when evaluating a product (Jha et al. 2019) which alter their reliance on the possibility to materially interact with the product, we advance that higher levels of consumers' Need for Touch hinder the sense of psychological ownership for NFTs. Conversely, consumers' Need for Uniqueness fuels the sense of psychological ownership (Simonson and Nowlis, 2000) for NFTs since the non-fungibility implies the uniqueness of the product (Chohan and Paschen, 2020). Finally, we predict that higher sense of psychological ownership of a product lowers consumers' price elasticity (Shu and Peck, 2011).

Another relevant aspect pertaining to consumers' perceptions of psychological ownership related to NFTs deals with the channel where individuals can exploit the ownership of the product. Indeed, NFTs allow the use of the product both on digital (e.g. on the Metaverse, Fonarov, 2022) and on physical (e.g. to certify the authenticity of physical products, Wallace-Brewster, 2022). When dealing with spatial distance, previous literature has documented a tight connection between online versus offline purchases and construal level (Liu, Batra and Wang 2017). Spatial distance is one of the facets of psychological distance, alongside

temporal, social, and probabilistic distance (Liberman, Sagristano, and Trope 2002). Research has shown that objects at different spatial distances (e.g., one's neighborhood vs. a faraway country; on top versus bottom of a retail shelf, as in Wongkitrungrueng, Valenzuela, and Sen 2018) trigger different levels of construal. In this vein, the offline channel is characterized by a higher level of tangibility of the products that are present in the here-and-now environment of the consumers than the online channel (Darke et al. 2016). Conversely, in the online channel, consumers do not have the possibility of physically interacting with products because of the higher spatial distance separating them from the physical products. Furthermore, since the central assumption of CLT is that individuals adopt increasingly lower levels of construal to represent psychologically proximal objects and events (Trope and Liberman 2010), we propose that the online channel, compared to the offline channel, triggers different levels of construal via higher spatial distance perceptions. Accordingly, we propose that when NFTs involve the exploitation of the ownership of a product on digital channels, individuals will adopt a higher level of construal which makes them perceive a lower level of psychological ownership due to the low levels of concreteness associated to the NFT.

Methodology

In order to test our conceptual model, we implemented three experimental studies where we manipulate the fungibility of the good (Study 1: fungible vs. non-fungible vs. both fungible and non-fungible; Study 2: non-fungible vs. both fungible and non-fungible), and the product customization (Study 2: no customization vs. customization) in the fashion apparel clothing setting. Need for touch and Need for Uniqueness were measured by using the scales developed by Peck and Childers (2003) and by Tian and colleagues (2001) respectively, to serve as moderators of the effects of the independent variables on psychological ownership. Psychological ownership was measured as in Li and Atkinson (2020), and willingness to pay was measured as in Shu and Peck (2011).

Findings

Results from the three experimental studies overall showed that psychological ownership plays a pivotal role in driving consumers' willingness to pay for the NFTs of products. Specifically, the results of our two experiments inform about the specific features of NFT and how they impact the level of psychological ownership by consumers. In detail, results from Study 1 show that the non-fungibility characterizing NFTs increases psychological ownership as long as the NFT is paired with the physical product. Instead, the NFT alone yields lower levels of psychological ownership than the product without the NFT, that is to say the product which is not unique. Psychological ownership, in turn, increases individuals' willingness to pay. Similarly, Study 2 shows that the fungibility of the good interacts with the level of customization in affecting consumers' psychological ownership. When consumers can customize the product, no differences in the level of psychological ownership emerge as a function of fungibility, whilst when consumers cannot customize the product, psychological ownership is higher when consumers acquire a non-fungible token of the product. Need for Touch negatively moderates the relationships leading to psychological ownership, whilst Need for Uniqueness was found not to moderate the relationships. This is to say, the characteristics of NFTs do not always lead to higher psychological ownership since consumers high on Need for Touch display lower levels of psychological ownership.

Contributions

To the best of the authors' knowledge, this is among the first studies addressing consumers' perceptions of NFTs as alternative purchase solutions for distribution channels. In doing so, the present research builds on the Theory of Psychological Ownership which allows to understand how individuals perceive products whose they exert the mere possession on,

without necessarily consuming them. This emphasis on psychological ownership allows to understand consumers' value perceptions in the form of willingness to pay for the NFT of a product.

Practical implications

NFTs represent an innovative way for consumers to acquire the ownership of products which might potentially change the habits of consumers to make purchases both online and offline. Our results stimulate retailers to acknowledge the potential of NFTs to sell products to their customers. With these regards, findings from the two studies presented in the present work stimulate retailers to leverage on the non-fungibility and on the exclusive level of ownership of products to leverage on consumers' need for touch. Indeed, retailers might consider that, at least within a segment of consumers, need for touch is an important aspect related to consumption, so that the material side of consumption would be important to keep high levels of psychological ownership of products' NFTs which ultimately enhance consumers' willingness to pay.

Research limitations and outlook

Results from the present research should be read in the light of its limitations which set the stage for future researches. First, the present studies focused on a single product category. It might be that different product categories, with different levels of involvement in the purchase process and/or different levels of materiality, lead to different effects of NFTs on consumers' perceptions and intentions. Thus, future studies might apply a similar theoretical framework to different product categories. Second, the present research focused on products which were purchased online for offline consumption. However, it might be that consumers would display different reactions whether purchasing NFTs of product online versus offline. At the same time, if the product which the NFT stands for is envisioned for consumption in an online environment, need for touch might be less relevant, thus altering the effect of NFTs on psychological ownership. Finally, our work relies on a self-stated measure of willingness to pay as dependent construct. Although this is common practice in consumer behavior research, future studies might capture consumers' willingness to pay by means of behavioral variables which would enhance the ecological validity of our findings.

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Keywords

NFT, Need for Touch, Need for Uniqueness, Psychological Ownership, Customization

Instore retail technologies - a computer sciences perspective

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Keywords

Introduction

Since the outbreak of COVID 19 eCommerce has grown two to five times faster than before the pandemic. Many consumers used digital channels for the first time and roughly three quarters of those who did, say they will continue to do so when things return to “normal”. (McKinsey 2021). Stationary retailing concepts are increasingly put under pressure due to this development, although with around 80 percent of total retail sales worldwide, brick-and-mortar concepts are still dominating (eMarketer 2022). However, many scholars (e.g. Grewal et al. 2017) and practitioners (e.g. Shaverien 2018, Centre for Retail Research 2022) consider stationary retailing to be under a disruptive change and predict a merger of online and offline into multi- or omni-channel concepts.

Consequently, recent conceptual studies map out future concepts of stationary retailing and associated innovative technology. Willems et al. (2017) categorize retail technologies according to their associated shopping value (cost/effort reduction; utilitarian value; hedonic value) and path-to-purchase (need recognition; information search; evaluation of alternatives; purchase; post-purchase). They find that especially the pre-purchase and purchase phase of the customer journey are technologically supported, providing a mostly utilitarian value to customers. A result also supported by Rogveen and Sethuraman (2020) who develop an integrative framework based on the three typical phases of the customer journey (pre-transaction; transaction; post-transaction) and categorize forty existing technologies into six technology nodes (needs management technology; search engagement technology; purchase transaction technology; physical acquisition technology; follow-up service technology; loyalty management technology). Reinartz et al. (2019) propose five new ways of customer value creation triggered by new technologies (automation; individualization; ambient embeddedness; interaction; transparency & control) and categorize technologies accordingly. They conclude that the importance of these sources of value creation depends strongly on the purchase situation. Depending on the branch a retailer is operating in, technology-driven players will have a higher or lower chance to challenge the traditionally dominant position of brick-and-mortar stores. In this context, Hoyer et al. (2020) define three types of new technologies (internet of things (IoT); augmented reality/virtual reality/mixed reality (AR/VR/MR); virtual assistant/chatbot/robot) and categorize these technologies according to three typical stages of the customer/shopper journey (pre-transaction; transaction; post-transaction). According to their analysis, IoT seems to predominantly support customers in a pre-transaction phase through the provision of relevant information on products and services. AR/VR/MR are likely to have the highest impact during transaction and post-transaction by augmenting customer experience beyond physical and upgrading and enriching consumption. Virtual assistants, chatbots and robots seem to be of relevance in all phases of the customer journey, helping companies to partner up with customers by providing assistance in all kinds of interaction scenarios. Grewal et al. (2020) categorize innovative and futuristic retail technologies from a consumer value perspective using a 2x2 matrix based on convenience level (high/low) and social presence (high/low). They conclude, that technologies providing a high level of convenience and a high level of social presence enhance the vividness of a product or experience and therefore drive the sales of a retail business. Finally, a review by Shankar et al. (2021) offers a holistic framework for how technology is changing retail. Covering the impact of technologies on different stakeholders, they define three broad categories based on users of technology (customer, employee or supplier) and discuss possible future scenarios and technology use. They conclude that technology will help (i) retailers to maintain social distance to keep shoppers and employees safe, (ii) manufacturers and service providers to supply directly to consumers, (iii) retailers to sell products and

services in hybrid bundles (e.g. a TV plus installation service), (iv) retailers to rent or share products and services instead of selling them, and (v) will help to create new types of retailers.

Purpose

Recent conceptual papers provide a holistic and multi-perspective view on the impact of tech in stationary retailing. Technology is going to disrupt the retailing industry on many levels and from a multitude of perspectives. In this context, most of the presented reviews and conceptual studies argue predominantly from a retailing and marketing literature perspective. They form different clusters of technology based on their impact on different stakeholders within the customer journey and value creation processes. Technology itself is strongly defined by use cases and best practice examples published in practitioner journals. However, research on the topic of retail technology is interdisciplinary by nature. Therefore, also a focus on literature from technical academic disciplines is necessary. Research in computer sciences provides a base for retail technology innovations and scholars in retailing and marketing should be more aware of the state of the art in this discipline. The study at hand closes this interdisciplinary research gap by providing a state-of-the-art review on instore retail technologies in computer science literature.

Methodology

The approach carried out in this work is based on a systematic literature review as proposed by Snyder (2019). Our goal is to compile an overview on publication activities in the computer science field regarding new technologies applied to the stationary retail environment.

As a first step, to gather all relevant articles, we consulted prominent literature databases from the Association for Computing Machinery (ACM), the Institute of Electrical and Electronics Engineers (IEEE), Springer Nature and Elsevier. A query consisting of three search categories was performed on each database. The search scope was limited to the title, keywords and abstract. Each search category consisted of various synonyms and words with similar meaning to make sure no relevant work was neglected. Overall, all three categories were joined by a logical AND, while all items within a category itself were joined with a logical OR. The asterisk (*) in the queries was used to indicate a wildcard. The first search category specified the application of technologies and digitization and consisted of the terms: *technolog* OR smart* OR digital* OR digitization OR futuristic*. The second search category was used to reduce the results to the retail environment or omni-channel applications and comprised of the terms: *retail OR brick-and-mortar OR physical store OR physical shop OR stationary retail OR omni-channel OR omnichannel OR in-store OR point-of-sale OR offline retail* OR off-line OR grocery OR grocery retailing*. The third category was introduced to limit the results to studies which explore customer-oriented technologies and included the terms: *customer OR consumer OR shopper OR buyer OR B2C OR purchaser OR client OR patron*.

The query was performed on each data base and initially resulted in a total of 2,366 articles. To ensure a certain quality standard, we only queried for peer-reviewed publications. Since the scope of Springer Nature and Elsevier is not limited to the field of computer science, other related fields (e.g. economics, marketing, management) were also present in the database. To primarily focus on the retail applications initiated by the field of computer science, all articles appearing in journals listed in the marketing, management and retailing sections of the VHB-Jourqual 3 ranking were discarded. As a next step, a two-stage manual screening of title and abstract was carried out. Only empirical research studies investigating

technologies related to a brick-and-mortar retail setting were included in our review. Ultimately, this resulted in a total of 135 articles. We used a deductive content analytical approach to gather a deeper understanding of the nature and structure of the identified articles. Based on Willemsen et al. (2017), Reinartz et al. (2019), Hoyer et al. (2020), and Rogeveen and Sethuraman (2020) we identified the initiator and operator of technologies (manufacturer; retailer; customer), categorized technologies according to the provided consumer value (automation; individualization; ambient embeddedness; interaction; transparency & control) and classified the stage in the path to purchase the technology is used in (pre-transaction; transaction; post-transaction). Furthermore, using an inductive content analytical approach, we identified the type of technology used and categorized it into three broad categories (sensor technology; service technology; data science).

Findings

The majority of identified studies (more than 80 percent) investigated technologies which are potentially initiated and operated by retailers. Typical technologies associated with this category are smart shopping carts (e.g. Bitá et al. 2021), instore customer location tracking systems (e.g. Alipio et al. 2020) and check out systems (e.g. Sinha et al. 2019). Only a minor number of studies (less than 15 percent) dealt with technologies initiated and operated by manufacturers of products and services. In this context, mostly smartphone applications were researched. These applications provide typically information about offers (availability of promotions or services etc.) (e.g. Meegahapola et al. 2017) or helped to ease the customer journey (e.g. self-scan apps) (e.g. Huang et al. 2020). Very few studies (less than 10 percent) investigated technology which is owned and initiated by the customer. Typically, smartphone applications were of interest in this category. Again, applications which provided additional information on the assortment (e.g. on the origin of a product or service) or made shopping easier (e.g. an application to virtually try on clothes) (e.g. Rashid et al. 2015) were of interest in computer science research.

A large number of the identified studies investigated innovative retail technologies without any theoretical underpinning in retail, consumer or marketing research. Therefore, only a few studies accounted for different consumer values as proposed by Reinartz et al. (2019). The majority of categorized studies dealt with technologies which provide (i) value through automatic operation without active human input (automation), (ii) the integration of processes, products and communications into customer's routines (customer embeddedness) and/or (iii) the provision of superior information, education or insights to the product use (transparency and control). Predominantly, services were based on tracking data of shopping carts/baskets, products or customers. Typical investigated tracking technologies were based on radio-frequency identification (RFID), smartphone data via beacons or wireless local area network (WLAN), and/or data gathered by video camera systems (e.g. Herviana et al. 2020). In this context, issues with the accuracy of sensory data and the economic feasibility of different approaches were discussed in literature.

Regarding the importance of different stages of the path to purchase our results partly confirm previous findings by Willemsen et al. (2017) and Rogeveen and Sethuraman (2020). Most studies focused on the pre-transaction and transaction phase. Especially convenience, defined as the cost of time and effort, was a mature issue for researchers and developers of instore retail technology. Most studies worked on very “traditional” instore remedies e.g. avoiding long queues and associated waiting times at checkouts or the effortless location of products in stores (e.g. Hanooja et al. 2020). Therefore, a main focus from a technological point of view was put on the development and application of sensor technology and associated data analytics. The development or improvement of other customer facing

technology (e.g. self-service machines or robots) was less of interest according to the number of papers investigated.

Contributions

The literature review at hand provides an overview of the state of the art of research in computer sciences on the topic of instore retail technologies. Based on typical conceptual frameworks taken from retailing and marketing literature, we identify similarities and differences between the two research fields. Consequently, we show that although prominently featured in the retail and marketing literature, customer facing technology in the form of robots, automated self-service machines and recommender systems are rarely the focus in computer sciences. However, a strong focus on sensor technology and data science solutions exists. Since, according to our review, research in computer sciences seldomly integrates a consumer perspective, we propose a stronger collaboration between the two research fields in the form of more interdisciplinary research endeavours. Such a collaboration can help to better identify issues of customer acceptance, technology readiness and economic feasibility.

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International/global retailing

EXAMINING THE GLOCALISED MARKETING STRATEGIES OF LUXURY FASHION RETAILERS IN CHINA

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Keywords

International retailing, International marketing, Marketing strategies, Luxury fashion marketing, Global, Multinational, Glocalisation, Standardisation, Localisation, mainland China

Introduction

Over the last decades, the mainland China market has accounted for over 38% of global fashion industry growth, with an impressive 70% of the expansion in the luxury segment (McKinsey & Company, 2020). According to Fickling (2018), Deloitte (2021) and Bai *et al.* (2022), China and India are the top countries of origin for emerging market multinationals in luxury fashion retail. For the luxury fashion market in China, it is increasingly described as a ‘red sea’, because internationally famous brands have already operated for decades, whereas new domestic players are also becoming competitive due to the rocketing capital market and consumers’ purchase power (Perry *et al.*, 2020). This may imply that a simple standardised global or an adapted multinational marketing strategy is not advantaged due to homogenised offerings of products and services (Kim *et al.*, 2020). Considering the context of retail internationalisation, a crucial component of market success is social embeddedness in the local market (Burt *et al.*, 2017). Siebers (2012) identified that psychic distance reduces with higher levels of localisation whilst foreign retailers who are better able to interpret institutional factors and market infrastructure benefit and are more likely to be successful in their core business. However, a single localised approach may be not preferred since these foreign retailers acquired and retained Chinese consumers based on their sound international reputation. As noted by Bai *et al.* (2021b), especially at the post-entry business development, those international retailers require a proactive stance to sustain their long-run expansion, refine their business goals, and optimise their retailing portfolio in China market. In other words, rather than fully applying either of the two, an integrated approach between standardisation (global) and localisation (multinational) may be urged. While the debate is ongoing, whether the theoretical points could be evidenced from the China market is worthwhile to be discussed.

Purpose

There is an extensive discussion of the literature on international marketing strategies at a country market level, and these focused on a relatively static perspective (Wang and Liu, 2008; Bai *et al.*, 2018). Moore *et al.* (2010) found that literature on international retailing focuses more on supermarkets than luxury fashion retailers. Moreover, a firm that operates in an international environment needs dynamic capabilities to assimilate knowhow and integrate it into its strategy (Frasquet *et al.*, 2013). For example, IKEA through the business model of incremental change in the last decades while initial entry to China was standardised then became more local and then integrated into the global (Burt *et al.*, 2021).

In this instance, this study aims to examine internationalising retailers' changing marketing strategies from initial market entry to post-entry business development. This allows us to develop a dynamic and continuous model of international marketing strategies from market entry to post-entry phases in the context of the Chinese luxury fashion retail market. Especially, from global to multinational and finally to glocal. Following research questions are investigated to fill these gaps in the current literature:

- Have international luxury fashion retailers changed their marketing strategies between initial entry to post entry, and why?
- What is the most effective international marketing strategy for business developmental management after their initial into China/post-entry, and why?
- How are international luxury fashion retailers' marketing strategies in China integrated into their global marketing strategies through the dynamic glocalisation process?

Conceptual framework

An important inquiry of this study is about the role of global and multinational for international luxury fashion retailers to maintain their business development in China market. Being this study is the perspective of international retailing, the definition of luxury fashion retailers by Moore *et al.* (2010) is measured to be the most applicable for this study which includes:

[...] distribution of clothing, accessories, and other lifestyle products designed and/or manufactured exclusively by/or for the retailer; identified with a trademark, design handwriting, or some other distinguishing feature; priced significantly higher than market price; and displayed within prestigious retail environments. (p.143)

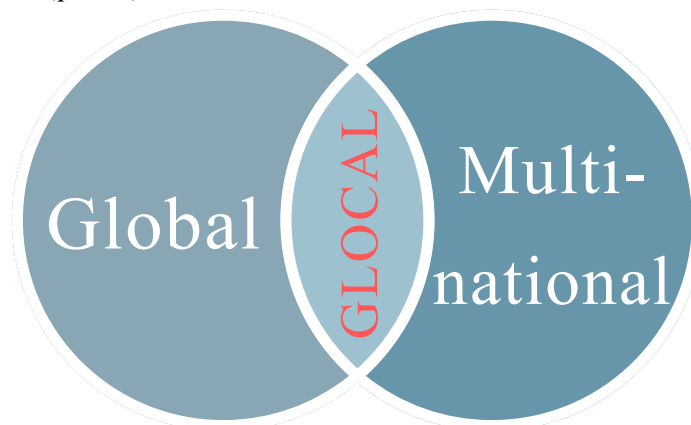


Figure 1: Initial Conceptual Framework

As Figure 1 shows that the integrated part between global and multinational is glocal. Theoretical underpinning is international marketing strategies, and the context is international luxury fashion retailing. Furthermore, the marketing mix needs to be adapted to retailers. More specifically, within the retailer marketing mix, this study can be divided into four sections: Product, Promotion, Price, and Place. Additionally, literature considered luxury fashion brands.

Existing studies also provide sufficient knowledge about how to adjust between the global and local strategies. Noted to Wigley and Moore (2007), to support fashion retailers' business success in their internationalisation process, three particular components should be considered, including coherent international brand management, disciplined distribution control, and retail presentation consistent with the marketing image. However, as different companies may have their own levels of organisational capabilities and face specific market conditions, it is difficult for them to adjust between standardisation and localisation. Identified by Liu *et al.* (2016), there exists a global-local dilemma for those international luxury fashion brands operating in China, which requires the businesses to employ highly adaptive marketing communication and standardised branding activities, rather than a simple localisation strategy that may confuse consumers' brand awareness. However, aiming at the production process, Kapferer (2012) shows that when international luxury fashion companies highly rely on their standardisation of manufacturing with the international supply chain to decrease production costs, their brands would lose their cultural origin, which decreases the vision of luxury fashion as a high value-added business. Linked to the marketing mix theory, how to make effective use of standardisation and localisation may be still a challenging task because the businesses should make wise choices to drive their business development into components such as products, place, promotion, and price.

As the core concept to develop this study, the role of glocalisation that overthrows the 'either-or' mindset should be recognised. Burt *et al.* (2016) noted that the concept of territorial embeddedness was implied by using the term 'glocalisation' in several studies. As explained by Robertson (1992), glocalisation is the simultaneous presence of universalising and particularising tendencies in a social, political, or economic system. It is a new understanding of 'globalisation', allowing any agents to reconsider the tempering effects of local conditions on global pressures. On the epistemological level, glocalisation enables the fusion between universalism and particularism (Roudometof, 2016), so that an international business could take the mutual influence between its global and local strategy as a whole process. Aiming at international businesses, Foglio and Stanevicius (2006) outline five core components that constitute a complete picture of a glocal business. These are: 1. a strategic synergy between globalisation and localisation; 2. a unified system to manage global and local markets; 3. articulating a system of activities in supporting the glocal value chain; 4. implementation of a glocal plan through producing and selling; and 5. a particular method allowing the business to focus on the global or local market respectively. While these findings are not exhaustive to conceptualise glocalisation, they can be still used as the starting point to see how well the international practitioners have adopted the glocal operations in China's luxury fashion market.

Apart from the conceptual strands of this work, it is also important to know practical knowledge about the international luxury fashion players in China. As noted by Bai *et al.* (2021a), differentiated from their entry mode, international retailers develop three particular models of expansion in the post-entry period, including cautious, regional and countrywide. As a geographic process of expansion, while they have been successful in tie-1 cities, how penetrating the tie-2 and tie-3 regions is still a challenging task due to different levels of economic development and consumer culture. In other words, it is not only the conditions of the national market that urge international players to adjust their operations but also the geographic differences within the market that may further complicate and diversify their

strategic direction in balancing between standardisation and localisation. More importantly, while Bai *et al.* (2017) identify that the three strategies of post-entry expansions have been employed by international retailers, including direct controllership, local partnerships, and omnichannel distribution, whether there exist any common patterns in assigning particular expansion modes in corresponding to their strategic direction should be further explored. In this way, the glocalisation process would support the study.

Methodology

In general, this study will employ a pragmatic two-stage mixed-methodology to achieve the three research questions, as mixed methods can provide a comprehensive and deep understanding of an issue while utilising only one method would not produce the desired results (Creswell and Creswell, 2018). On the one hand, this study requires the identification of overall patterns of international retailers' operations in China, so that the quantitative measurement could provide a highly reliable, valid way to generalise findings through research data. On the other hand, while the quantitative methods allow an objective assessment, it still needs in-depth inquiry to discover the reasons why the quantitative findings are produced in certain ways, associated with the contextual knowledge about the research questions (Patton, 2002). In other words, to discover the research phenomena, qualitative methods will be also employed. Some representational examples of international luxury fashion retailers in China will be selected as the research samples. Based on Deloitte's annual list of 100 luxury companies in the world, the screening was conducted which is evaluated mainly by established organisations' marketing reports, including Bain & Company, KPMG, Mintel and McKinsey & Company. In the plan, these include LVMH, GUCCI, VERSACE, BURBERRY, PRADA, DIOR, CHANEL, GIORGIO ARMANI, HERMES and MULBERRY. The selection of samples for testing will take place through the Chinese Ministry of Commerce website, such as T-mall, Jingdong, China's top ten luxury shopping centers, and other channels.

Following the concurrent design that supports both the quantitative and qualitative inquires for these firms, three particular sources of data will be included. Firstly, to examine the uses of standardisation and localisation in the international luxury fashion retailers through managers' perspective, a Likert-scale questionnaire will be designed and delivered to the managerial roles in the organisations as the research respondents. A greeting/e-card/e-mail that incorporates our university's logo will accompany the survey, explaining the purpose and reassuring respondents of their anonymity and confidentiality. Through means of statistical inference, the overall patterns about how the retailers have deployed their post-entry expansion can be extracted. The options for luxury fashion retailers will be selected from approximately 130 in order to ensure a high response rate. Secondly, to collect qualitative data, a set of semi-structured interviews will be developed. To diversify the perspectives of findings, interviewees will not only be selected from the organisations, but also from third-party stakeholders such as professionals in business consultancy, media, and education. To conduct qualitative research, the researcher will ask first-stage participants if they would like to participate in the second stage of the in-depth interview that the study pre-considered executive number as 12. Information about the interviewers will be available on the official website while the researcher will contact via their university official student email address and without any prior interactions between these stakeholders. The interview data will be analysed through a content analysis. While these sources of data and analysis involve individuals' subjective experiences, a document analysis will be also prepared. This aims to identify the knowledge about how the retailers fit the glocalisation trends by analysing their financial reports, business proposals, and other reliable sources of documents.

As a quantitative analysis, the mean value is compared to the independent sample t-tests in SPSS 22 in order to extract the overall pattern of how retailers implement their post-entry expansions. Following that, the qualitative data are analysed with thematic analysis in NVivo 12 while thematic coding is performed. A number of codes and references were created with NVivo 12, which was preserved in an index system, in order that data could be accessed and explored.

Projected Findings

The research is ongoing and has not yet been completed, there are several findings of gaps in the existing literature. Currently, studies, such as Huang *et al.* (2007), Tse (2015) and Kim *et al.* (2020), have explored how international players glocalise their luxury fashion business in China. Yet, most of them studied the phenomenon through a viewpoint of either branding, advertising, or customer relation. The majority of the previous studies viewed from an international business perspective, this research considered international marketing and international retailing perspective. The prior studies focused on a relatively static perspective (Wang and Liu, 2008; Bai *et al.*, 2018), however, retailer internationalisation is a dynamic and continuous process (Bai, 2021c), this study aims to develop a dynamic and continuous model of international marketing strategies from initial Chinese market entry to post-entry business development. Existing literature has focussed on developed markets more than China (Bai, 2022). In addition, literature on international retailing focuses more on supermarkets than luxury fashion retailers (Moore *et al.*, 2010). By reviewing these literatures, a new paradigm of glocalisation that requires a business to ‘think globally and act locally’ may enrich their business visions in the process of internationalisation.

Potential contributions

Luxury fashion retailers have previously ignored the Chinese mainland market, which is economically significant (Bai *et al.*, 2017). The study, therefore, will focus on the Chinese mainland market that supplements the gap. Within a global and Chinese context, this study may make three theoretical contributions to the retailer internationalisation literature. Firstly, to address the gap of only a few previous studies adopted an international retailing perspective (Bonetti, 2014; Bai *et al.*, 2018), this study will provide an in-depth insight into the current international retailing literature by examining the relative effectiveness of international marketing strategies of international luxury fashion retailers entering into the Chinese market. Secondly, Bai *et al.* (2021a) highlighted that prior studies have examined retailers from developed markets rather than emerging markets. This study would enrich the literature on emerging market strategies through exploring the effective international marketing strategies for business developmental management after their initial into China/post-entry via its use of pragmatic mixed methods research approach. Finally, internationalisation in retail is a continuous and dynamic process (Bai *et al.*, 2017), this study thus will be conducive to the knowledge of glocalised marketing strategies by evaluating how international luxury fashion retailers' marketing strategies in China are integrated into their global marketing strategies through the dynamic glocalisation process.

Potential practical implications

This study will demonstrate that international luxury fashion retailers may not complete achieving success upon their entry and post-entry into the China market, neither by fully

applying either standardisation or localisation. In addition, the international luxury fashion retailers would be suggested to adopt glocalised marketing strategies in China. Finally, the study possibly implies the importance of an integrated approach for international luxury fashion retailers to maintain their business development in China market.

Research potential limitations and outlook

As this study will examine only the mainland China market, the further findings would like to be of limited value when attempting to explain other nations' markets. Besides, the sample size may relatively small, which could also present a challenge. Additionally, the Initial Conceptual Framework model could test and extend. Further understanding of the glocalisation of luxury fashion retailers is expected.

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Keywords

International retailing, International marketing, Marketing strategies, Luxury fashion marketing, Global, Multinational, Glocalisation, Standardisation, Localisation, mainland China

Corporate Social Responsibility

Corporate Social Responsibility from Consumer Perspective in a cross-market context: a meta-analysis

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Introduction

Recent crises, like Russia-Ukraine crisis or the coronavirus pandemic, pose new challenges not only for societies but also for the business environment worldwide, as consumer trust declined sharply (Teller and Gittenberger, 2022). In addition to these crises, tackling the climate crisis represents a central concern as resource scarcity, rising global temperatures, climate change, and ocean acidification, caused by increasing levels of atmospheric carbon dioxide, are still a major world problem (Luger *et al.*, 2022). All these crises have caused a tremendous change in our globalized world, where we rely on international economic relations and political cooperation. In these relations consumer trust is a vital consideration for the success (Harring *et al.*, 2021). In times of constant change and uncertainty, in the global business environment the development of trust is an important pillar of building consumer relationships (Kang and Hustvedt, 2014).

Morgan and Hunt (1994) emphasize the importance of trust in relationship marketing, which can be reached, for example, through the reduction of uncertainty, greater shared values with consumers or increased communication. Regarding shared values between consumers and companies, social and environmental issues, which are increasingly demanded by consumers, are of particular importance. In this context, the concept of corporate social responsibility (CSR) has gained relevance (Dang *et al.*, 2020; González-Rodríguez *et al.*, 2019). In recent years, the discourse on CSR has received major attention among companies, governments, and society (Bian *et al.*, 2021; González-Rodríguez *et al.*, 2015). Especially in the context of multiple crises, CSR plays a central role as Bansal *et al.* (2021) e.g. emphasize that a broad social ecological perspective is necessary in tackling grand societal challenges. Furthermore, Ahmad (2019) emphasizes how important a strong strategic direction is in the increasingly competitive environment. CSR is a major aspect in strategic management across the globe, and especially the millennial generation is characterized by a high level of social and environmental issues awareness (e.g., Mohr and Webb, 2005; Bucic *et al.*, 2012). As an increasing number of companies are integrating CSR in their business practices, in order to meet the demand of consumers in terms of social and ethical values, CSR research is playing an important role in the academic and business fields. Especially in international business, CSR has become essential as globalization is a major aspect of the change process in the relationship between business and society (Chaudhri, 2006). However, especially cross-cultural CSR analyses between emerging and advanced countries are scarce even though it is highly relevant for marketers to know if and how CSR activities influence consumers' behaviour and how adaption of CSR programs in different markets should take place (González-Rodríguez *et al.*, 2019; Guping *et al.*, 2021; Farooq *et al.*, 2019; Maignan and Ferrell, 2003; Pires *et al.*, 2020). Academic literature confirmed the demand for further research on CSR in an international context (e.g., Fatma and Rahman, 2015; González-Rodríguez *et al.*, 2019; Pérez and Rodríguez del Bosque, 2015)

Therefore, the purpose of this paper is to review systematically the existing CSR studies in a meta-analytic framework. While CSR meta-analysis from a managerial perspective has received attention in literature (e.g. Orlitzky *et al.*, 2003; Kong *et al.*, 2020; Wang *et al.*, 2016) the consumer-centered focus is neglected. Prior consumer-oriented studies in the academic literature provide indefinite results, that is why an up-to-date analysis is necessary (Allen *et al.*, 2020; Du *et al.*, 2007; Guping *et al.*, 2021; Maignan, 2001). Therefore, the contribution is threefold. First, this study examines CSR from the consumer perspective more closely. Second, the research includes international context by examining CSR behaviour between advanced and emerging markets. Third, a comprehensive overview of the current state of the art in CSR research is provided.

Purpose

CSR represents an important research construct and studies have shown that CSR influences consumer behaviour (e.g. Luger *et al.*, 2022; Tian *et al.*, 2011; Maignan, 2001). However, the extent to which consumers support companies because of their CSR activities as well as which CSR dimensions are the most important to influence consumer behaviour is largely under-researched and unclear as different results exist in the CSR literature (Allen *et al.*, 2020; Du *et al.*, 2007; Guping *et al.*, 2021; Maignan, 2001). Previous studies have also shown differences across markets in consumer behaviour based on CSR and existing literature emphasizes the lack of cross-cultural CSR analyses (e.g., Arli and Lasmono, 2010; Pires *et al.*, 2020, Ramasamy *et al.*, 2013). Therefore, the purpose of the paper is to identify and systematize international CSR research from a consumer-oriented view by presenting relevant results from this meta-analysis. As already mentioned, compared to the managerial perspective of CSR, fewer studies base on CSR perception of consumers. Furthermore, this study focuses on differences between advanced and emerging markets in terms of CSR. Hence a significant contribution to the academic literature will be made. Moreover, the meta-analysis provides helpful insights for firms strategic positioning in CSR across markets. Thus, the study is relevant to both the academic and business areas.

Conceptual framework

The conceptualization of Corporate social responsibility (CSR) began in the 1950s, when Bowen (1953) focused on the social obligations of companies. According to Carroll (1979) CSR comprises different responsibilities that can be illustrated in a pyramid. Beside the fulfilment of economic and legal responsibility also ethical and philanthropic responsibility are part of Carroll's CSR concept (Carroll, 1979). The Commission of the European Union (2011) defined CSR as "the responsibility of enterprises for their impacts on society" (Commission of the European Union, 2011, p. 6). However, the challenge is not defining CSR, but rather understanding what effects the assumption of social responsibility entails and what impact CSR has on consumer behaviour. That is why this meta-analysis is necessary and an overview of the existing studies in CSR research must be given. With focus on the CSR definition of Elkington's (1998) "triple bottom line" principle, which comprises the three dimensions of profit, planet and people, the most important variables in this meta-analysis are economic, environmental, and social responsibilities as well as consumer behavior (CSR support and purchase intention). The triple bottom line approach has been widely used in the CSR literature and comprises a holistic view of CSR (e.g., González-Rodríguez *et al.*, 2019). It represents a sustainability framework for firms, non-profit organizations as well as governments at the federal, state, and local levels (Slaper and Hall, 2011). The idea is to involve not just economic aspects in the performance measuring process but rather social and environmental values (Norman and MacDonald, 2004). In the academic literature numerous studies include measurable CSR items, which were developed based on

the three dimensions of social, economic, and environmental responsibility (e.g., Wang and Juslin, 2012; Gallardo-Vázquez and Sanches-Hernandez, 2014).

Methodology

Search for Relevant Studies

The database was created based on a comprehensive literature review. To identify relevant studies, EBSCOhost and Google Scholar were used and consumer-oriented papers up to March 2022 were considered. The relevant keywords were CSR, corporate social responsibility, environmental responsibility, economic responsibility, CSR support, purchase intention and consumer behaviour. Only those empirical studies that included CSR constructs at the consumer level were involved in the research process. Furthermore, different studies with the same sample size were excluded if one of them were already part of the research. For the extraction of relevant information from each study a coding protocol was created, including effect and sample size and study characteristics (Hunter and Schmidt, 2004).

Criteria for Relevance

To identify literature for the meta-analysis the following characteristics were defined. First, only CSR articles with empirical studies that reported sample sizes and an outcome statistic (r , univariate F , t , χ^2) were included (Hunter and Schmidt, 2004). Second, the studies must have a consumer-oriented CSR focus. Third, a link between CSR activities (environmental, social, economic dimensions) and consumer reactions (e.g. purchase intention, CSR perception, CSR support) must be given (e.g. Eveland *et al.*, 2018; González-Rodríguez *et al.*, 2015 and 2019; Maignan, 2001; Ramasamy and Yeung, 2009).

Findings

This meta-analysis uses the guidelines provided by Hunter and Schmidt (2004). Based on 396 effect sizes from 37 articles, the study estimates the relationship between CSR dimensions and consumer behaviour. In order to consider the international consumer-oriented focus we included studies conducted on the one hand in advanced markets (e.g. United States or advanced European markets like Austria, France, Germany) and on the other hand in emerging markets (e.g. Brazil, China, India). The studies were published between 2001 and 2021 and concern among others the finance industry. Applied methods were surveys, online studies and experimental designs. The sample size of the studies varies between 48 and 1600.

The following topics play a role in the result analysis. First, results focus on consumer response to CSR in relation to different CSR dimensions (e.g., Han, 2015). Second, included studies estimated variables like CSR support, CSR perception and the relationship between CSR and consumer purchase intention (e.g., Tian *et al.*, 2011, Öberseder *et al.*, 2014). Third, the cross-market focus is important as included studies show differences between CSR in emerging countries and advanced countries. Thus, further topics are “CSR in advanced markets”, “CSR in emerging market” and differences between advanced and emerging markets in terms of CSR (e.g., Maignan, 2001, González-Rodríguez *et al.*, 2019). Furthermore, the relationship between cultural dimensions and consumer CSR perception will be measured (eg., González-Rodríguez *et al.*, 2015). The findings will be added as soon as the analysis is finished and will be the foundation for future CSR research.

Contributions

Previous empirical studies on consumer-oriented CSR studies provide indefinite conclusions, whereby this study systematically reviews and quantifies the links of researched CSR variables. Furthermore, this paper sheds light on the influence of CSR activities on consumer

behavior. Therefore, helpful insights into consumer's response to CSR are provided, as literature highlights the lack of an overview about cross-cultural studies on consumer's CSR behavior. Not just academic research benefits from the results but also marketers and managers who are concerned with the strategic direction of organizations gain important insights into what the impact of CSR means from a consumer perspective. Moreover, existing crisis have caused a tremendous change in international economic relations, consumer trust and consumer behaviour, that is why it is even more important to know the role of CSR activities in the context of constant change. This meta-analysis makes a significant contribution to this as it brings a greater theoretical and practical coherence to the area.

Practical implications

Several managerial implications can be derived from the results of the meta-analysis as it is particularly important for practitioners to know which CSR activities have a major influence on consumer behaviour across markets. Furthermore, practical guidance to marketers regarding the CSR communication strategy will be given.

Social implications

As this paper deals with CSR, social implications can be provided which also affect public economic and public industry. Research results help companies increasingly engage in CSR activities which might affect quality of life. The assumption of social and economic responsibility has positive impact on tackling existing societal and economic crisis.

Research limitations and outlook

Based on the results of the meta-analysis this paper will provide suggestions for future research. An already identified limitation could be the focus on the consumer perspective of CSR, that is why future research could combine both perspectives. Furthermore, a common limitation in relation to meta-analysis concerns the problem that there are publications on CSR research which were not found or are written in other languages.

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Keywords

corporate social responsibility, cross-market, consumer perspective, CSR research, meta-analysis.

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Keywords

Political Brand Activism, Corporate Digital Responsibility, Social Media Activism, Corporate Social Responsibility, Interbrand.

Introduction

In a world shaken by pandemic scenario, social inequalities, economic crises, low trust in institutions and scarce faith in the future it has become more than ever a priority for brands to look out to the external environment to collect the necessary information to understand what their target consumers are looking for from them, and what is mattering the most to them. Many companies, in these days, are taking positions on the Ukrainian crisis, with concrete actions (i.e., abandoning the Russian market or taking action to support the most affected populations in a humanitarian way) and/or communication statement. This type of actions attracts great consumers' attention: in some cases, they espouse the causes of their brands, in some others they believe that certain sectors (sport, for example) must keep away from politics. In many cases, people point out to companies that they have not exposed themselves in previous humanitarian cases, or that despite professing to be opposed to Russian actions, they continue to sell Russian products in their point of sales. In short, the degree of attention on the subject and on how the brands are behaving (or how they are not behaving), is really high. Also, retailers are witnessing new and transformational challenges and opportunities, in terms of strategic decisions and commitment, as suggested by many studies about CSR and Brand Activism.

In this context, Social Media have a pivotal role in offering the opportunity to stand for a cause and to deeply engage with the customers.

Purpose

The main purpose of this study is to highlight if and how main retailers, with high brand equity, are dealing with Political Brand Activism through their Social Media touchpoints.

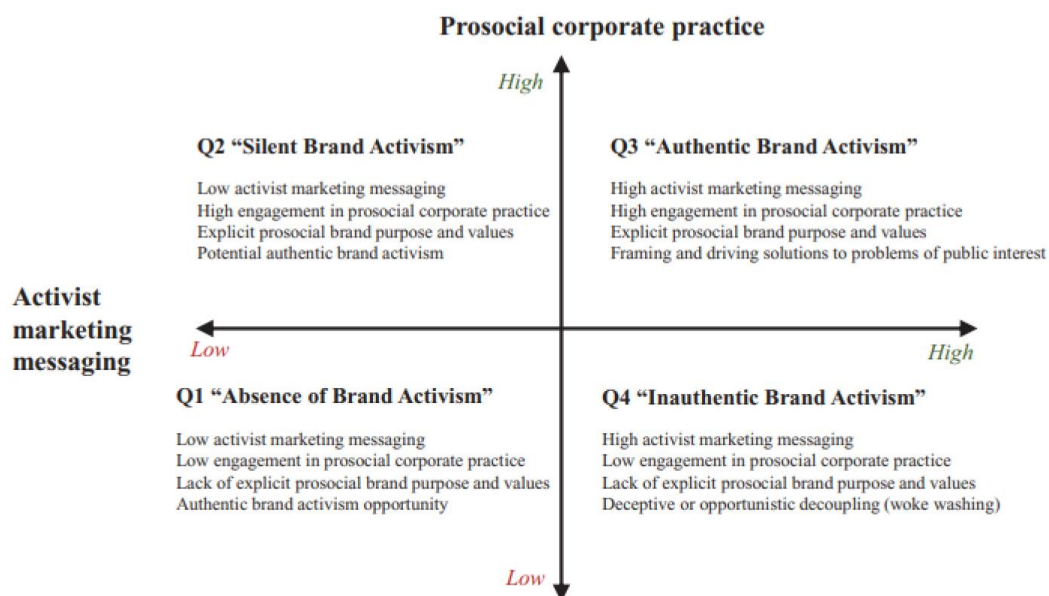
Conceptual framework

The theoretical foundation for this study is Signaling Theory, which suggests that companies will communicate about their ethic efforts when this communication make it possible to distinguish "good" from "bad" performers.

Starting from a context of widespread acceptance of Corporate Social Responsibility, as described in earlier literature, in the last twenty years there have been changes and trends at the socio-cultural and economic level that have given way to the birth of Brand Activism. Recently Kotler and Sarkar (2017) have given a more precise definition: "Brand Activism consists of business efforts to promote, impede, or direct social, political, economic, and/or environmental reform or stasis with the desire to promote or impede improvements in society" (Sarkar and Kotler, 2018).

Brand Activism moves from activism in general as a Brand becomes an activist subject that takes on an issue usually of a social or environmental nature that does not necessarily involve its core business. In practice, this takes place with a public declaration of the company that can take place in different ways and with different channels, usually with a written communication on its website, with a post on Social Networks or with a traditional commercial. Often the statement is accompanied by concrete actions to have an impact and influence on the issue. Brand Activism, as mentioned above, conceptually evolves from CSR even if they remain two completely different things and the presence of one does not imply the presence of the other within a company. CSR, in fact, has a mainly internal focus, since it seeks to pursue profit by measuring and optimizing the impact that activities in support of the core business have on the environment and the local community. Companies try to have a positive impact on the environment in which they operate, starting from within and, if necessary, bringing changes within the internal system where weaknesses or inefficiencies are identified from this point of view. Brand activism instead has an external focus, the Brand becomes an active player in a cause trying to stimulate a change in the surrounding environment from the outside (Landone, 2021).

Vredenburg *et al.* (2020) introduced four different types of Brand Activism:



Authentic Brand Activism differs from Inauthentic Activism in the way its activism messaging aligns with prosocial corporate practices: an authentic brand (AB) in fact both engages in high activism marketing messaging while not leaving behind its engagement in carrying on concrete practices. An inauthentic brand (IB), on the contrary, engages in high activism marketing messaging but its purpose, values and engagement in concrete prosocial practices is very low.

Even if in practice the boundary between categories is blurred and some campaigns can simultaneously fall into multiple categories, Sarkar and Kotler (2018) discussed various types or categories of Activism: political, economic, social, legal, workplace and environmental. How to decide which cause is better to stand for? Sarkar and Kotler (2018) suggest asking themselves: what are our customers worried about? And, today, there are no doubts that political issues are very important for the society.

Political Brand Activism occurs when a company takes action on a controversial political issue (Clemensen, 2017). Political Activism can take place specifically through campaign

finance, lobbying, intervention in voting and democracy issues and privatization. The fundamental characteristic of this type of activism is precisely that of intervening in controversial matters that can also divide public opinion and therefore that of its consumers.

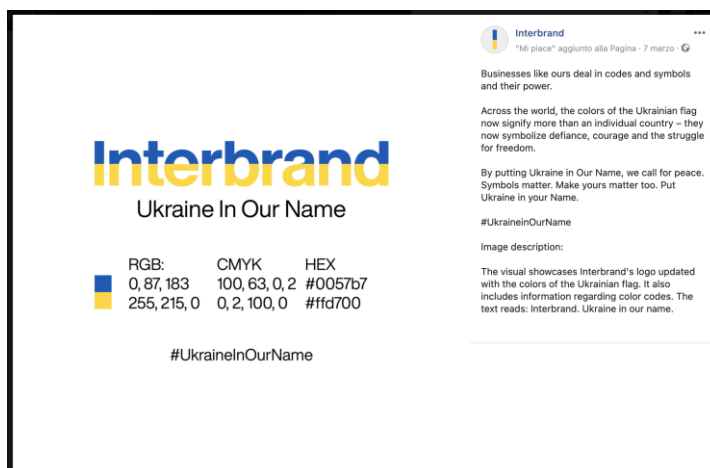
In this context, the role of Social Media is pivotal: they constitute the optimal platform for companies to build reciprocal, constant and long-lasting relationships with their customers. Companies have decided to resort to Social Media to engage in forms of Social Media Activism to create strong connections with their target customers, based on reciprocity and shared support for a cause. *Social Media Activism* is “a form of protest or advocacy for a cause that uses Social Media channels. Because hashtags play a central role in mobilizing movements, the term is often used interchangeably with *hashtag activism*” (Reid and Sehl, 2020).

Methodology

Year by year Interbrand publishes the Best Global Brands ranking, highlighting the best 100 Brands across different areas and industries. The past year the combined value of the top 100 brands increased from \$2,326,491 million in 2020 to \$2,667,524 million in 2021, an overall increase of 15%. In the provided comment, three factors explain this fast growth:

1. the ability to set a clear direction, that means that the entire organization knows where they are going, and are working towards the same ambition.
2. Agility: that means to bring new products and services to market quickly, and where necessary, pivot to address changing customer needs. And, finally,
3. Participation: Bring people on a journey with them, and make them part of the movement to create an engaging brand world.

The third point is the pivotal one for our study: the Brands ability to relate to people, to take part and position in the world, moving together. Past 7th March, Interbrand launched a call to action to all the Brands: to put Ukraine in their name, as a call for peace. They set a hashtag #UkraineInOurName, and they provided also colour codes to join the call.



How did retailers respond to this direct call? The answer is the focus of this contribution.

Only five Retailers have been included in the Interbrand Report 2021, and we analysed which position Ikea (27th rank), H&M (43th), Zara (45th), eBay (56th) and Sephora (100th) took with reference to the Ukraine crises, and how they communicated their positions. The multiple case study analysis has been focused on the main channel (Instagram), involving the International accounts run in English, in the March-April 2022 period. They were all verified account. Then, the retailers' behaviour has been analysed in the light of different kinds of Political Brand Activism, as discussed in the main literature above.

Findings

In the next table have been included the main results of this study.

	Ikea <i>1 mil followers</i>	H&M <i>38,3 mil followers</i>	Zara <i>50,1 mil followers</i>	eBay <i>1 mil followers</i>	Sephora <i>20,9 mil followers</i>
Did they join the Interbrand CTA?	No	No	No	No	No
Did they communicate about the conflict?	Yes, with a post (3 rd March)	No	No	Yes, with a post (3 rd March)	No
Which kind of action they took?	Authentic Brand Activism	Silent Brand Activism	Absence of Brand Activism	Authentic Brand Activism	Silent Brand Activism
Fans/Followers reaction	Support, positive sentiment (except for Russian customers/supporters)	/	/	Support, positive sentiment	/
Notes:	Engagement Rate exponentially higher than other posts (x10)	Focus on other social issues, like pride	/	Engagement Rate exponentially higher than other posts (x5)	Focus on other social issues, like pride

Everyone must play his part, brands included. The ground-breaking change is here: with a new asset of values comes a new way of conceiving the role of the citizen-consumer. And the businesses have to keep pace with this change if they want to be part of a new world, adapt and thrive in it. Moreover, being driven by a purpose, once this is recognized, becomes even more senseless if vision is not aligned to concrete actions. Despite this understanding, the retail Industry still seems slow in embracing themes of Brand Activism and, in particular, of Political Brand Activism. Yet, the two brands that have exposed themselves on this front, Ikea and eBay, have registered an exponentially more important engagement and a very positive sentiment, demonstrating the fact that people, on Social Media, are hungry for different contents, for brands taking positions.

Contributions

Few are the papers that discuss in depth the topics of Brand Activism and Corporate Digital Responsibility having a retail point of view. As far as we know, this represents the first contribution focused on Political Brand Activism, highlighting how this controversial issue can also be addressed by Retailers in building more true and complete relationships with their target, also thanks the use of Social Media. Retailers that desire to take a stand must reflect on these options and consequences, to act strategically.

Practical implications

Managerially, our aim was to highlight how retailers can approach Political Brand Activism using Social Media touchpoints. This provides grounds for future discussion, both at strategic

and managerial level, related to retailers' Brand Activism aims, readiness, implementation, and success.

Social implications

The real challenge for Retailers is to move from CSR to Brand Activism, as Authentic Brand Activists.

Brand Social Activism, as any other form of brand activism, is polarizing by nature. This means that by supporting a specific social cause you will, as a consequence, disfavour a portion of your consumer base. And this is even more true if the topic involved is a controversial one. Although supporting a social cause, like the Ukrainian one, means fighting for the good of the people involved in that issue, not all the people in the world can have the same notion of good. Consequently, by standing for an issue, retailers will face the possibility of meeting with resistance manifested also by a segment of their same consumer base. Brands deciding to stand for risky social causes are more exposed to creating social reaction, division, debates with the ultimate result of generating love and support, or hate. When it comes to risky social causes it is rare to give rise to grey areas: you either generate throughout support, or hate and separation from your standing point. As highlighted by Duman and Ozgen (2018), consumers punish the brands they oppose politically (the so-called BAPI). Ikea and eBay gathered a very deep and positive support.

Research limitations and outlook

The paper is based on the study of only five retailers, the only ones included in the Interbrand ranking: the next lines of research may include a greater number of retailers, study more the reaction of fans/followers through a more comprehensive content and sentiment analysis and involve a greater number of digital touchpoints. Moreover, previous studies (Schramm-Klein et al., 2013) discovered a link between retailer CSR and consumer behaviours: does this link exist also for Brand Activism?

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Keywords

Political Brand Activism, Corporate Digital Responsibility, Social Media Activism, Corporate Social Responsibility, Interbrand.

Come Closer Please! Consumer Perception of Diversity Communication in Retailing

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Retailing, Diversity Communication, Social Identity, Psychological Distance, Dissociative Concerns.

Introduction

Today's marketplaces are becoming increasingly multicultural, but marketers are struggling with their intercultural competency (Demangeot et al. 2013; Kipnis et al. 2013). These days, almost all retailers implement a diversity & inclusion statement (Burns et al. 2021), but academic research investigating their effectiveness on creating value for consumers is scarce. The aim of this project is to understand how diversity communication in retailing can influence consumer perception. We follow Demangeot et al. (2013) in adopting a broad lens of multicultural marketplaces by recognizing that society consists of different groups, which may vary in ethnicity, beliefs, disabilities, sexual orientation or simply lifestyles (Friedman, Lopez-Pumarejo, and Friedman 2007). We focus on retailers in specific, as they provide the key platform where marketplace exchanges are performed and as their design can positively impact multicultural marketplace well-being through engagement (Demangeot et al. 2019).

Conceptual Framework

We assume that consumers' evaluation of diversity and inclusion statements in retailing is influenced by their social identity (Tajfel 1974). This implies that consumers' group affiliations will determine how they react to different communication initiatives (Sierra and McQuitty 2007). Consequently, the individual consumer perceives him/herself as a member of an in-group of similar others and distinguishes him/herself from out-groups of dissimilar others. Diversity communication might attract out-group consumers to new marketplaces, which is likely perceived as a threat by in-group consumers (McGowan, Hassan, and Shiu 2019). Diversity communication might therefore have positive (e.g., increased value

perception by previously excluded consumers) and negative (e.g., decreased value perception by in-group consumers) consequences that are hard to predict based on existing research. Drawing on Construal Level Theory (Trope and Liberman 2010), we propose that consumers will evaluate diversity initiatives based on their perception of social and psychological distance. We differentiate between diversity initiatives in retailing presented to consumers at an abstract (i.e., far distance) vs. concrete (i.e., close distance) level. We initially predict a positive effect of the abstract communication on retailer perception as it is in line with current acceptable values in society (e.g., Burns et al. 2021), but negative consequences of the concrete diversity communications as they provide indication that out-group consumers indeed will enter the specific retail space and thereby increase dissociative concern with the retailer.

Study 1: Communication of retailer actions

In a one-factor between-subjects online survey experiment, we communicate diversity on the abstract level as a *general corporate value* of a hypothetical retailer. At the concrete level, diversity is communicated as either *diverse product assortments* (e.g., international, halal and kosher products) targeting different consumer groups or *floor staff* representing different social, ethnic, or religious backgrounds or sexual orientation. Pre-registration of study 1 is available at <https://aspredicted.org/blind.php?x=j9r8c2>. We present data based on a representative sample of 561 Danish consumers, who were presented with either one of the diversity communications and then rated, their perceived psychological distance (PD) (Loebnitz et al. 2020), their dissociative concern (DC) with the retail outlet (White and Dahl 2006) and their perception of the retailer on the three-dimensional *Retailer Brand Image* (RBI) scale by Kremer and Viot (2012). We ran a serial mediation analysis (Hayes 2017, model 6) with PD and DC as mediators for all three dependent variables. We compare abstract vs concrete communications as well as both concrete communications with each other. Due to space limitations, we only present results for the *value* (RBIv) and *price* (RBIp) dimension of the RBI scale in Figure 1 (upper panels). RBIv as a general measure of customer value creation and RBIp as retailer price image is an important antecedent for store choice (Hamilton and Chernev 2013). The results for the third RBI supply dimension follow a similar pattern.

The results show that generally, the more concrete communications were perceived at a closer PD compared to the abstract communication ($\beta=.71$, $p<.001$). We do not observe a difference between the two concrete communications. Also, we observe that more concrete communications lead to a higher DC with the retail outlet ($\beta=.29$, $p<.05$). Moreover, we observe that a closer PD leads to a lower DC ($\beta=-.22$, $p<.001$). In addition, we observe a perceived closer PD leading to higher RBIv and RBIp ($\beta=.32$, $p<.001$) and higher DC leading to lower RBIv ($\beta=-.18$, $p<.001$) and RBIp ($\beta=-.10$, $p<.001$). Importantly, we also observe a direct effect of concrete communications to reduce RBIv ($\beta=-.44$, $p<.001$), relative to abstract communications. The indirect effect of abstract vs concrete communications remains significant throughout both models, suggesting partial and full mediation of the effect on RBIv and RBIp respectively through PD and DC.

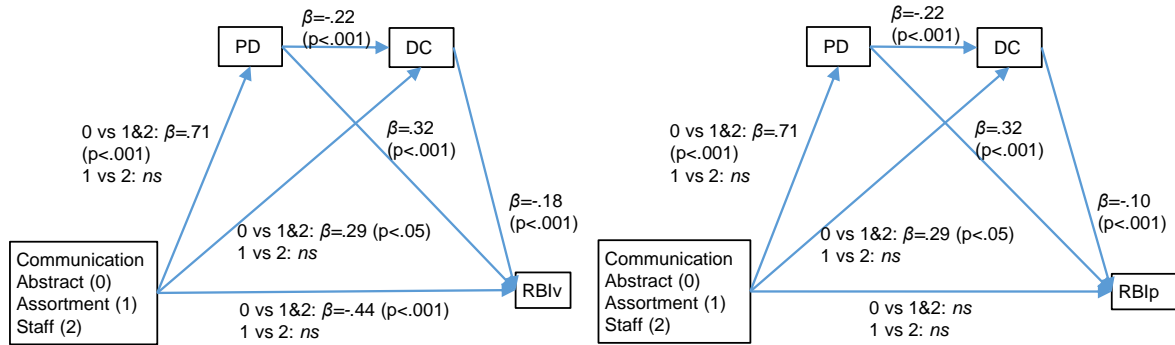
These results support our prediction in that abstract communications have a positive effect on retailer perception. In addition, they support our assumption in that more concrete communications are perceived at a closer PD. The results are not in line with our expectations, as they suggest that concrete communications (which are perceived at a closer PD) reduce DC and thereby increase retailer perception. This implies that it is relevant, who is targeted with more concrete communications to predict whether they are perceived at a closer or further PD, which will in turn influence DC and the respective RBI dimension.

Study 2: Communicating specific target groups

To get a better understanding of the role of concreteness in diversity communication, we modify the focus to two specific target groups of minority consumers: Consumers with a different ethnic background than the majority and those that identify as LGBTQ+. Based on the findings in study 1, we adapt the concrete assortment communication to focus on 1) broad: both products from different ethnic backgrounds as well as produced by companies that are ranked highly in LGBTQ+ standards, 2) ethnic: only products from different ethnic background or 3) LGBTQ+: only products, which are ranked highly in LGBTQ+ standards. We assume statement 1) to be more abstract as it includes several aspects whereas statements 2) and 3) are assumed to be more concrete. In addition, we assume the two minority groups to be perceived quite different in society and to each other. From a practical point of view, it is relevant to understand whether focusing communication efforts to one specific minority, will lead to feeling of exclusion by other minority groups as well as whether focusing on several groups makes the communication too broad to be perceived at a close PD. To enforce the textual information from study 1, we support the statements with assortment images. Pre-registration of study 2 is available at: https://aspredicted.org/7Q5_MVX. In a between-subjects design, an overall sample of 1008 UK consumers were recruited. Of these 359 respondents had a non-British ethnic background and 295 identified as LGBTQ+. The remaining 354 participants were considered majority consumers, who do not identify as LGBTQ+ and had a British ethnic background. All three stratas were representative in terms of age, gender and region. We exchange the RBIV dimension with another price perception measure that is easier to interpret (Ofir et al. 2008) but otherwise keep the same measures and analysis. Results for RBIV and price perception are presented in Figure 1 (lower part).

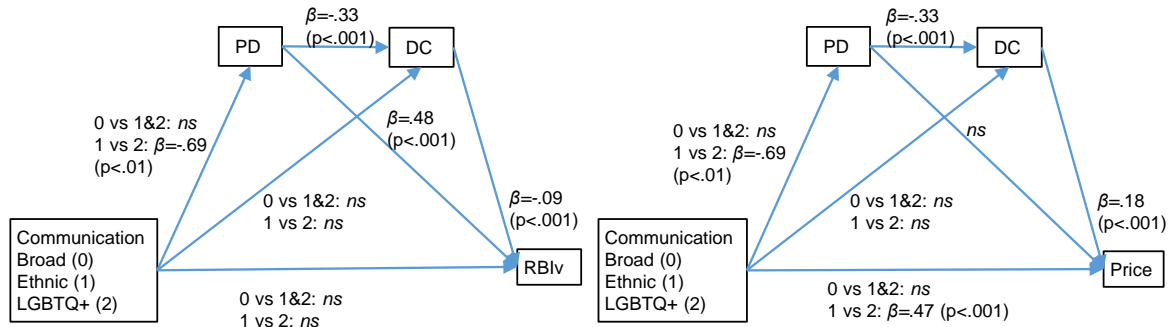
The results are generally aligned with those of study 1: PD and DC mediate the effect of diversity communication on RBIV and price perception. However, here we do not find an effect of the more abstract (broad) communication vs concrete communication, but only between the ethnic vs LGBTQ+ communications. Also, we do not observe an effect of the communication on DC. It seems that combining two target groups in one communication is perceived as being less abstract than the value communication in study 1, but also less concrete than focusing only on one target group. In the majority group (Figure 1, second row) the LGBTQ+ communication was perceived at a further PD compared to the culture communication ($\beta = -.69, p < .001$). Moreover, as expected, we observe a closer PD leading to a lower DC ($\beta = -.33, p < .001$). In addition, we observe a perceived closer PD leading to higher RBIV ($\beta = .48, p < .001$) and a higher DC leading to lower RBIV ($\beta = -.09, p < .001$), but higher price perception ($\beta = .18, p < .001$). Importantly, we also observe a direct effect of LGBTQ+ communication to increase price perception ($\beta = .47, p < .001$), relative to ethnic communications. UK majority consumers have a strong sense that only highlighting LGBTQ+ products in the assortments is related to carrying higher priced products. The indirect effect of LGBTQ+ vs ethnic communications remains significant throughout both models, suggesting full and partial mediation of the effect on RBIV and price perception respectively through PD and DC.

Serial mediation results study 1

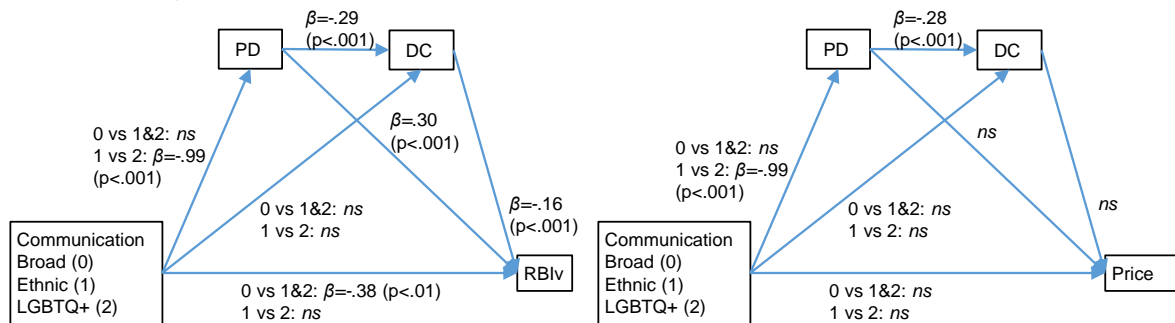


Serial mediation results study 2

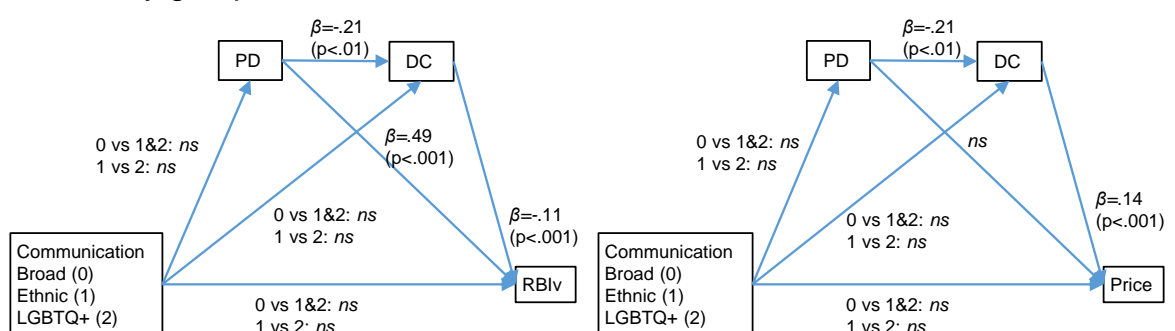
Majority group, British consumers



Minority group, non-British consumers



Minority group, LGBTQ+ consumers



The results for the non-British consumers (Figure 1, third row) show a similar pattern, but also some specific differences. We find the same mediation effect of PD and DC for RBIV, but interestingly not for price perception. Non-British consumers do not attach a certain price

image to the different communications, irrespective of PD and DC. Similar to study 1, though, we find a direct effect of the broad vs specific communications, suggesting that non-British consumers perceive a reduced RBIV with the more specific, compared to the broad communication. The indirect effect of LGBTQ+ vs ethnic communication remains significant, similar to the model for majority consumers. For LGBTQ+ consumers, we do not observe a communication effect. This group perceives all communications equally distant, but rates RBIV higher, if the communication is perceived at a closer PD ($\beta = .49$, $p < .001$) and lower, with an increased DC ($\beta = -.11$, $p < .001$). A closer PD, as before, leads to a lower DC ($\beta = -.21$, $p < .01$). Price perception in this group is only indirectly influenced by PD through DC ($\beta = .14$, $p < .001$).

Overall, these results illustrate the importance of understanding the role of PD and DC in influencing relevant retailer brand image value dimension. They do however also illustrate the important differences between different target groups of receiving the same message as well as specific differences on the role of value and price dimensions.

Discussion and implications

Against the background of an increased consumer demand for diversity and inclusion initiatives in the market as well as an increased use of related statements by retailers, we investigate the effect of retailers' diversity and inclusion communication. Specifically, we focus on the communication of specific retailer actions in the diversity and inclusion domain (diversity of assortment vs diversity within floor staff) as well as the focus on specific target groups, which might have contradicting views (ethnicity and LGBTQ+). To account for their views, we collect a rare data set with representative samples of both minority groups. We ground our research in the perceived psychological distance of communications (Trope and Liberman 2010) as well as social identity theory (Tajfel 1974). We assume that more abstract communications are perceived at a farther psychological distance, which should result in a higher consumer acceptance as long as they are in line with the general values of the given consumer group. Retailers' diversity and inclusion communications, which are perceived and evaluated at a closer psychological distance, were assumed to trigger considerations of the given shopping situation, which might raise dissociative concern.

Overall, our results suggest that a more abstract diversity communication provides a higher retailer value as well as a better price perception. However, when communications are more concrete, but perceived at a closer psychological distance, they will also improve value and price perception. This is due to the effect of reducing dissociative concern through perceived psychological closeness. This effect is consistent across all communications and target groups. It is however important to understand that different consumer groups perceive the same communications differently. The LGBTQ+ group did not differ in their perception of psychological closeness, while the non-British minority group perceived the communication targeted to this group to be closer, leading to an improved retailer brand value, but not an improved price perception. Importantly however, the model for the non-British minority group also showed a direct effect of broad communications providing a higher value. The majority group showed a perception that the retailer communicating only with an LGBTQ+ tailored assortment to be higher priced. One explanation of this is that by making the assortment more inclusive for LGBTQ+ consumers, variety might be reduced, thus increasing exclusivity perception by majority consumers. This suggests that by accommodating one specific minority group, other minority groups and the majority group feel less spoken to by the retailer and therefore see less value in conducting their shopping there.

This is in line with previous research, which highlights the lack of benefits in terms of diversity and inclusion initiatives as one of the main barriers towards their implementation

(Kipnis et al. 2021). By focusing only on one minority group, others might feel excluded or at least not included, which seems to be counterproductive to the intention. In order to enhance consumer well-being through multicultural engagement in the retail setting (Demangeot et al. 2019), we suggest diversity and inclusion statements to convey value to both majority as well as minority consumers. Abstract statements might be less controversial for the retailer and leave room for interpretation, but concrete statements (formulated to feel close by all consumer groups) will enhance the likelihood of in-group and out-group consumers visiting the retail setting simultaneously and engaging with each other. This engagement will in turn positively influence Retailer Brand Image and foster multicultural marketplace well-being (Demangeot et al. 2019).

However, retailers have to be aware of the impact of the level of psychological distance and dissociative concern as well as the related expectations they create in their target segment when implementing diversity and inclusion in their market communications as well as in their business practices (e.g., assortment decisions and staffing). Generally, while potentially impactful, more concrete statements bear more risk as they will be easier to verify by consumers. Retailers will have to live up to the expectations they create in order to prevent backlash (Mukherjee and Althuizen 2020). Also, concrete statements bear the risk of failed representation (Kipnis et al. 2013) and crave careful composition to fully unfold their potential. It is therefore crucial to design concrete statements that are perceived at a close psychological distance by all relevant groups to lower dissociative concern. It is also important to understand the effect of highlighting specific target groups on exclusivity perception – some retailers might gain from a higher price perception, while for others (e.g. discount chains), this might be against their core value proposition.

Overall, our research shows the importance of accounting for the perceived psychological distance when creating diversity and inclusion initiatives as it reduces potential dissociative concern. We find that abstract communications can create value for some groups, but focusing on perceived psychological closeness increases value and price perception consistently. Concrete communications will be perceived to be closer, if carefully composed. We focused on closeness perception of different retailer actions and different target group communications. Future research should focus on a deeper understanding of the communication features creating closeness perception across different consumer groups. Future studies could take into consideration the role of supporting means, such as the role of supporting text with pictorial information. In addition, conducting in-store experiments on consumers' reactions to retailers' diversity and inclusion initiatives will enhance external validity of our findings.

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Keywords

Reusable packaging, green packaging, circular economy, market opportunities, e-commerce

Introduction

As online shopping continues to grow, so will its impact. Accompanying this trend is the increased amount of single-use packaging in order to ship products to the customer and back, if expectations have not been met. As the name indicates, single-use packaging follows the “take-make-dispose” principle. It ends up as waste after its first use cycle and builds the foundation of the predominant linear waste management system. One of the most promising efforts leading the transition towards a more circular waste management system and aiming to put a halt to single-use packaging is “reuse”. Reusable (or circular) packaging solutions aim at recirculating the packaging of parcels multiple times before they eventually are disposed or recycled.

Purpose

Reusable packaging solutions are urgently needed from an ecologic point of view to curb plastic pollution. As such they are considered as politically expedient. However, hardly any practical use of reusable and circular packaging schemes exists within Austrian e-commerce operations (Coelho et al., 2020). To address this circumstance and potentially promote the further implementation of circular packaging, the aim of this study is to answer the following research question: What are the market opportunities for circular e-commerce packaging in Austria? In order to evaluate the market opportunities of reusable packaging solutions in e-commerce for retail companies, the attractiveness map by Gruber and Tal (Gruber et al., 2018) is used. The attractiveness map constitutes the core of the market opportunity navigator, a corroborated framework helping companies to identify, evaluate and prioritize market opportunities for their business (Escursell et al., 2021). An attractive market opportunity is one that will likely produce significant potential for value creation and poses relatively few challenges in capturing that value. To evaluate the market opportunities of circular packaging,

we aim to evaluate the potential for value creation and challenges in capturing that value in course of the implementation of circular packaging.

Methodology

To obtain the data required for estimating the location of circular e-commerce packaging within the attractiveness map, 16 qualitative expert interviews with retail companies were conducted. Retail companies from different industries were approached, to get a multifaceted picture of the potentials and challenges for circular e-commerce packaging in Austria. The sample included (among others) respondents from five clothing/textiles companies, four drugstore companies, three office suppliers and even a food retailer. The interviewees were either the CEOs or chief of logistics operations of the respective retail companies. In the interviews, information on the potential for value creation and respective challenges in capturing that value was retrieved of each of the companies. The intended result of the empirical qualitative research was to gain in depth understanding from within the specific retail company and to figure out whether circular packaging represents a viable market opportunity for the company. Ultimately, the interviews help to obtain a better understanding of the possibilities, opportunities, barriers and impact of introducing circular e-commerce packaging. A semi-structured questionnaire was used to guide the interviews. This approach helped to focus on relevant topics without restricting the conversation too much. Whenever possible, the interviewees were able to talk freely about a subject matter without being interrupted. Therefore the interviews ranged in duration but lasted not more than one hour. According to the principles of qualitative interviews, the questions were formulated in a very open way. All 16 interviews were conducted between March and May 2021. All interviews were conducted via videoconference technology (MS Teams) due to the global COVID19 pandemic. The conversations lasted up to one hour and were partly recorded and transcribed. MaxQDA was used as a software tool to structure and analyse the interview results. The data derived from the interviews was subsequently used to rate circular e-commerce packaging and place it in a quadrant of the attractiveness map.

Findings

The interview results were analysed according to the two main dimensions of the market opportunity attractiveness map, which are “potentials” and “challenges”. The interviewees pointed out severe challenges which inhibit the introduction of circular e-commerce packaging. The most crucial aspect is the return costs which occur due to the fact that customers send back their empty packaging to the retail companies. Rates for return shipment are rather high and cut into the margins of either the provider of the reusable packaging or the online retailer. For a reusable packaging scheme to prosper, the current infrastructure would have to change. An indispensable prerequisite for this is functioning reverse logistics. Given the nascency of the innovation of reusable packaging in e-commerce and the ubiquity of single-use packaging, changing the current infrastructure can be considered a mammoth task. It not only requires setting up the infrastructure but also changing the roles of many stakeholders involved in the process. By adopting reverse logistics, the underlying responsibilities diffuse and have to be reassigned. Novel business processes have to be implemented and proven patterns of thinking and acting have to be broken. This system change which is bound up with circular packaging represents a relevant challenge for all stakeholders involved - producers, retailers as well as consumers.

A key actor for the implementation of circular packaging is the fulfilment centres of the retail companies. Their willingness to adopt reusable packaging to their operations heavily depends on whether the integration into existing processes can be carried out seamlessly. The primary drivers of fulfilment centres are speed and efficiency. Reusable packaging solutions arguably

compromise either of these drivers. Along this line of thought, the adoption of reusable packaging entails significant changes to incumbent processes which adversely affect operational productivity and costs. For example, labour costs at fulfilment centres might increase since workers have to spend more time on packing and reprocessing the shippers for another use cycle. As a result, fulfilment centres might be reluctant to transition away from single-use packaging.

Breaking up and changing consumer's habits is another challenge which is particularly difficult. Using single-use packaging is extremely convenient to consumers. Having to return empty packaging is an inconvenient task that might also entail higher costs for consumers. Despite the impact of sustainability on their purchasing decisions, the dimensions "quality" and "price" of a product still play the most important roles at the point of sale.

Despite the considerable challenges described above, there are also several aspects that would lead to the conclusion that in fact there is a great economic and ecological opportunity to establishing circular e-commerce packaging in Austria. In the following, the potentials of reusable packaging will be detailed.

First of all, from an ecological standpoint alternative route to recycling are urgently needed in order to reduce the negative externalities of single-use packaging (Dey et al., 2021). The recent uptake of both demand and supply in Austrian e-commerce has resulted in strong growth of the total volume of e-commerce packaging in circulation. This causes substantial waste. Although firm legislative action is yet non-existent in Austria, curbing the pollution caused by single-use packaging is politically expedient per se. At the level of the EU, several initiatives have been brought underway that foster the implementation of reusable packaging solutions. It might be reasonably assumed that single-use packaging will become more expensive in the near future as extended producer policies are enforced. If environmental costs associated with single-use packaging throughout its product life cycle are added to their market price, it will in turn inevitably improve the economic viability and overall business case for reusable packaging.

In Austria, online fashion retail constitutes the largest segment and is growing at a rapid pace (E-Commerce Study Austria 2021). It represents a particularly suitable application field for the subdomain according to the analysed use cases. Additionally, Austrians are especially prone to return their orders which further increases the packages in circulation.

Evidence shows that a growing number of consumers value sustainability as an important criterion in their purchasing decisions (Polinori et al., 2018; Pinkse et al., 2021; Lubowiecki-Vikuk et al., 2021). They are buying more environmentally friendly products than they did five years ago and many have even stopped buying certain products because of environmental concerns. In addition to their willingness to pay more for sustainable products, they are willing to act to support their sustainability ambitions e.g. return used packaging to be reprocessed for another use-cycle.

Reusable packaging solutions can unlock several potentials for online retailers and thereby offer a compelling business case. Particularly worth mentioning in that regard is the possibility to enhance brand loyalty and customer engagement. Apart from that, greater visibility throughout the supply chain can be achieved which results in considerable cost savings for online retailers.

Taking the above-described aspects into consideration, the market opportunities for circular e-commerce packaging can be classified as "moon shot" according to the attractiveness map of Gruber and Tal (Gruber et al., 2018). Moon shot market opportunities are characterized by the fact that both the value creation potential and the challenge to capture the value are relatively

high. In most cases they constitute very innovative solutions with a high risk and high return profile (Gruber et al., 2018)

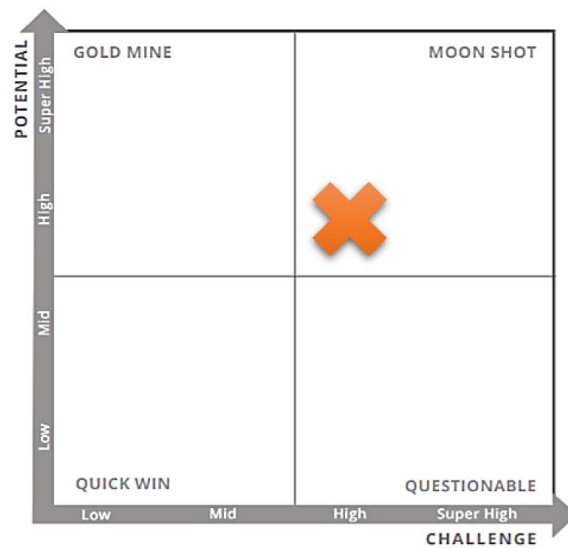


Figure 1: Classification of market opportunities for circular e-commerce packaging in Austria.

Contributions

Offering reusable packaging to cater the needs of the booming sector of e-commerce is a niche domain which is under-researched so far and which is spearheaded by a few relatively small initiatives only. A circular packaging approach entails a paradigm shift because in many cases the packaging is no longer owned by the consumer but by the supplier. In that sense, the packaging is offered as a service rather than a product. This might discourage retail companies from banning single use packaging. This study tries to support retail companies by setting out the main potentials and challenges which are bound up with circular e-commerce packaging. It is an attempt to demonstrate the strengths and weaknesses which accompany the market opportunity of reusable packaging.

Practical implications

As the preceding discussion shows, the implementation of circular packaging may represent an economically attractive market opportunity for Austrian retailers. In fact, truly innovative opportunities are often located in the “moon shot” quarter of the attractiveness map. There are many historic examples in which innovative ventures have disrupted existing value chains by completely turning them around. This might also be the case with reusable packaging disrupting the linear waste management system and single-use packaging. The success of subscription services in combination with changing social values and the recent boom of the sharing economy and e-commerce, give reason to believe that reusable packaging is not as unlikely as it might have been some years ago.

Research limitations and outlook

Further research is required to analyse how much a customer would be willing to pay more for reusable packaging. This is helpful to implement an effective pricing strategy. The margins of online retailers and thereby their interest in reusable packaging solutions depend heavily on the proportion of costs that can be offset to the consumer.

Particular research focus should also be placed on existing reverse logistics. In view of the fact that return shipments are a very common practice in the local market, it would be interesting to see to which degree they are developed to date. This would enable drawing a conclusion upon the complexity of embedding a circular packaging scheme into the current logistics ecosystem. In that context, it would also be interesting to analyse to what extent the process of preparing the shippers for another use cycle could potentially be outsourced to third party suppliers and whether this would be economically viable. It would also be valuable to examine how fulfilment centres could be incentivised and convinced to adjust their supply chain logistics to reusable packaging solutions.

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Keywords

Reusable packaging, green packaging, circular economy, market opportunities, e-commerce

Innovation and technology in the retail environment

How shopping habits change with artificial intelligence: smart speakers' usage intention

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Keywords

Smart speakers, chatbots, intention to use, artificial intention, technology acceptance

Introduction

Modern society is faced with advances in the field of Artificial Intelligence (AI), Machine Learning (ML), and Deep Learning (DP) that require scholars and managers to reflect on and reshape the relationship between man and technological applications. The retail context, in particular, has been revolutionized by smart technologies (Pantano and Timmermans, 2019). Literature has recently investigated these innovations, going to explain the logic and dynamics that have allowed their creation, operation, and subsequent implementation in numerous fields of human activity, with a particular focus on marketing activities that concern one of their most successful applications: chatbots. Among these, smart speakers are of utmost interest in

the retail sector: thanks to Natural Language Processing (NLP), they allow users to interact with voice assistants through their voices.

This paper aims to study how individuals interact with smart speakers. Starting from the model of technology adoption TAM by Davis (1989), a SEM model is used to identify the variables affecting the intention to use this technology. The interaction that millions of users are establishing all over the world with voice assistants opens up multiple and interesting scenarios in economic and marketing terms for companies able to reap the benefits of the changes taking place. The results offer theoretical and managerial implications concerning the role played by smart speakers in the retail sector. Finally, future directions are discussed aimed at underlining how voice assistants are slowly changing the human-machine relationship.

Purpose

The recent development of ML has made it possible to take huge steps in NLP or computational linguistics, a field of study that combines AI, computer science, and linguistics.

NLP uses computational techniques for learning, understanding, and producing language content intending to process human language for numerous tasks and applications (Zhao et al., 2020). The origins of this technology date back to 1964, when Weizenbaum created ELIZA, the first program capable of reproducing a human conversation (Kaplan and Haenlein, 2019). However, it is only in the last twenty years that computational linguistics has become an area of scientific research and a practical technology incorporated into commercial products. Today, there are high-performance tools able to identify syntactic and semantic information, but also to deduce information from and in the context of a speech. This development is due to four key factors: an increase in the computing power of computer devices, the availability of linguistic data, the development of ML, and a greater understanding of the structure of human language (Hirschberg and Manning, 2015). Specifically, chatbots are programs that simulate human conversation, allowing users to interact with digital devices, as if they were addressing real people (De Cicco et al., 2020).

The recent shift toward messaging systems as the primary channel for communication (both personal and professional) has contributed to the rapid spread of this technology (Gnewuch et al., 2018). Nowadays, Voice Assistants and Smart Speakers, such as Siri, Xiaodu, Cortana, Alexa, and Echo Dot, have become so widespread with interesting growth prospects for the coming years.

From 2016 to 2021, the number of individuals holding at least one smart speaker in the US rose from 8% to 50% and by 2025 this penetration rate is expected to reach a share of 75%. Revenues generated by the smart speaker market will amount to \$35.5 billion, steadily growing since 2016 (Statista, 2022).

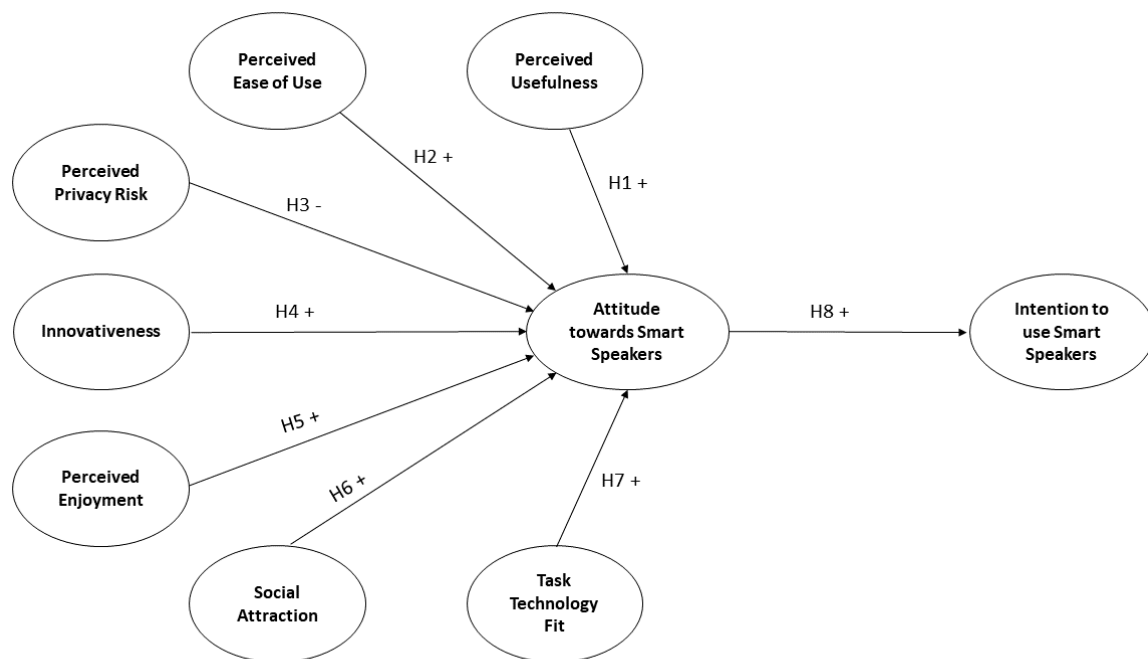
Starting from these considerations, the present study aims to understand how this technology is perceived by its actual and potential users, what kind of attitude they have toward smart speakers, and consequently their intention to use them.

Conceptual framework

The conceptual framework is based on the TAM model (Davis, 1989) since it is considered a solid tool to predict the behavior of potential and real users and their respective attitudes toward a specific technology (Aiolfi and Bellini, 2019). In addition to the original TAM variable, other dimensions capable of directly influencing the attitude and indirectly the

intention to use smart speakers were added. Ultimately, the conceptual framework is based on the eight hypotheses shown in Figure 1.

Figure 1 - Conceptual framework



Methodology

To test the proposed model, a self-administered questionnaire was filled in online by a sample of 159 subjects. Consumers who surf the Web might represent the most suitable target for the research objectives. Indeed, those who are used to surfing online are most likely more familiar to consider voice assistants and using innovative smart speakers.

All the scales used in the online survey come from previous research about shoppers and marketing theories. All the items were adapted for the context of smart speakers and measured using a 7-point anchored scale (Appendix-Table 1).

In addition, demographic questions and smart speakers' usage habits were included (e.g., individual's awareness; motivations, and frequency of use).

Data underwent two phases of analysis. First, a confirmatory factor analysis (CFA) with the latent variables considered was performed to obtain evidence of reliability, convergent and discriminant validity.

Second, the paths of the hypothesized relationships were explored. Structural equation modelling (SEM) with the maximum likelihood method employed for the CFA and the analysis of the conceptual model. Data analysis was performed using the IBM SPSS 25.0 statistical software and the software LISREL 8.80.

Findings

Respondent Profile

The sample was represented by 72% women and 28% men, with a mean age of 37.8 (min = 18; max = 75). Almost all respondents (95.7%) stated that they know about smart speakers and 44.2% own at least one. Among them, almost 80% own an Amazon device of the Echo Dot series. The majority of the respondents (63.8%) use their smart speakers at least once a day and almost all smart speaker users adopt those devices to listen to music (95.7%). For a more complete understanding of the socio-demographic profiles and habits see respectively Appendix-Table 2 and Appendix-Table 3.

Analysis of the measurement model

As the skew and kurtosis statistics showed that the normality assumption was violated, the model was estimated using the method by Satorra-Bentler (1994). The fit statistics indicated that the measurement models fit the data well ($\chi^2 = 735.850$, $df = 428$, $p = 0.000$, $CFI = 0.979$, $RMSEA = 0.065$, $NNFI = 0.976$, $SRMR = 0.058$). All items substantially and significantly loaded onto the expected latent construct (Anderson and Gerbing, 1988) and all constructs also showed satisfactory levels of Composite Reliability (CR) and Average Variance Extracted (AVE), exceeding the recommended cut-off points for the adequacy of 0.70 and 0.50 respectively (Fornell and Larcker, 1981; Steenkamp and Van Trijp, 1991). Discriminant validity was also assessed based on the Fornell and Larcker's (1981) criterion. We tested reliability using Cronbach's Alpha and all values are higher than the minimum acceptable value of 0.70 (Santos, 1999). Table 1 in Appendix reports the reliability and validity indexes for each construct.

Tests of the structural model

The fit indices indicated an acceptable overall fit of the structural model to the data: $\chi^2 = 99.819$, $df = 7$, $p = 0.000$, $CFI = 0.929$, $NFI = 0.926$, $NNFI = 0.637$, $SRMR = 0.0631$.

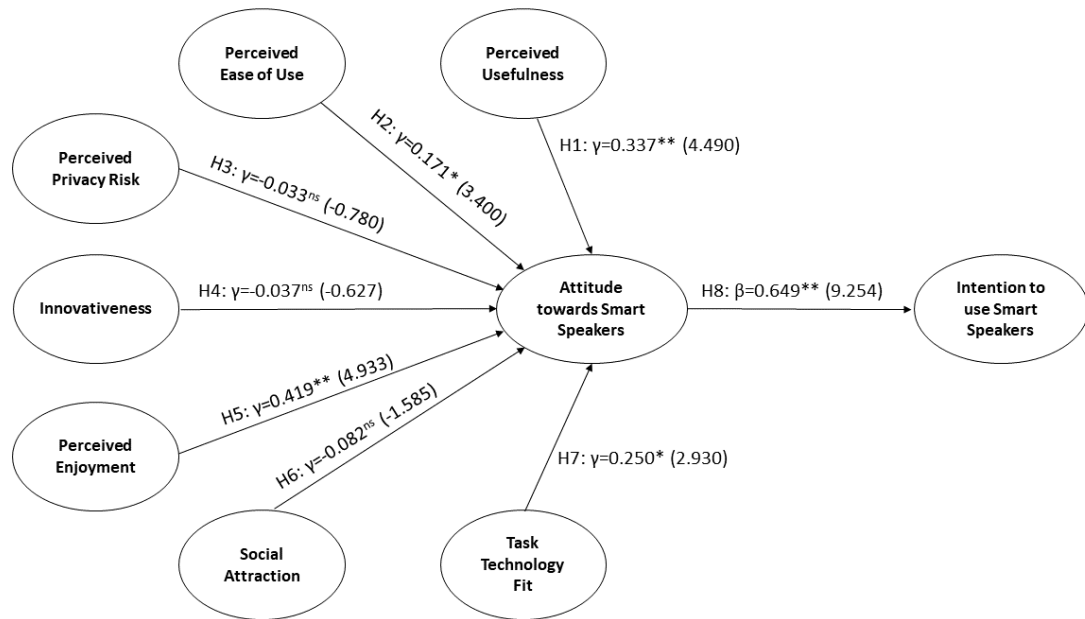
Results in Figure 2 show that the variables of the original TAM (Davis, 1989) significantly affect the attitude toward the smart speakers. Therefore, the model supports H1 and H2 for which the higher the importance attributed to usefulness and ease of use the higher the positive attitude ($\gamma_{\text{usefulness}} = 0.337$, $p < 0.001$; $\gamma_{\text{easeofuse}} = 0.171$, $p < 0.01$) that in turn positively affects the intention to use the smart speakers proving H8 ($\beta_{\text{attitude}} = 0.649$, $p < 0.001$).

A significant relationship also emerged between task technology fit and attitude toward smart speakers ($\gamma_{\text{tasktechnologyfit}} = 0.250$, $p < 0.01$) as well as between perceived enjoyment and attitude toward smart speakers ($\gamma_{\text{enjoyment}} = 0.419$, $p < 0.001$), thus supporting H7 and H5.

Contrary to what was hypothesized, the relationship between perceived privacy risk and attitude has been proved to be not statistically significant ($\gamma_{\text{privacyrisk}} = -0.033$, $p > 0.05$), thus not supporting H3.

Finally, no significant relationship has been found between innovativeness and attitude toward smart speakers nor between social attraction and attitude toward smart speakers. Therefore, H4 and H6 have not been supported.

Figure 2 - Structural Model



Note: **: p-value<0.001; *: p-value<0.01; ns: p-value>0.05

Contributions and Implications

Original/value

In a context radically transformed by scientific progress, where the relationship between man and machine is radically changing, the present study has attempted to understand the variables that influence the attitude toward smart speakers and the intention to use them.

This phenomenon, in addition to stimulating important developments in the daily life of human beings, opens up multiple and interesting scenarios for companies able to reap the benefits of the changes taking place. At the core of this technology improvement there is undoubtedly the topic of personalization: smart speakers, thanks to AI and ML, continuously collect information and feedback on the requests submitted to them. They process and use this knowledge to improve and optimize their functioning and be able, later, to better respond to subsequent requests from the same user.

Finally, our work confirms the validity of the application of the TAM model to measure the factors underlying the adoption of new and specific technology, the smart speaker, with the same success as other technologies.

Practical and social implications

The antecedents of attitude and intention are in line with the characteristics of smart speakers most appreciated by those who are familiar with them. The challenge today is to make conversations and interactions similar to those that take place between human beings. This phenomenon highlights the importance of how interactive experiences are considered better than transmitting static information, and a high level of interactivity often manages to compensate for the impersonal nature of a chatbot (Go and Sundar, 2019).

The range of actions that a smart speaker can perform must be expanded and go beyond carrying out routine activities. The way to increase the perceived usefulness is to give evidence that users can use the voice to have answers even to unthinkable actions and perform these actions optimally and easily and make users perceive the benefit in terms of time, efficiency, and comfort. It is, therefore, necessary to invest resources to create a stable and continuous link between a user and smart speaker based on the logical chain that the more it can carry out multiple, easy, and differentiated actions, the more useful it is and therefore the greater the attitude toward it and consequently its use.

Moreover, since the ‘task technology fit’ is the perception of the adequacy or inadequacy of a smart speaker to perform the actions for which it is programmed, all the activities it can perform, present (and future), must always be carried out correctly, without margins of error. This aspect does not concern so much the execution of the command itself (i.e., inserting an event in the calendar), but more the immediately preceding part such as the understanding of the voice command to perform exactly the required task. The main limitations to the development of a smart speaker depend on the progress achieved in the field of NLP that clashes with the complexity of the human language does not always follow a linear flow and is full of aspects complicated to translate into computational linguistics. The phrases-inputs spoken can also differ or be misunderstood thus generating frustration for the users who interface with them daily. Thus, beyond all the ancillary features that a smart speaker may be able to have, companies are forced to ensure better speech recognition understood as a greater understanding of sentences and commands given, the ability to understand multiple languages, and to add emotional aspects within conversations with devices (Zwakman et al., 2021).

To develop emotionally smart speakers, it is appropriate to understand users' perceptions and preferences toward situations in which one might need emotional support and understanding or when vice versa competent and more informed responses would be preferred (Lopatovska, 2020). It is precisely this emotional bond that must be created and most exploited by firms to form the basis of a positive and lasting relationship. Perceiving enjoyment can create a positive emotional relationship with people's voice assistants. The use of a smart speaker is not only aimed at carrying out actions for their own sake, such as setting an alarm clock but also to derive satisfaction from what people use it for. This is for example the main reason why users can activate skills that allow them to be entertained through music, games, or fun conversations.

In addition, despite the growing interest of users in the protection of personal and sensitive data, our results show how individuals are not afraid of sharing their data through smart speakers. This result could be attributable to the paradox of privacy (Norberg et al., 2007). Today giving consent to the processing of personal data has become almost a routine, an automatic gesture (sometimes mandatory to use some applications) and although people say they care about their privacy and are not willing to share their information, they give their data in exchange for small benefits or convenience (Aiolfi et al., 2021).

To sum up, our work has attempted to light on the revolution taking place to fully satisfy the individual intention to use smart speakers that may turn on to be also a new retail channel. Thus, in the next future, it is essential to pay attention to the development of this new sales channel that has the potential to change the current purchasing habits of individuals who use e-commerce, especially convenience goods, for which the consumer is not willing to invest time in the search for information and evaluation of alternatives.

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Keywords

Smart speakers, chatbots, intention to use, artificial intention, technology acceptance

USING A PERSONALITY-PROFILING TO INVESTIGATE ONLINE RETAIL TARGETING: MINING THE DIGITAL AD CONTENTS

Introduction

Retailers increasingly rely on digital ads to bring traffic to their shopping websites. Digital ad spending outlook blows past previous forecasts, with US digital retail ad spend hitting US\$31.49 billion in 2021, a 53.4% increase from the previous year (eMarketer, 2021). Yet, across all industries, the average clickthrough rate is 1.91% for search ads and 0.35% for a display ad (HubSpot, 2020). There is a clear managerial need to better target the potential customers.

Past research suggests that psychological characteristics are more important predictors of shopping proneness than demographics (Roy, Sethuraman and Saran, 2016). Laboratory studies show that retail ads are more effective when they are tailored to individuals' unique personality characteristics (Dubois, Rucker and Galinsky, 2016; Hirsh, Kang and Bodenhausen, 2012; Moon, 2002; Wheeler, Petty and Bizer, 2005). However, research on how personality impacts of a broad spectrum of real-world online ad clicks remains nascent and limited (Matz *et al.*, 2017).

Purpose

The semantic content and style aspects of verbatim can be used to gain new insights into digital ad contents and to investigate their impact on ad clicks. In this work, we propose an approach to match the textual feature - Authenticity to users according to their identified personality profiles.

We first establish the typology of personality-profiling of consumers based on the Big Five framework and the self-regulatory systems: brittle & overcontrolled, resilient & undercontrolled, resilient & controlled, and brittle & undercontrolled. People with different psychological profiles are expected to display unique patterns of responses to ad contents. The authors employ text mining to extract ad Authenticity reflected by the linguistic styles of textual contents of 100 ads across 20 product categories. A panel data of 120 users reveals that the influence of Authenticity in ad content on ad clicks is differentiated based on personality-profiling, such that increases in Authenticity in ad content decrease the ad click intentions of the overcontrollers. We also found a quadratic relationship between aggregate authentic content in an ad and the ad click intention for the undercontrollers, in which the aggregate authentic content should increase ad click initially, but decreases subsequently. However, such effect is found only found undercontrollers who tend toward brittle but not those who tend toward resilient.

Conceptual framework

Online Retail Ad Targeting

Ad targeting is aimed at encouraging a particular segment of individuals to act on the communicator's viewpoint (Matz *et al.*, 2017). Rather than presenting an off-key or irrelevant message, personality science allows marketers to empathize with customers and engage them with sponsored content in a way that is more likely to resonate with them.

Psychological persuasion research shows that persuasive communication is most effective when tailored to people's personalities and motives (Dubois, Rucker and Galinsky, 2016; Hirsh, Kang and Bodenhausen, 2012; Moon, 2002; Wheeler, Petty and Bizer, 2005). For instance, when the marketing message for a mobile phone was matched to their personality

type, participants' favorable attitudes and purchase intentions were higher (Hirsh, Kang and Bodenhausen, 2012). While the extant research offers promising evidence for ad targeting's effectiveness via psychological persuasion, the validity is limited by the fact that these studies were mainly conducted in small-scale, controlled laboratory environments. One exception is Matz et al. (2017), who test the effects of psychologically tailored advertising in field experiments with over 3.5 million users. They demonstrate that matching the persuasive appeals to people's psychological characteristics significantly altered their behavior as assessed by clicks and purchases.

Personality-Profiling

Big-five personality characteristics have long been seen to be the most reliable and complete variable-centered approach to personality description, with a wealth of supporting evidence (John, Naumann and Soto, 2008; Judge, Heller and Mount, 2002; Oshio *et al.*, 2018; Soto and John, 2017). Extraversion, conscientiousness, agreeableness, neuroticism, and openness to experience are the Big-five personality dimensions that define the fundamental ways in which personality differs (McCrae and John, 1992). However, the inclination to interpret personality characteristic dimensions in isolation leads to a restricted knowledge of personality types (Sava and Popa, 2011). The person-centered approach, in contrast to the variable-centered approach, describes the configurations of personality traits, such as Block and Block's ego-control/ego-resiliency model, which focused on self-regulatory processes that reflected individual differences in emotion, thought, and behavior (Block and Block, 1980). Integrating the variable-centered and person-centered methods has been shown to be beneficial and productive in empirical personality research (John, 1990; Robins *et al.*, 1996). As a result, the configuration of self-regulatory components of personality observed and represented within the Big-five model's descriptive dimensions might reveal additional information about personality profiles (Asendorpf and Denissen, 2006; Asendorpf and van Aken, 1999; Isler *et al.*, 2017). Resilient personalities, for example, have a low level of neuroticism and are above average in all of the other Big-five aspects. The four-group personality configuration, namely high resilience and low control, high resiliency and high control, low resiliency and high control, and low resiliency and low control, has been identified and proven in the literature to give stronger coherence and predictive ability than other configuration models (Gramzow *et al.*, 2004; Isler *et al.*, 2017; Robins, John and Caspi, 1998; Schnabel, Asendorpf and Ostendorf, 2002). Personality differences may be used to explain user behavior and preferences across a wide range of content and apps (Weinstein, 1994). For content personalisation, user segmentation based on personality factors is critical (Lee, Cho and Choi, 2019).

Hypothesis development

Authenticity as a content cue in ads has been extensively discussed but empirically under studied (Becker, Wiegand and Reinartz, 2019). Authenticity scores are meant to detect writing that is honest and personal in nature (Cohn, Mehl and Pennebaker, 2004). When people reveal themselves in an "authentic" or genuine way, they tend to communicate more spontaneously and do not self-regulate or filter what they say. Here we took on the Authenticity measure that has less to do with "deception" in a traditional setting and is, instead, more a reflection of the degree to which someone is self-monitoring (Markowitz et al.). Prepared texts (i.e., speeches produced ahead of time) and writings in which a person is being socially cautious are examples of texts that score low in Authenticity. Spontaneous chats between close friends or political leaders with minimal to no social inhibitions are examples of contents that score high in Authenticity.

In this paper, we build upon the theoretical lens of self-regulatory systems (Block, 1971; Gramzow *et al.*, 2004) and propose a match between the tone and framing of the communication with the personality properties and thinking styles of potential customers can boost effectiveness.

Overcontrollers are planful and organized, but also avoidant and intolerant of ambiguity (Gramzow *et al.*, 2004). Spontaneous messages can be perceived as unpolished and unplanned, which can induce negative responses.

H1: There is a negative relationship between aggregate authentic content in an ad and the ad click intention for the overcontrollers.

Undercontrollers are spontaneous and impulsive (Gramzow *et al.*, 2004). For this group of consumers, some authentic elements in ads can stimulate brand trust (Anderberg and Morris, 2006), help consumers connect with the brand (Grayson and Martinec, 2004), trigger feelings of sympathy or empathy (Stern, 1994), and help overcome consumer skepticism toward ads (Darke and Ritchie, 2007). However, overly uninhibited message execution may be perceived as “rough”, “unpolished” or even unprofessional, which may impair communication (Zeng, Kohno and Roesner, 2021).

Compared with the brittle undercontrollers, resilient persons who tend toward undercontrol are capable of delaying the urge to respond to an ad that is perceived to be authentic, because of the self-regulatory ability to modulate their degree of impulse control in response to situational demands. Brittle persons who tend toward undercontrol have difficulty delaying such responses.

H2: There is a quadratic relationship between aggregate authentic content in an ad and the ad click intention for the undercontrolled, in which the aggregate authentic content should increase ad click initially, but decreases subsequently. However, such an effect is stronger for the brittle as compared to the resilient.

Methodology

Data

The dataset includes 100 text advertisements rated by 120 unacquainted individuals who are English native speakers ages 18 through 68 ($\mu = 31.7, \sigma = 12.1$). 64% of the subjects are females and most of them have a university education. The Big Five Inventory-10 personality ratings are adopted to measure the differences across the participants (Rammstedt and John, 2007). The Big Five Inventory is indicated as a short measure with acceptable reliability and validity for time-limited evaluation protocols (Markowitz *et al.*; Soto and John, 2017; Thalmayer, Saucier and Eigenhuis, 2011). Participants rate each advertisement (from one to five) based on how likely they would click on it. Ads in 20 product/service categories are shown to all participants as pictures (Roffo and Vinciarelli, 2016).

Findings

In the first phase, we looked for groups of participants who shared similar patterns of personality traits across the Big-five personality dimensions. K-means clustering is used to identify the optimal segmentation of participants to maximize the homogeneity of individuals in the same segment, while decreasing the similarity between different segments (Kuhn and Johnson, 2013). The optimal K is determined as four based on the quantitative indices. The first segment consisted of 40 (33.3%) users, while 35 (29.2%) users were allocated to the second segment, 17 (14.2%) users were in the third segment and the last segment had 28

(23.3%) users. According to Gramzow et al. (2004)'s personality typology, the first group of users has above-average levels of neuroticism and lower scores across the other four dimensions (brittle overcontroller), while the second group is highly extraverted, agreeable, conscientious, and open-minded with low levels of neuroticism (resilient undercontroller). Users in the latter two segments, on the other hand, showed personality attributes that were halfway between the previous two. Users in the third section had moderately low levels of extraversion and openness but moderately high levels of the other personality characteristics (resilient overcontroller). The people in the last cluster are moderately extraverted and open to experience, but less agreeable and conscientious (brittle undercontroller).

In Phase2, to assess the semantic content and linguistic style of the digital ads, we used Google's Tesseract OCR engine to perform an Optical Character Recognition (OCR) technique to electronically extract texts from the 100 ad pictures (Smith, 2007). Next, the extracted ad texts were analyzed using the linguistic inquiry and word count (LIWC) program (Pennebaker *et al.*, 2007). LIWC counts the number of words that match a certain linguistic category and determines the percentage of the text that fits into the category for an ad corpus. To capture the effect of Authenticity on ad click rates, we used the Authenticity score of each ad corpus as an explanatory variable. To test our hypotheses, we split the sample into four clusters and construct the main effect and square terms in separate models. We assessed the main effects in Model 1 and included squared effects in Model 2. We found a significant negative effect of increasing levels of aggregate authentic content on declining ad click rate ($\beta = -0.003$, $p < .05$) for both brittle and resilient overcontrollers (H1 is supported), whereas extreme intensity changes in authentic content exhibited a significant quadratic relationship on ads click rates for brittle undercontrollers ($\beta = 0.008$, $p < .001$) and insignificant for resilient undercontrollers ($\beta = 0.002$, $p < .217$), in support of the nonlinear relationship between authentic content changes and ads click rate for undercontrollers, and such effect is stronger for the brittle as compared to the resilient (H2 is supported).

Original/value

This paper is among the first to match personality profiles with real-world ad targeting using textmining methodology, particularly focusing on the Authenticity of linguistic style.

Practical implications

Digitalization has transformed the nature of retail communications (Hagberg, Sundstrom and Egels-Zandén, 2016). Personality-profiling offers opportunities to better engage individuals, and if done ethically it can be beneficial for customers and organizations alike (Graves and Matz, 2018).

Research limitations and outlook

The study did not include any independent measures of resilience and control. These assessments will be useful in future research to confirm the relationships between the Big-five model's taxonomy of personality types and the self-regulatory levels of resilience and degrees of control.

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Keywords

Ad targeting, Personality-profiling, Linguistic style, Authenticity, Ad click

EXPLORING EXTERNAL EFFECTS OF UNMANNED RETAIL OUTLETS IN RURAL AREAS

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Unmanned Retail Outlets, Food Deserts, Supply Gap, New Retail Formats, External Effects, Externalities

Purpose

For several decades, the retail industry and its environment have faced continuous transformations – a process that has been exacerbated in the era of online retailing and driven by consumer demands for greater convenience. Wide ranging economic and demographic changes have contributed to market-specific pressures leading to seismic strategic shifts across the industry (LeDoux and Vojnovic, 2013; Wrigley *et al.*, 2019). The grocery retail sector, for example, has seen forays into online ordering and delivery, extensive store format innovation and changing store network provision affecting the balance between metropolitan centres and rural areas (Thibodeaux, 2019). This restructuring has created geographical regions with inadequate food supply – commonly referred to as ‘food deserts’ (Bitler and Haider, 2011; Adams *et al.*, 2010; Dennis *et al.*, 2007). Food deserts are defined as predominantly economically disadvantaged regions characterized by small and elderly population, poor education, low income and constrained infrastructure and mobility that importantly lack access to a grocery market (Dutko *et al.*, 2012; Adams *et al.*, 2010; Sinéad Furey *et al.*, 2001; Bromley and Thomas, 1993).

A related change that directly affects the retail industry is increasing digitalization and technological advances both in back office operations and across various customer-facing touchpoints, such as via online ordering or social media marketing (LeDoux and Vojnovic, 2013; Wrigley *et al.*, 2019). These developments provide the basis and opportunity for innovative business models and new forms of retail operation and customer engagement (Badrinarayanan and Becerra, 2019). For instance, unmanned, self-service, automatized retail stores are increasingly prevalent (Yao *et al.*, 2020). Initially, rollouts of unattended stores appeared in 2017 by Amazon, Alibaba and Jingdong (Grewal *et al.*, 2017), representing a new type of retail operation that combines the physical experience of digital technology with the full self-service of in-store shopping (Yao *et al.*, 2020). Examples of digitalized unmanned retail elements are currently found in different goods delivery clusters such as “self-service check out points”, “click and collect stations”, “walk in vending machines” and more recently “fully unmanned stores” such as Amazon Go (Begley *et al.*, 2019). Clearly, unmanned retail outlets represent an increasingly relevant retail form that remains poorly understood from both an industry and academic perspective.

To summarize, existing literature considers food deserts in general, noting their location typically in areas of economic deprivation as lack of access to grocery stores exacerbates these concerns relating to social justice (Adams *et al.*, 2010; Bitler and Haider, 2011; Dutko *et al.*, 2012; Sinéad

Furey *et al.*, 2001). Wrigley *et al.* (2019) finds that the development of high quality convenience stores might have the effect of re-localising food shopping and have a pronounced halo effect on the wider micro retail economy through cross shopping activities. Such a finding is interesting in the context of the growth of unmanned retail outlets (Grewal *et al.*, 2017; Yao *et al.*, 2020). Further, Demoulin and Djelassi (2016) suggest that unattended convenience stores have positive effects on customer satisfaction, patronage and create a more convenient service. Yet, to date, there is no research on the relationship of unmanned automated retail outlets on the vitality of rural areas, food deserts and their externalities. This research addresses this research gap. The purpose of this study is to explore external effects of locating unattended grocery stores in rural areas with hardly any retail infrastructure.

Design/methodology/approach

The amount of literature dealing with unmanned retail outlets in rural areas is rather limited. Therefore, the authors propose an exploratory research design with interviews aiming to investigate stakeholders from two locations such as local businesses, local residents, local authorities, etc. To receive data such as visitor frequency in town centres or changes in population and branch mix in rural areas, the authors draw on secondary data provided by stakeholders.

The study has a longitudinal character, including three collection times: before the implementation of the retail outlets, one month after the implementation and 13 months after implementation. This survey method enables the authors to ensure mid- and long-term results and identify relevant consumer perspectives, trends, and behaviours. At the time this abstract was submitted, phase one and phase two had already been completed. A total of 40 face to face semi-structured interviews have been conducted with residents and stakeholders so far. The Interview Guide consisted of three blocks. First, it was of interest to request the knowledge base concerning a specific unmanned retail outlet of the interview partners as well as the attitude towards it. Part two was about the possible changes and external effects caused by the implementation of the unmanned retail outlet in rural areas. It dealt with positive and negative changes and aims at the identification with help of the PESTEL analysis. The third block was about the shopping behaviour (current and future) of the stakeholders. The authors transcribed the interviews and analysed those with a content analysis (Mayring, 2015). Two independent coders have double-coded (McHugh, 2012) with the software MAXQDA. The authors developed the category system deductive and inductive.

Preliminary Findings

The preliminary findings of this project are based on the literature review as well as the 40 interviews with stakeholder. The external effects are identified for political, economic, social, technological, ecological and legal externalities. The external effects can be perceived as positive and negative by the respondents. First, a political external effect caused by unmanned retail outlets is the encouragement for political parties and especially for the mayor of the rural areas. Sales increases for other companies, e.g. restaurants and other stores are a possible external effect. On the other hand, sales losses for competitors arise. Some of the stakeholder mention that a multi-purpose-trip of the consumers are an outcome (economic external effect). Like traditional offline

retailers, unmanned retail outlets are also a social hub for respondents. Due to the implementation of an unmanned retail outlet, village attractiveness also increases (social external effect). In terms of technological impact, respondents see progress especially in terms of digitalisation, for example, the acceptance of cashless payment could advance. The environment also experiences positive effects. A reduction in car use, as well as an increased use of environmentally friendly impacts are the most likely externalities. Finally, the respondents see a possible negative legal impact especially in the area of data protection.

Originality

This research is the first that examines the external effects of unmanned retail outlets on consumer and their behaviour in the context of food deserts (Contribution 1). It offers the potential to inform retail strategists regarding the implications of unmanned, automated formats for different stakeholder groups in rural communities in particular (Contribution 2). Further, the findings will inform policy makers with an interest in regulating retail development and the sustainability of rural economies more widely (Contribution 3).

Research limitations

This paper deals with unmanned retail outlets in the specific context of grocery shopping. The results only represent the retail sector. As the project has a qualitative method character, quantitative research can be carried out subsequently to the project.

Keywords:

Unmanned Retail Outlets, Food Deserts, Supply Gap, New Retail Formats, External Effects, Externalities

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Keywords

Automation, Retail Innovation, Customer Experience, Technology Readiness, Utilitarian, Hedonistic.

Introduction

Internet of Things (IoT) and the associated digitization and automation of processes are changing and penetrating more and more consumers' everyday lives (Bellis and Johar, 2020), especially as the use of artificial intelligence (AI) makes it possible for IoT devices to become increasingly autonomous (Willems, 2022). One example of autonomous devices are smart refrigerators, which can simplify the shopping process for consumers by automatically reordering products and delivering them to their homes (Hoyer *et al.*, 2020). However, AI-equipped technologies (Nölle and Wisselink, 2019) are still only slowly adopted by consumers (Yang *et al.*, 2017). Existing literature often addresses automated purchasing processes and IoT technologies from a technical perspective (Leung *et al.*, 2018). Considering the consumer perspective in the context of technology acceptance (Yang *et al.*, 2017), there is not only the question of acceptance, but also of the change in the customer journey and thus the customer experience when using such devices. In addition, Hoyer *et al.* (2020) note that different benefit components can also play a role. Thus, following research questions arise:

What role do hedonistic and utilitarian utility components of products play in relation to the intention to use an automated purchasing process?

Which other factors influence the usage intention of an automated purchasing process in general?

How does the customer experience change along the phases of the customer journey?

Purpose

Smart devices like fully automated smart refrigerators can simplify customers' shopping processes. However, despite the advantages, such as saving time and effort, these devices are rarely used in private households. Therefore, the aim of this study is to investigate the influence of various aspects on the usage intention of automated purchase processes and how these can be established in the long term. The purpose of the study is thus to gather new insights into consumer shopping behaviour in interaction with artificial intelligence in order to identify the drivers and barriers that motivate or demotivate consumers to integrate such new technologies into their everyday lives.

Conceptual framework

On the one hand, automation eliminates both cognitive (Bellis and Johar, 2020) and physical effort (Baier *et al.*, 2016), which can be beneficial. On the other hand, consumers may be reluctant to leave decisions to a technology, as this reduces control (Bellis and Johar, 2020). When it comes to concrete theoretical approaches, a large part of research on automated purchasing processes addresses technology acceptance using the Technology Acceptance Model (Kahlert *et al.*, 2017). However, this model cannot adequately explain the use of new technologies because it does not imply individual personality differences (Godoe and Johansen, 2012). For this reason, the theory of technology readiness according to Parasuraman (2000) is consulted. In addition, in the context of automated purchasing processes, some researchers refer to the Theory of Planned Behaviour (Yang *et al.*, 2017), showing that behavioural intention can predict actual behaviour (Ajzen, 1991) in situations including less control (Yang *et al.*, 2017). Automated purchasing processes represent a new way of shopping for consumers deviating from ordinary shopping behaviour by a high degree of autonomy and resulting in barriers to acceptance, for example due to concerns about self-efficacy, control, privacy, and data security (Wunderlich *et al.*, 2013). Also, since individuals use hedonistic products for identity formation (Leung *et al.*, 2018; Reed *et al.*, 2012), leading therefore in a higher involvement in comparison to utilitarian products, it can be assumed that an automation shopping process, which results in a lower active participation by the consumer, is more likely to be rejected in the context of hedonistic consumption, as also assumed by a study by Leung *et al.* (2018).

H1: The usage intention is influenced negatively by (a) the automated shopping processes, (b) hedonic products, and (c) the interaction between these.

H2: The effect of (a) the automatization of purchasing processes (not given vs. given), (b) the product type (hedonic vs. utilitarian) and (c) the interaction between these on the usage intention is mediated by trust.

H3: The effect of (a) the automatization of purchasing processes (not given vs. given), (b) the product type (hedonic vs. utilitarian) and (c) the interaction between these on the usage intention is mediated by behavioural control.

H4: The effect of (a) the automatization of purchasing processes (not given vs. given), (b) the product type (hedonic vs. utilitarian) and (c) the interaction between these on the usage intention is moderated by inherent novelty seeking.

Building on these hypotheses, Figure 1 shows the conceptual research model for the experimental study:

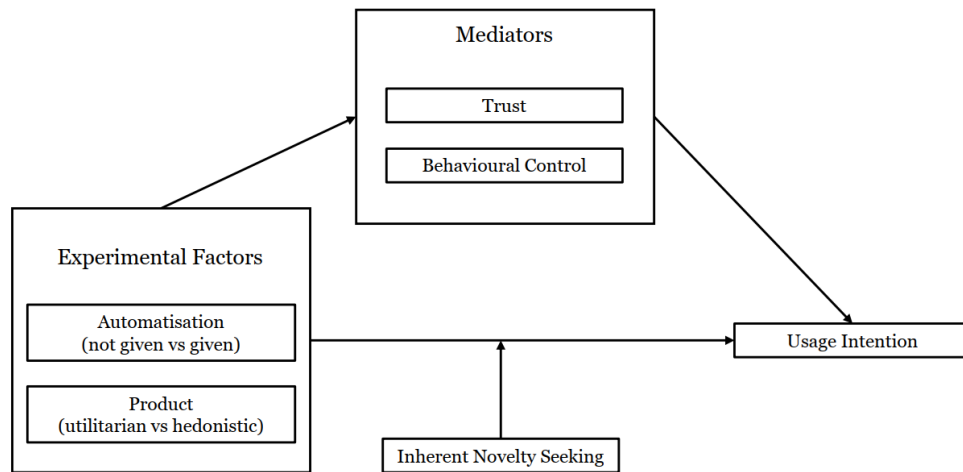


Figure 1: Conceptual research model

Methodology

For examining the given topic, an online experiment was conducted in which the experimental factors “automation” (not given vs. given) and “product type” (utilitarian vs. hedonistic) were systematically manipulated. In the non-automated scenarios, participants were told to open their refrigerator in which a product was missing, that was then procured in the typical way for the participants. In the automated scenarios, the refrigerator automatically detects which products are missing by using built in cameras and order them automatically based on previously preferred products and minimum quantities. For manipulating the product type, milk was used for the utilitarian product scenarios and milk cuts for the hedonistic product scenarios. The manipulation was tested in a pre-study and established constructs from literature were adapted to test the hypotheses. After data cleaning procedure, a total of 176 participants (women: 53.4%) were included in the final analysis.

Findings

Findings show a decreasing usage intention for automated shopping processes and no significant results for the utilitarian and hedonistic product type.

Table 1: Results of ANOVA

		Automation		Product	
		not given	given	utilitarian	hedonistic
Usage intention	M	4.62	2.70	3.59	3.47
	(SD)	(1.63)	(1.47)	(1.93)	(1.69)
	F-value (η^2)	67.178*** (.279)		.197 (.001)	

M: mean (SD: standard deviation); Sig.: * $p < .05$, ** $p < .01$, *** $p < .001$

In addition, PROCESS (model 4) was used (Zhao *et al.*, 2010) and the four steps according to Baron and Kenny (1986) were followed. Mediating effects for trust and behavioural control on the effect of automation on the usage intention could be measured. Moreover, this effect is further moderated by inherent novelty seeking.

Contributions

The study investigates the usage intention of automated buying processes in a B2C retail context and highlights the importance of trust and behavioural control in this context. Retailers offering automated buying processes should further focus on customers who are seeking for novelty. In general, this study offers new insights in how to establish automated buying processes in consumers' everyday consumption in the long term. The establishment of automated purchasing processes and the integration of artificial intelligence into consumers' everyday lives are ways of supporting consumers in an increasingly digitalized, complex, and fast-moving world. Thus, this study contributes to the successful implementation of these technologies from a scientific as well as a practical perspective.

Practical implications

As switching for consumers when starting to use autonomous devices can be associated with more (transaction) costs and more effort, retailers should therefore adopt strategies to keep these switching costs as low as possible and add value to the customer experience. Furthermore, companies offering autonomous devices such as smart refrigerators and the corresponding technologies should focus on an innovative marketing concept, reaching customers that are seeking for novelties, are open-minded, and are internally motivated. In addition, the aspects of trust and behavioral control in particular play a decisive role for consumers' usage intention, which indicates, among other things, an increased need for security.

Research limitations and outlook

However, this work also has some limitations. Having an average age of 28 years of the participants, perceived behavioural control regarding IoT may be different based on the age. Furthermore, the purchase process in the experiment was presented as relatively simple through full automation. In reality, displays on the refrigerator or interfaces to the cell phone could help consumers to intervene in the "automated" purchase process if they want to. For further research, given the autonomy of IoT devices, ethical issues such as aspects of data security, consumer protection, profiling and manipulation regarding automated decision-making should also be investigated. Finally, different levels of automation can be used for smart devices, also offering future research opportunities.

Keywords

Automation, Retail Innovation, Customer Experience, Technology Readiness, Utilitarian, Hedonistic.

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An experimental study on customer responses towards humanoid robot product recommendations in-store

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Keywords

Humanoid Robots, Frontline employees, Personalization, Retail, Product Recommendations

Introduction

Over the past decades customers have become increasingly overwhelmed by an abundance of information and choice (Chernev et al., 2015; Ngai & Wu, 2022). The vast majority of the products and services that customers are exposed to are irrelevant and the few relevant ones are difficult to find. Recommendation systems, defined as software agents that elicit users'

preferences and interests to generate product or service recommendations (Heimbach et al., 2015), promise to overcome such difficulties by connecting customers with the most relevant products or services. As such, they are recognized as a powerful personalization tool (Wedel et al., 2016) and identified as a key area for future research (Hoffman et al., 2022).

Amongst the promising smart technologies that can support in-store personalized recommendations are humanoid robots (Forgan, 2020; Graef et al., 2022). Humanoid robots (i.e., robots with a human-like morphology such as a face, arms and legs; Mende et al., 2019) are envisioned to become more visible in the store environment to enhance customer experience and service quality (Brenngman et al., 2021; De Keyser & Kunz, 2022). For example, Carrefour has been experimenting with humanoid robots for several years now. In 2015, they deployed the first humanoid robots in Europe to offer customers recommendations for wine based on their type of meal and budget.

Where traditionally the contact between a customer and an organization was purely human-to-human (Larivière et al., 2017), service ‘triads’ consisting of technology, employees and customers are more common today (Odekerken-Schröder et al., 2022). Retailers are advised to carefully decide on the balance between human employees and technological input (Larivière et al., 2017).

The current paper aims to contribute to the literature by enriching insights on the interplay between humanoid robots and employees in recommending products to customers while they are shopping in-store. Specifically, we aim to understand whether there are differences in customers perceptions of a humanoid robot providing recommendations, depending whether the products were recommended by the robot only or by a robot team (i.e., a humanoid robot assisted by a store employee).

The proposed research model examines customers’ attitudes towards a humanoid robot providing product recommendations through (1) cognitive elements (i.e. ease of use, convenience benefits), (2) socio-emotional elements (i.e. enjoyment and perceived social presence) and (3) relational elements (i.e. benevolence and competence).

Conceptual framework

The proposed research model (cf. fig. 1) is based on earlier research that proposes that in the study of customer acceptance of robots (service robot acceptance model; Wirtz et al. 2018), researchers should not only account for the cognitive evaluation (e.g. ease of use) but also consider social-emotional (e.g. social presence) and relational elements (e.g. competence and benevolence). People relate to humanoid robots in many ways similar to how they relate to humans (Mieczkowski et al., 2019), as also reflected in the Computers As Social Actors paradigm (Nass et al., 1994). Focusing on humanness cues, judgments of warmth (i.e., people’s intentions) and competence (i.e., people’s ability to carry out their intentions) have surfaced repeatedly as two of the most fundamental factors of social perception (Fiske et al. 2007; Fiske, 2018). Prior research found that such perceptions also apply to humanoid robots due to their humanlike morphology (Reeves et al., 2020; Wirtz et al., 2018), which in turn determine the expectations that customers hold towards the value being delivered in the service interaction (Belanche et al., 2021). When customers and robots collaborate, understanding the relational aspects of the interaction is essential.

In addition to the above described socio-emotional and relational elements, Grewal et al. (2020) recently argued that, when introducing or experimenting with new in-store technologies, retailers should carefully consider that customers desire a convenient, easy and frictionless experience. Technologies that enhance shopping convenience, enhance the customer’s total experience in the store. Therefore, in addition to ease of use, we also account

for the extent to which the humanoid robot recommendation system allows to make the shopping process (here, the selection of chocolates), more convenient.

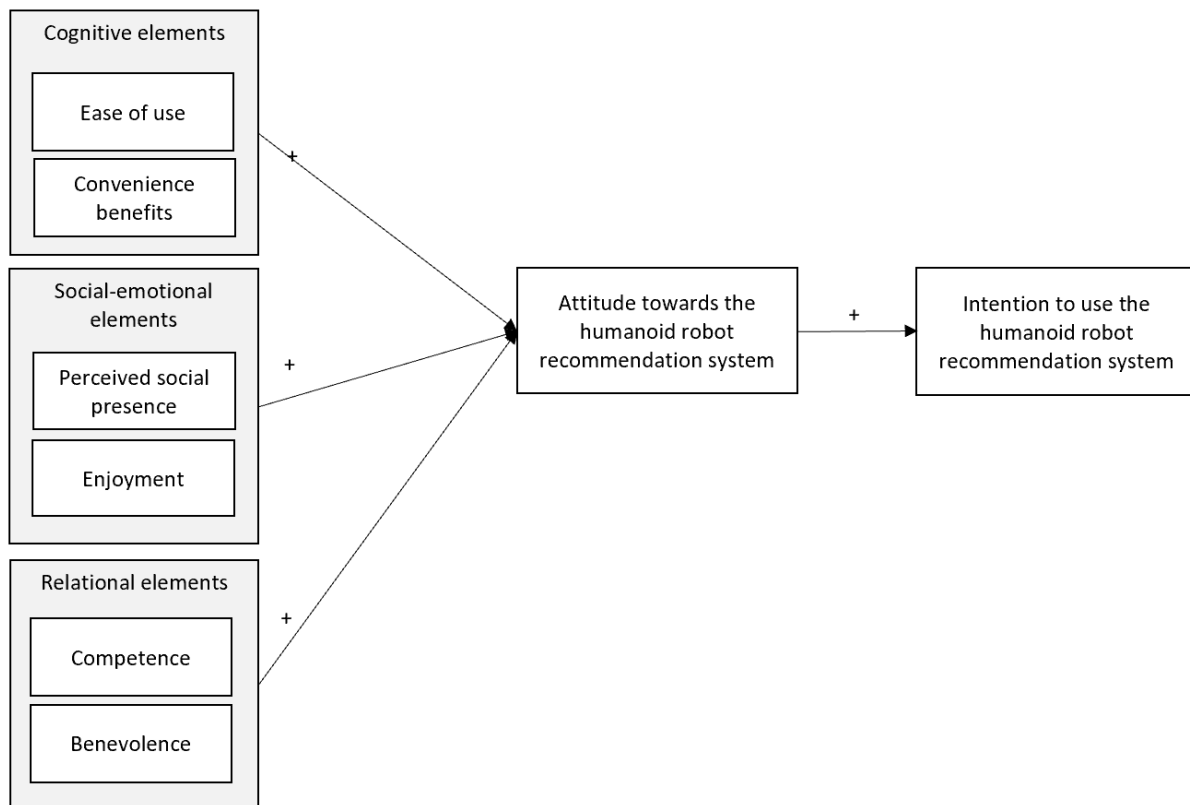


Fig. 1: research model

Methodology

To test the above research objective, a field study in a Belgian retail store selling premium chocolates was set up in February 2019. A Pepper humanoid robot was placed at the entrance of the store, assigned to recommend specific chocolates to participants, based on a set of personal preference questions they had to answer via the robot's touch screen interface. Further data was collected via a questionnaire. The field study employed a between-subjects experimental design. In a first condition, the robot was assisted by a store employee. In the other condition, the robot was by itself. The features of the robot remained constant between both conditions. A total of 239 participated in the study. Five responses were excluded because the participants did not meet the criterion of being at least 16 years old, leaving a final sample of 234 respondents (Ncondition1 = 114 and Ncondition2 = 120).

The distributions of the respondents by age and gender were balanced across both conditions, without any significant differences. More details on the sample characteristics are provided in table 1.

	Robot	Robot team	Total
Number of respondents	114	120	234
Age			
Average (SD)	31.72 (13.07)	33.61 (13.35)	32.69 (13.22)

Gender			
% Female	47,4%	50.0%	48.7%
% Male	52,6%	50.0%	51.3%

Table 1: sample characteristics

Findings

The results will be analysed as follows. First, we will examine whether customers' perceptions of the cognitive, socio-emotional and relational elements differ depending on whether the products were recommended by the robot only or by a robot team. The second objective is to examine whether there are differences in the proposed research model, depending on whether the robot only or the robot team provided the product recommendations. To do so, we will perform a multigroup analysis using SmartPLS in the next coming weeks to test whether both groups have significant differences in their group-specific parameter estimates. Before undertaking a multigroup analysis, invariance of the measures needs to be established. Measurement invariance will be analysed following the three-step MICOM procedure as introduced by Henseler et al. (2016).

Contributions

Empirical work on customers' responses towards technology-provided product recommendations (here, humanoid robots) in an actual retail store is scarce and openly called for (Brenghman et al. 2021, special issue of IJRM 2022).

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Retail strategy

The Drivers of Small Independent Retailers' Competitive Behaviour

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Keywords

Competitive behaviour, Competitive dynamics, Customer orientation, IRaMuTeQ, Small independent retailers, Territorial anchoring.

Introduction

No research has focused on the drivers of small independent retailers' (SIRs) competitive behaviour. Indeed, work on the determinants of firms' competitive behaviour – and even on competitive dynamics more generally – has mainly focused on large firms (Chen, 2011). This work has highlighted the existence of numerous and varied drivers of firms' competitive behaviour. But all this work has been carried out in contexts far removed from that of SIRs and is therefore of little use in understanding the drivers of their competitive behaviour.

Some studies have addressed the competitive strategies of SIRs, but not the drivers of these strategies, of which competitive behaviour is the concrete manifestation. Much of this work is normative and therefore does not address the actual behaviour of SIRs or the factors that may underlie that behaviour (Grimmer *et al.*, 2018). The few studies on the competitive strategies of SIRs implicitly refer the specificity of their behaviour to their size: smaller than their competitors, SIRs adopt a niche strategy (Watkin, 1986) and offer unique products with better service than chains or mass retailers (Armstrong, 2012; Barber and Tietje, 2004; Coca-Stefaniak *et al.*, 2010).

We propose to effectively address this issue by answering the following question: What are the drivers of SIRs' competitive behaviour?

Purpose

The objective of this research is to fill the gap identified in the literature: No one has asked before the specific question of the drivers of competitive behaviour of SIRs.

Conceptual framework

This research is based on the competitive dynamics' perspective on the one hand and on the literature on competitive strategies of SIRs on the other. The competitive dynamics perspective offers a theoretical framework for analysing inter-organisational relationships (Chen and Miller, 2012) that considers these relationships as multifaceted (cooperation, competition, competition) and integrates all stakeholders into the analysis (Chen and Miller, 2015).

The literature on competitive strategies of SIRs provides an overview of what has been written on SIRs' competitive behaviour. But, if some research examined SIRs' competitive strategies, most of them are normative, preferring to investigate what they should do to be successful, rather than analysing what they actually do (Grimmer *et al.*, 2018). This normative work emphasises in particular customer (Spillan and Parnell, 2006) and market (Kara *et al.*,

2005) orientations as the keys to the success of SIRs (Megicks and Warnaby, 2008; Tajeddini *et al.*, 2013). Work analysing their actual strategies shows that SIRs would adopt a niche strategy (Watkin, 1986) and offer unique products with better service than chains or mass retailers (Armstrong, 2012; Barber and Tietje, 2004; Coca-Stefaniak *et al.*, 2010). Eymas and Bensebaa (2021) put the role of customer and market orientation in their competitive strategies into perspective, showing that the relationship that SIRs have with their suppliers or their values can play a decisive role in their competitive behaviour. However, none of this work has specifically addressed the question of the determinants of SIRs' competitive behaviour.

Methodology

We decided to use interviews as a means of collecting data, because they allow us to look back on past events, to directly discuss the drivers of competitive actions and because it allows participants to fully share the richness of their experiences (Janssen *et al.*, 2018). We built a guide for semi-structured interviews. The main idea was to leave the participants a lot of freedom to talk about what they related to competition, but the interview remained structured, because before making interviewees talk about competition, we asked them about their background and how they created or took over the company.

We analyzed these interviews using an automated lexicometric method. The software we used provides holistic analyses with narrative fidelity and appears accurate to dissociate meaning units (Illia *et al.*, 2014). Then, the transformation of the phenomenon into a management object of studies and the synthesis of the essential structure of the phenomenon are based on the researchers' interpretation (Giorgi, 2012). As we seek to synthesise the commonalities of collective experiences, we decided to analyse the whole corpus as a single body (Saldana, 2011). The use of a software appeared to be a convenient and fast way to reveal themes from the corpus (Miles *et al.*, 2019). We chose an open-source software called IRaMuTeQ that enabled us to realize not only a descending hierarchical classification (DHC) (Reinert, 1990), but also to provide some statistical analyses.

Findings

The software IRaMuTeQ allowed us to work on frequencies of words and to realise a DHC. The word cloud is a tool that permits a simple representation of the words that we used the most during the interviews. The word cloud that we obtained shows the 150 forms the most used, a number chosen for the word cloud to be readable. This is a visual representation in which the size of words is correlated to their frequency. It is a basic tool because it does not show the links between the words. However, we can notice the importance of customers in the discourse about the competitive behaviour of the SIRs that we met. The word 'customer' recurs 139 times. If we add to it the frequency of the close word 'client', the client/customer pair appeared 218 times. We can interpret that as a first sign of the importance of customers in the competitive behaviour of the SIRs that we interviewed.

DHC groups in clusters the most similar reduced forms in order to reveal the main themes from the corpus. Then, this is through a way back to the texts, text segments more precisely, that the researcher gives a meaning to the different classifications defined by the software. After a few attempts, we decided to leave most parameters of the DHC by default. We only chose to increase 'the number of terminal clusters in phase 1', because, by passing this figure from 10 to 13, we were able to obtain the classification of a satisfactory number of segments of the corpus (79.48%) in a suitable number of clusters (6). For some clusters, the theme appears very easy to find. This is the case for clusters 1, 2 and 6 which correspond to the three main industries that we have chosen to explore during our research, respectively the wine trade, the beer industry, and the book trade. The other three clusters are more interesting for

our research, as they may allow us to identify cross-industry themes. It seems relatively easy to find a theme for clusters 4 (Customers and their loyalty) and 5 (Business, economic, and professional vocabulary), a little less for cluster 3 (Business anchored to a territory) which is the cluster that aggregates a set of words whose Chi² are the lowest.

In the end, this DHC allowed us to identify three cross-industry clusters in our corpus. But one of them appears relatively poor in meaning. Indeed, it does not really bring much to say that the executives we met share a general business, economic and professional vocabulary. By contrast, the two other cross-industry clusters that emerged from the descending hierarchical classification appear to be significant results.

Contributions

Indeed, by looking at a context, that of the SIRs, never before studied in the perspective of competitive dynamics, we show that the drivers of the competitive behaviour of this type of actor are specific to them. On the other hand, if the primacy of the customer for SIRs had already been put forward in normative works (Tajeddini *et al.*, 2013), this research shows that it is indeed effective in their actual competitive behaviour. Finally, we also show that, in parallel to the customer orientation, the territorial anchorage of the SIR influences its competitive behaviour.

Practical implications

If the importance of the client for SIRs has already been highlighted, the role played by the territory in which they have settled certainly deserves to be considered by SIRs. What are its characteristics? In what direction can it influence my competitive behaviour? These are questions that SIRs need to ask themselves, both at the time of setting up and beyond.

Social implications

The bodies in charge of territorial management should consider how their territories could positively influence the competitive behaviour of SIRs.

Research limitations and outlook

To go further, we could extend our research to other types of SIRs or link the drivers of their competitive behaviour to their performance.

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Keywords

Competitive behaviour, Competitive dynamics, Customer orientation, IRaMuTeQ, Small independent retailers, Territorial anchoring.

Improving Retail Service Performance in Tough Times: A Focus on the Critical Success Factors in Italy

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Retail, Critical Success Factors, Frontline Employees, HOT Fit model, Monobrand Stores

Introduction

The pandemic and resulting digital pressures have put tremendous pressure on stores and their employees, leading to critical situations for retail managers. The objective of this study is to analyze the Critical Success Factors (CSFs) that have enabled retail organizations to survive and thrive during the pandemic. The concept of CSFs was first introduced by Daniel (1961) and later refined and discussed in detail by Rockart (1979). However, to date, few studies have examined CFS in the context of retail (Iamratanakul, 2019). According to Rockart, CSFs are the key variables that must be managed appropriately for the organization to survive. As the pandemic has reshaped the retail context, it is useful to apply such a model to see which factors have contributed most to the successful survival and rebirth of retail organizations, as these factors are likely to form the basis for development in the years to come.

Purpose

We propose and test a theoretical model that analyzes multiple CSFs focusing on the factors influencing service performance. Following the literature on the Human-Organization-Technology-Fit model (HOT) (Yusof et al., 2008), we divide these CSFs into three dimensions: human factors (Nadeem et al., 2019; Liu and Lin, 021), technological factors (Ray et al., 2005), and organizational factors (Gillet et al., 2013a; 2013b; Rita et al., 2018) and relate them to service performance.

Conceptual framework

In recent years, the service literature analyzing the friction between human factors and technological factors has seen an upsurge (e.g., Lee, 2017; Amelia et al., 2021; Riegger et al.,

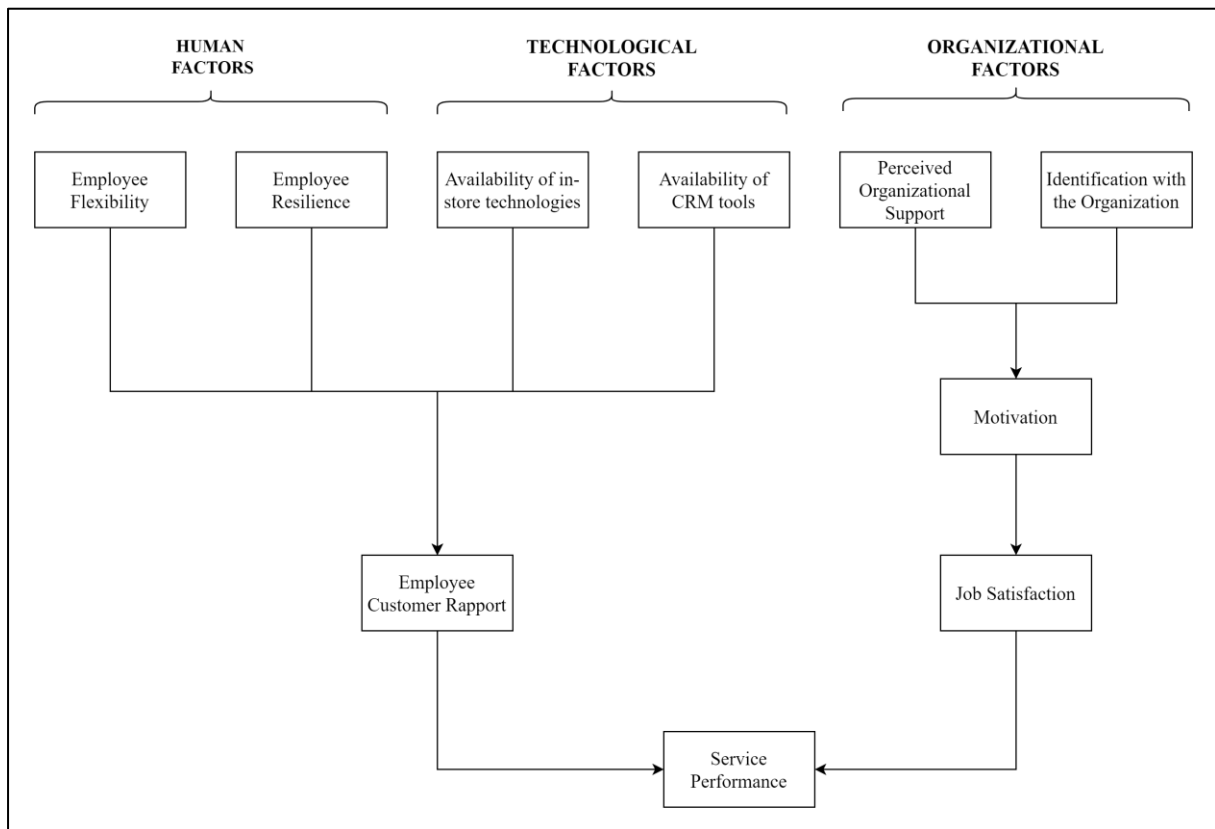
2021). Therefore, retail organizations need to properly manage these two fundamental variables to achieve service excellence and ensure an optimal customer experience (Makarem et al., 2009; Verhoef et al., 2009; Mason et al., 2022). For retail organizations, the human factor is the frontline staff or frontline employees (FLEs). Their peculiar characteristics such as flexibility, resilience, and initiative (Sok et al., 2021), add a human touch to service and improve the customer experience in the store. On the other hand, there are in-store technologies (Grewal et al., 2020). These can enhance FLEs' capabilities (e.g., CRM systems), but on the other hand, they can also diminish their role in certain stages of the customer journey, such as knowledge acquisition (Hochstein et al., 2021). Therefore, behaviors of FLEs that support technological innovation in retail are critical, as FLEs today need to engage with technologies to improve the customer experience (Siartri 2018).

Although several authors have recently highlighted technology as key to retail success (e.g., Moorhouse et al., 2018), this alone does not guarantee service delivery. The human touch still appears to be critical in retail service delivery. FLEs are a source of unique relational and emotional value for customers that automated technologies cannot provide (Solnet et al., 2019). FLEs can adapt to changing customer needs (Rego et al., 2014) and provide a unique service experience. FLEs can also transfer brand personality to customers (Sirianni et al., 2013), and consumers can identify with them and build strong relationships (Coelho et al., 2011). In other words, FLEs enhance the service experience (Ottenbacher & Harrington, 2009), provide excellent customer experiences, and strengthen long-term customer relationships (Delcourt et al., 2013).

In addition to human and technological factors, the literature also highlights the role of organizational factors in service performance (Cullen et al. 2014), particularly motivation, which in turn is related to job satisfaction (Chung et al. 2012).

Based on the above discussion, CFS can provide the framework for examining retail success factors in a critical situation such as a pandemic. As mentioned earlier, this study is based on the framework of HOT and conceptualizes employee performance as a function of three CSFs: human, organizational, and technological factors. A previous qualitative study (Massara et al., 2021) highlighted that human and technological factors are the critical success factors that improve retail performance by improving employee-customer relationships (Greve and Albers, 2006), while organizational factors are the critical success factors that improve retail performance by motivating employees (Darolia et al., 2010). This paper integrates CSF-based research (Massara et al., 2021) and empirically tests the HOT -fit model (Yusof et al., 2008) to predict retail success and development using a quantitative methodology. Figure 1 shows the theoretical model.

Figure 1: Proposed theoretical framework



Methodology

The data were collected with the support of several retail companies. In particular, we focused on monobrand retailers, which include fashion, accessories, sports, beauty, jewelry, consumer electronics, media, entertainment, furniture design, automobiles, and other types of stand-alone brand stores found in city centers, outlet villages, shopping malls, etc. that in terms of retail represent the frontier of brand experience (Shahid et al. 2022). We focused on monobrand retailers because, among distributors, they were among the most heavily impacted by the pandemic from a financial perspective and were exposed to the digital acceleration that followed. The companies (5 retail brands and 5 outlet villages hosting 120 retail brands) that participated in our research distributed the questionnaire in their stores and asked their employees to participate in a research initiative. The anonymous questionnaire was developed after a thorough literature review and consisted of two parts. The first part examined the sociodemographic profile of the respondents. The second part consisted of 10 scales with response options on a five-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree). The scales used were 1. Service Performance (SP, adapted from Hewagama et al., 2019), 2. Job Satisfaction (JS, adapted from Macdonald and MacIntyre, 1997) 3. Employee-Customer Rapport (ECR, adapted from Delcourt et al., 2013), 4. Employee Motivation (MOT, adapted from Gagné et al., 2010), 5. Perceived Organization Support (POS, adapted from Eisenberger et al., 2001.), 6. Identification with the Organization (IO, adapted from Mael and Ashforth, 1992), 7. Employee Resilience (ERES, adapted from Näswall et al., 2019), 8. Employee Flexibility (FLEX, adapted from Bhattachary et al., 2005), 9. Availability of CRM Tools (CRM, adapted from Sin et al., 2005), and 10. Availability of in-store technologies (AST, created by the authors). A total of 901 questionnaires were collected from September 2021 to May 2022. Incomplete questionnaires and respondents who failed the attention test

were eliminated, leaving a usable sample of 684 completed questionnaires (70.9% female, mean age = 32.25). Smart PLS 3.3.7 was used to estimate the proposed theoretical model. Previously, we tested the validity of the measurement model (Hair et al., 2021). First, we evaluated the factor loadings. Each loading exceeded the threshold of 0.70. Second, we assessed internal consistency by examining composite reliability scores (CR). Again, all constructs exceeded the commonly used threshold of 0.70. Third, we examined convergent validity: All AVE values were above 0.50 for each construct, confirming that a sufficient amount of variance is shared between constructs and indicators. Finally, the heterotrait-monotrait ratio of correlations (HTMT) method was used to determine discriminant validity (Henseler et al., 2015). In our case, all HTMT values met the proposed criteria of > 0.85 , except for the HTMT value between MOT and JS (Table 1).

Table 1: Discriminant validity and correlations among constructs

Construct	AVE	CR	SP	JS	ECR	MOT	POS	IO	ERES	FLEX	CRM	AST
SP	0,62	0,83	-	0,48	0,45	0,52	0,33	0,29	0,50	0,53	0,27	0,20
JS	0,75	0,90	0,54	-	0,38	0,79	0,65	0,47	0,34	0,26	0,33	0,17
ECR	0,66	0,85	0,60	0,47	-	0,50	0,30	0,36	0,42	0,30	0,31	0,29
MOT	0,67	0,89	0,60	0,93	0,63	-	0,61	0,55	0,42	0,32	0,37	0,17
POS	0,70	0,90	0,39	0,76	0,38	0,72	-	0,60	0,29	0,21	0,48	0,23
IO	0,79	0,88	0,35	0,59	0,48	0,69	0,74	-	0,27	0,24	0,39	0,20
ERES	0,73	0,89	0,65	0,40	0,54	0,51	0,34	0,34	-	0,52	0,22	0,21
FLEX	0,71	0,88	0,73	0,31	0,38	0,39	0,26	0,31	0,64	-	0,21	0,18
CRM	0,54	0,77	0,36	0,47	0,45	0,53	0,67	0,58	0,30	0,28	-	0,39
AST	0,52	0,76	0,30	0,26	0,41	0,36	0,36	0,32	0,31	0,25	0,66	-

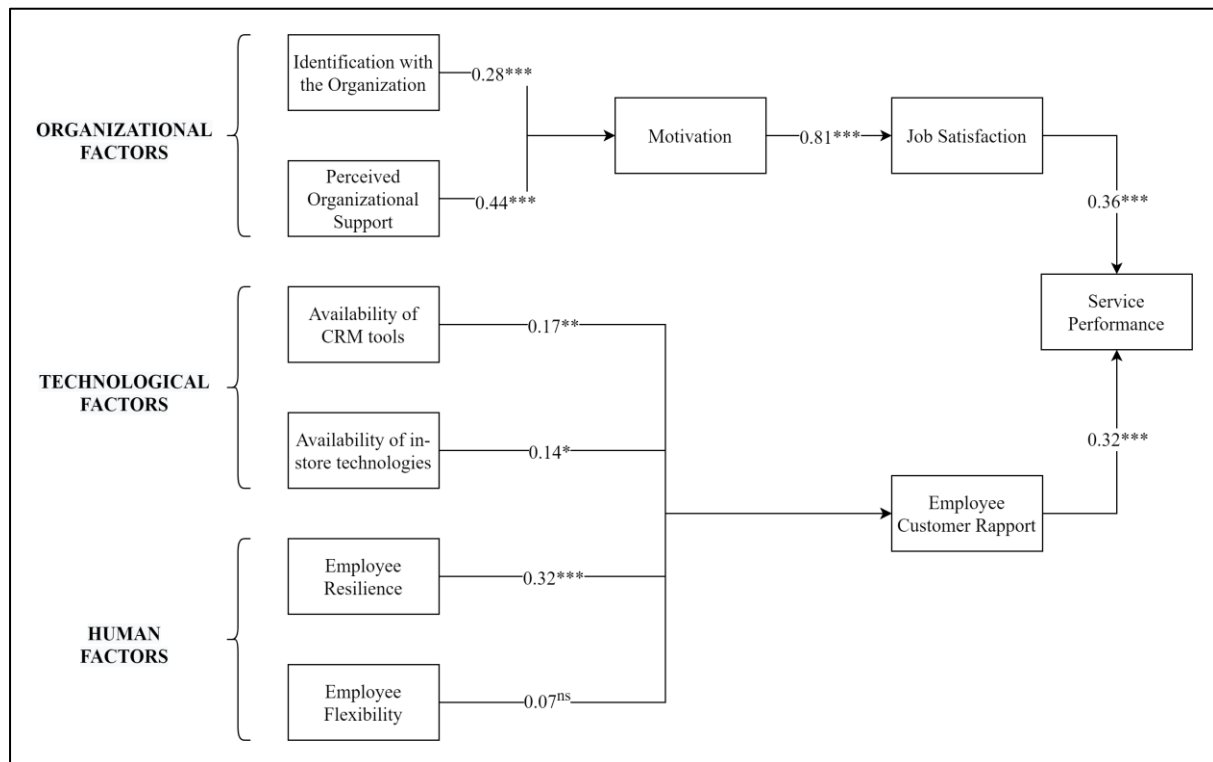
Note: HTMT values below the diagonal, correlations among constructs above the diagonal.

Table 2: Estimated model

Path	Path Coefficients			95% Confidence Intervals	
	Estimate	T-value	p-value	2,5%	97,5%
CRM → ECR	0,17	4,72	$< 0,01$	0,10	0,25
AST → ECR	0,14	3,20	$< 0,05$	0,04	0,23
ERES → ECR	0,32	7,58	$< 0,001$	0,24	0,40
FLEX → ECR	0,07	1,66	$= 0,10$	-0,02	0,17
IO → MOT	0,28	5,66	$< 0,001$	0,18	0,37
POS → MOT	0,44	9,08	$< 0,001$	0,35	0,54
MOT → JS	0,81	38,14	$< 0,001$	0,76	0,85
JS → SP	0,36	9,15	$< 0,001$	0,28	0,44
ECR → SP	0,32	9,30	$< 0,001$	0,24	0,38

The detailed results of the structural model are shown in Table 2. The direct effects of external CRM (Coeff.: 0.17; $p. < 0.01$), AST (Coeff.: 0.14; $p. < 0.05$), and ERES (Coeff.: 0.32; $p. < 0.001$) on ERC were positive and statistically significant. In contrast, the relationship between FLEX and ECR (Coeff.: 0.07; $p. = 0.10$) was not significant. The model showed a positive and significant effect on MOT for both POS (Coeff.: 0.44; $p. < 0.001$) and IO (Coeff.: 0.28; $p. < 0.001$), and the latter factor had a positive and significant effect on JS (Coeff.: 0.81; $p. < 0.001$). Finally, both JS (Coeff.: 0.36; $p. < 0.001$) and ECR (Coeff.: 0.32; $p. < 0.001$) had a positive and statistically significant effect on JP. Figure 2 shows the estimated model.

Figure 2: The estimated model



Findings

In short, our findings confirm the validity of the HOT fit model as a proxy of service performance, and therefore of success in difficult times. The results suggest that retail organizations need to balance human, organizational, and technological factors to improve service performance, and that technology should be used integratively, not just substitutively, with frontline employees. In particular, human and technological factors are critical to improving the relationship between employees and customers and thus exert an indirect influence on service performance. Organizational factors, in turn, appear to be of paramount importance in contributing to service performance with the mediation of motivation and job satisfaction.

Contributions

To our knowledge, this is the first study to apply the CSF framework in retail to examine the key variables that ensure business survival in difficult times. The results confirmed most of the relationships postulated by the HOT fit model. Of the two human factors studied, employee resilience had a positive impact on the retail staff's perceived relationship with customers. The model confirmed that resilience is an essential soft skill in difficult times such as the pandemic (Aguiar-Quintana et al., 2021). Second, technological factors were positively related to the relationship between employees and customers: For example, technology can serve as an important touch point for consumers and improve service performance through customer-employee interaction (Grewal et al., 2020). Third, organizational factors have been strongly associated with employee motivation. This confirms the importance of employee identification and perceived organizational support for employee motivation (Gillet et al., 2013a; 2013b; Rita et al., 2018), which leads to higher job satisfaction and service performance.

Practical implications

Several practical implications arise from this research. Retailers should view technology as a tool to facilitate service interactions, not as an element that can replace human presence. This is because of the potential synergies between the human factor and technology and the stronger effect that the former exert respect to the latter on employee-customer rapport. The human factor is a source of unique relational and emotional value that can build trust and loyalty with customers. The technological factor is an element that can make interactions with consumers more fluid, accurate, satisfying and enjoyable. Keeping this in mind is also paramount for retail organizations to address the obvious frictions between the two elements under consideration (e.g., employees' fear of being replaced or their inability to use technology properly). Through organizational support (e.g., ad hoc education, especially during early technology adoption), companies can enhance the potential synergies between human and technological factors while reducing potential frictions and achieving higher levels of employee motivation and service performance.

Research limitations and outlook

This study has some limitations. First, the sample included participants from a single country and monobrand stores; perhaps a more diverse sample could provide additional insights. Second, this study is based on self-report questionnaires, which may introduce some bias. Addressing these issues could provide additional insights into the interactions between human, organizational, and technical factors.

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Department of Trade and International Business



Department of Trade and International Business provides students with knowledge necessary for jobs in domestic and international trade, service industry and manufacturing. Courses taught by our department members study entrepreneurship and trade management within Croatian economy, and its activities within international trade. In the 3rd and 4th year, the department offers courses in domestic and international trade, while Master students majoring in Trade and International Business learn about contemporary ways of business administration in trade. Some of courses are available in English language within Bachelor Degree in Business Programme (BDiB) and Master level is fully taught both in Croatian and English language.

Postgraduate study programme Quality Management offers courses that deal with quality management in contemporary business environment according to international norms, and postgraduate study programme Trade Management provides students with knowledge and skills necessary for efficient management in corporate trade sectors.

The department also participates in professional degree programme Trade. Students of this programme acquire knowledge and skills necessary for contemporary and practical operative management of commercial and other similar businesses in domestic and international exchange of goods, services, capital and human resources.

A significant number of teachers is involved in postgraduate doctoral studies in Economics and global security. A part of teachers participates in the postgraduate doctoral studies in Economics and Business Economics.

Our department members permanently work on their expertise, do various research projects, cooperate with scientists and institutions in Croatia and abroad, publish books, textbooks and papers in the field of domestic and international trade.

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